



NATIONAL METEOROLOGICAL SERVICE MONTHLY AGROMETEOROLOGICAL BULLETIN

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ANNOUNCEMENTS

The National Meteorological Service of Belize is pleased to announce that Belize will be hosting “THE NATIONAL CONSULTATION ON CLIMATE SERVICES to be held on 30th October to 1st November 2013 at 9:00 am at the Radisson Fort George Hotel. Cholera outbreak in neighbouring México puts Health Officials to be on high ALERT in Belize.

Weather & Climate Summary for Belize (August-September-2013).

Climatological information showed that the main weather feature that affected the country in August, are tropical waves, Tropical Upper Tropospheric Troughs (TUTT), and tropical cyclone. A short dry spell known as the Mauga season also occurred. August 2013, a total of five (5) tropical waves supported by TUTT crossed the country. The Mauga season occurred from the 3rd to 8th of August. No cyclone affected the country in the August. The rainfall collected from Agro-meteorological stations showed that most stations received rainfall way above their norm. These high rainfall totals resulted in flooding in several parts of the country.

September 2013 is climatologically characterized by the passages of tropical cyclone. This September no cyclone crossed the country. Several tropical waves and areas of low pressure resulted in weather conditions to be very moist and unstable during. On The 10th September Belize City, recorded a total of 7.3

inches of rainfall in about 6 hours, which resulted in severe localized flooding. Data gathered from stations showed that the northern, inland and some parts of the south received rainfall above their normal, while the rest of the country got normal to slight below normal rainfall.

Assessment of the drought conditions for July-August-September showed that the entire country is not experiencing any sort of drought.

National Meteorological Service is now using the Standard Precipitation Index (SPI) to monitor the likelihood of drought or extreme rainfall over the country .

The Standardized Precipitation Index (SPI), developed by T.B. McKee, N.J. Doesken, and J.Kleist in 1993, is based only on precipitation. The SPI can be used to monitor conditions on a variety of time scales namely 1-month, 3-month, 6-month, 9-month and 12-month periods.

A positive SPI value means greater than the median precipitation and a negative SPI

values indicate less than median precipitation.

The table below shows the SPI Outlook for October 2013 that was generated using historical rainfall data from Belize and the precipitation outlook for October-November-December. Only October is highlighted below. The rest of the outlook for OND period can be found at www.hydromet.gov.bz under drought monitoring.

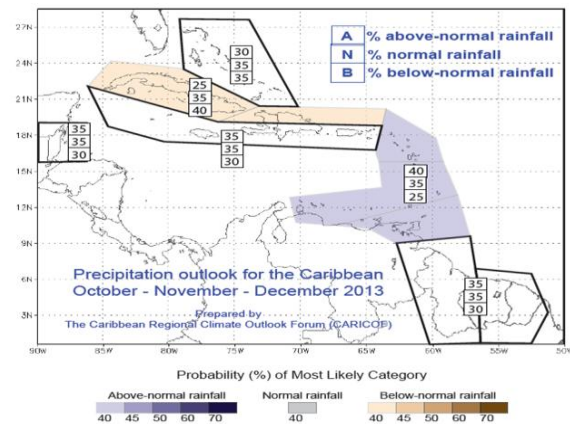
SPI Outlook for October 2013

Station	1Mth	3Mth	Prob
Airport	0.2 -2.91	0.62-3.06	35
	-0.49 -0.2	0.25-0.68	35
	-1.8- -0.49	-0.34-0.25	30
CFarm	0.91-1.96	1.0-1.51	35
	0.48-0.91	0.83-1.0	35
	-1.06-0.48	0.45-0.83	30
Melinda	0.49-2.23	0.86-2.22	35
	-0.38-0.49	0.34-0.86	35
	-2.24- -0.38	-0.35-0.34	30
Tower Hill	0.41-2.58	1.58-3.13	35
	-0.16-0.41	1.27-1.58	35
	-2.88- -0.16	0.45-1.27	30

Seasonal precipitation forecast for October-November-December 2013(OND)

The Seasonal precipitation shows that there is an equal chance for normal to below normal rainfall to prevail during the OND period. With the expected normal to above conditions during the OND season, also with ENSO Neutral conditions which usually indicate a normal rainfall pattern for Belize, drought conditions will likely to develop over the country during the OND period.

Provided: By Caribbean Institute of Meteorology & Hydrology (CIMH)



Cholera

Cholera is an acute bacterial infection of the intestine caused by the consumption of food or water containing *Vibrio cholerae*. When a person consumes contaminated water or food, the bacterium releases a toxin in the intestines causing severe watery diarrhea. Other symptoms include muscle cramp, dehydration or water loss. In untreated situations death can result rapidly.

Cholera is mainly transmitted through the consumption of food or water contaminated by faeces from a person with the infection. The bacterium is found typically in contaminated water environments such as fresh water lakes and rivers. Common sources include:

- Water Supplies
- Ice made from contaminated water
- Food and drinks sold by street vendors
- Vegetables grown with water containing human wastes
- Undercooked or raw seafood food caught in polluted sewage water



Cholera is a disease spread generally by poor sanitation, therefore sanitary conditions are very important as the *Vibrio cholerae* bacterium survives and multiplies outside of the human body and can spread rapidly in crowded living conditions with unprotected water sources, where there is not safe disposal of faeces.

Cholera is a treatable disease. The rapid administration of oral salts to replace lost fluids nearly always results in cure. In severe cases intravenous fluids may be needed to save a patient's life. Zinc supplements have shown to decrease and shorten the duration of diarrhea in children.

Although there is a vaccine against cholera the CDC and World Health Organization does not recommend it because it does not protect half of the amount of people that get it and it only lasts for a few months. Therefore; it is highly recommended that people protect themselves by using only water that has been boiled, chemically treated, or bottled.

PLEASE HEED TO ALL WARNINGS COMING OUT OF THE MINISTRY OF HEALTH CONCERNING CHOLERA- PREVENTION.

Agricultural Information was provided by the Ministry of Agriculture.

PLANTING

Commodity	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Carrots												
Lettuce												
Potato												
Broccoli												
Cauliflower												
Onion												
Celery												
Corn												
Bean												
Cabbage												
Tomato												
Sweetpepper												

	minor planting
	major planting

HARVESTING

Commodity	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Carrots												
Lettuce												
Potato												
Broccoli												
Cauliflower												
Onion												
Celery												
Corn												
Bean												
Cabbage												
Tomato												
Sweetpepper												

	minor harvesting
	major harvesting

Explain the chart

Minor harvesting indicates the start of the planting season for these seasonal crops (highlighted in yellow) - crops that are planted during the colder days of the year and are also short day plants. Major planting is when the highest number of acreage is planted. The planting will correlate with the harvesting period.