

Belize Sustainable Agriculture, Ltd. Farming Report – December 3, 2015

General Comments & Weather

This is the first and only fortnightly Farming Report for BSA’s 2015-16 Winter (Dry) Season, whose main objectives are to: Inform readers as to BSA’s farming activities by season, farm, and crop; Provide relevant data on climatic conditions and agricultural pests affecting BSA’s crops; Inform readers on domestic/regional market conditions for BSA’s crops.

As explained below, due to the severely adverse weather conditions in the Autumn of 2015, notably in November, BSA will not be farming at the Cayo One Estate in the Winter 2015-16 season. Cayo One is situated between miles 40 and 42 of the George Price Highway in Belize, near the village of Cotton Tree in Cayo District.



November was an extraordinarily wet month, which we believe may have set a 100 year record. There were consistent heavy rains throughout the month, with occasional torrential rains. Rain for the month totaled 1113 mm, which is 675% of the 15 year average! After rains in September and October which were 200% of the 15 year average, 2015 is likely to set a once in a century record for monthly rainfall with no hurricane activity. We can only speculate as to whether this is due to the forecast El Nino, but it has clearly been an extraordinary year. Again, the only climatic bright spot has been the lack of cyclone activity. Data are shown both for the current year and an average for the past 15 years.

Belmopan Precipitation Data (mm per month) December Data through December 2, 2015												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	195	0.1	56	18	57	491	265	93	425	508	1113	0
2000-2014	137	55	49	31	132	245	261	238	216	252	165	129

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Farming Report – December 3, 2015

You can (normally) follow Belize's weather on: <http://www.hydromet.gov.bz/250-km-radar-loop>

We continue to use the US NOAA Hurricane Center weather radar network which monitors the Caribbean basin, and would also suggest Weather Underground as an additional resource:

<http://www.nhc.noaa.gov/>

<http://www.wunderground.com/q/zmw:00000.2.WMGMM>

Cayo One ~ 500 acres (100% non-irrigated)

Climate conditions during the Autumn of 2015 appear to have been not only some of the worst in the past 25 years, but November 2015 may prove to be a "Once in a Hundred Years" event in terms of precipitation. 1,113 mm of rain fell during November 2015 compared with a 15 year average November rainfall of 165 mm; this is a 675% deviation from the average. It would be speculative to venture that this may be due to the strong El Nino conditions prevailing in the Pacific, but this may well be the explanation.

With some 2,046 mm of rain in the September through November period, compared with a 15 year average of some 643 mm, the Cayo One Estate is more than wet! Indeed, there was a 7 day period from November 9-16 where average daily rainfall over 7 days was over 100 mm (4"); a truly extraordinary number!

The waterlogged conditions of the Cayo One fields mean that even if we were to have a very dry December, we would not be able to begin preparing the fields for planting until late December, and we would not be ready to plant until early January. With long cycle (120-145 days) crops like Soybeans and Corn, there would be no time for them to grow before we would need to do essential land work in March/April for the Summer 2016 Season. Even a shorter Edible Bean Crop (85-100 days) would not be ready in time. Moreover, if we were to return to more seasonal rain patterns, none of these crops could be expected to thrive in the normally dry February to April time period.

Perhaps most importantly, we consider that our number one goal for the forthcoming season is to ensure that as much of the Cayo One land as possible has received deep drainage ploughing, with a drainage tiling system installed. This will take 8-10 weeks of solid work before we can consider planting the Summer 2016 crop. Moreover, as we will be looking to install one or more test irrigation pivots for the Summer 2016 crop, we will require further time when some of our fields will be unavailable for planting.

CONCLUSION

The bottom line, therefore, is that even if it were possible to plant a Winter 2015-16 bean crop, the wisest and most financially sound course of action is to focus on completing land development at Cayo One. It is better, and undoubtedly more profitable and secure, to farm less acres of fully developed land than to pursue planting more acres for the sake of planting more acres. Accordingly, no Winter 2015-16 crop will be planted at Cayo One.

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Market Conditions and Conclusion

Local market conditions continued to be mostly unchanged throughout November 2015 and still reflect both Belizean shortages as well as shortfalls throughout Central America for Summer 2015 crops.

Corn

Belize's domestic corn market remains firm and reflects insufficient quantities of corn in storage which is expected to lead to possible shortages later in 2016. Local prices for spot delivery remain at BZD 30.00-31.00/cwt level (~\$8.54/bushel - \$336/mt), although buyers continue to balk at paying much above BZD 30.00/cwt; we expect the price to remain there for the near term.

We sold our modest amount of excess grain not committed to our Guatemalan buyer on November 4th at BZD 29.50/cwt (\$8.26 bushel - \$325/mt) for immediate cash settlement (as opposed to customary 30-90 day payment terms). This is a remarkable premium price when considering the Chicago corn futures contract was trading at \$3.80/bushel and the cash price for US Gulf Ports delivery was \$4.40/bushel! This is evidence yet again of the fragility of the region's food supply, and how important it is to bring new supply to the area.

Soybeans

There is no news to report in the local Soybean market. Domestic prices remain high at around BZD 58-60/cwt (~\$17.40-18.00/Bu – \$ 639-661/mt), which remains about 100% above the current CME price.

Edible Beans

We continue to receive limited information on edible beans, except that there are continued reports of strong demand at very attractive prices from Central American buyers. We still expect not to plant any Edible Beans in the Winter 2015/16 season.

Rice

Belize's domestic Rice market remains well underpinned due to modest domestic harvests. Local wholesale prices for rough rice ("Paddy rice") continue to be reported at USD around 22.50/cwt or USD 496 /mt.

The Summer 2015 weather conditions were exceptionally challenging, combining both downpours and drought. We were indeed fortunate to have aggressively proceeded to bring in our crops in October, as any crops still in the ground once the extraordinary November rains began would have been lost.

In light of the excessive rains this Autumn we have made the strategic decision not to plant a crop in the Winter 2015/16 Season, So this brief report is our only one for the Winter 2015/6 season. We will publish our next report as we prepare for the Summer 2016 Season, when we hope to have much more positive news to report.

Despite the current weather related challenges, we retain all of our optimism for Belize's remarkable farming potential, provided the right investments are made in irrigation, drainage, equipment, and people!

Thanks! - Abram Dyck, John Peters, and the Farming Report Editorial Team

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Grower	Location	Field #	Acres	Irr ?	Soil Type	Crop	Seed Variety (count/acre)	Plant Date	Stand Date	Fertilizer Program <i>(For full details of applications, refer to Lot Records)</i>	Comments
BSA	Cayo One	1	125	N	Black	None	N/A	N/A	N/A		No Crop planted in Winter 2015/16 Season
BSA	Cayo One	2	100	N	Black	None	N/A	N/A	N/A		No Crop planted in Winter 2015/16 Season
BSA	Cayo One	3	133	N	Black	None	N/A	N/A	N/A		No Crop planted in Winter 2015/16 Season
BSA	Cayo One	4	125	N	Black	None	N/A	N/A	N/A		No Crop planted in Winter 2015/16 Season

Lot Records for Fields 1, 2, 3, & 4