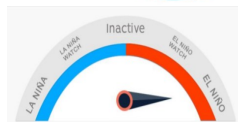


SEASONAL CLIMATE OUTLOOK & ADVISORY

August 2019 — January 2020

CLIMATE OUTLOOK SUMMARY

- A transition from El Niño to ENSO-neutral is expected in August 2019;
- ENSO-neutral is favored to emerge in September 2019 until the first quarter of 2020.



WEATHER SYSTEMS THAT MAY AFFECT BICOL REGION



Month	Tropical Cyclones
Aug. 2019	3 to 4
Sept. 2019	2 to 4
Oct. 2019	2 or 3
Nov. 2019	1 or 2
Dec. 2019	0 or 1
Jan. 2020	0 or 1



- Severe Local Thunderstorms, Southwest Monsoon (Habagat), Easterlies, ITCZ, LPAs, Tropical Cyclones, Transition from SW to NE Monsoon Season, Tail End of cold front, NE Monsoon

Forecast Rainfall Analysis¹

Prov	August			September			October			November			December			January		
	Normal (mm)	Forecast (mm)	% to Normal	Normal (mm)	Forecast (mm)	% to Normal	Normal (mm)	Forecast (mm)	% to Normal	Normal (mm)	Forecast (mm)	% to Normal	Normal (mm)	Forecast (mm)	% to Normal	Normal (mm)	Forecast (mm)	% to Normal
Al	210.5	321.9	152.9	269.0	314.5	116.9	344.4	187.0	54.3	456.0	454.2	99.6	462.4	561.4	121.4	275.8	307.0	111.3
CN	159.6	231.1	144.8	259.8	305.5	117.6	433.0	184.9	42.7	488.9	447.3	91.5	500.4	611.0	122.1	248.6	287.4	115.6
CS	189.3	281.7	148.8	266.3	308.9	116.0	386.9	183.0	47.3	434.5	418.9	96.4	473.0	578.0	122.2	258.2	282.2	109.3
Cat	165.6	259.6	156.8	239.4	272.7	113.9	385.3	186.1	48.3	439.3	392.3	89.3	461.8	555.5	120.3	265.2	304.7	114.9
Mas	186.8	278.2	148.9	227.7	269.1	118.2	280.6	140.3	50.0	296.0	317.3	107.2	314.4	372.2	118.4	186.1	221.7	119.1
Sor	200.1	275.2	137.5	244.0	293.5	120.3	315.8	171.8	54.4	415.6	422.3	101.6	449.9	534.5	118.8	292.2	339.0	116.0

¹All Climate Forecast/Information is based on EL NIÑO & CLIMATE OUTLOOK (Aug 2019-January 2020, issued by PAGASA last July 24, 2019 Source: <http://bagong.pagasa.dost.gov.ph/>)

● Way below normal ● Below normal ● Near normal ● Above normal

IMPACT OUTLOOKS

- ◆ **Above normal rainfall in the month of August and December** is conducive for crop establishment especially in upland and rainfed areas that experienced delayed planting due to *El Niño*.
- ◆ Forecast rainfall (in mm) though near normal in the month of September is still high and may affect the rice areas in flowering stage. Occurrence of white heads can be observed.
- ◆ The wet condition succeeding the *El Niño* may cause **disease and pest outbreak in crops** (fungal diseases) and respiratory, increased parasitism in livestock and poultry. **Fall army worm** posts threat to corn areas. The **pasture** areas in provinces of **Masbate** is likely to **recover** from drought damage.
- ◆ While there is a projected below **normal rainfall** in the month of **October**, the risk of incurring **high post harvest losses** in cereals and other high value commodities remain high due to 2 or 3 tropical cyclone forecast that may enter the Philippine Area of Responsibility;
- ◆ With several **typhoons** projected, the possibility of damages by **flooding, strongwinds, soil erosion/landslide** may affect production.
- ◆ The risk of **salt-water intrusion** to farms is less likely especially along the Bicol River Basin and coastal communities. However, salinity level reduction may affect crabs and shrimps.
- ◆ For the month of August, **flushing stage** of pili trees can be observed. Thus, there is an expected limited supply of scion.
- ◆ In **Catanduanes**, return to near normal rainfall may result to longer drying period of abaca. Meanwhile, for **cutflower growers in Albay and Camarines Sur**, this may result to **flower** damages and infestations. For **Camarines Norte**, above normal rainfall will render the pineapple highly susceptible to root rotting and fungal activity.
- ◆ In **fisheries**, replenishment of water in fishing grounds and surface water temperature reduction are conducive for fish breeding and fingerlings dispersal.
- ◆ **Near normal and above normal rainfall forecast** may reduce **fishing** area due to water hyacinth intrusion and destruction of fish structures during typhoon and flood events.

DA RFO 5 SUPPORT

- ♣ Planting materials, other farm inputs (seeds/seedlings, fertilizer and other production support services) and buffering activities
- ♣ Continuous pest and disease surveillance
- ♣ Farm Mechanization support services and Post-harvest facilities and farm operations technical assistance
- ♣ Climate-information services

CLIMATE-RESILIENT AGRICULTURE PRACTICES

- ♣ **PCIC Risk Transfer.** Prior to planting, avail of risk-transfer mechanisms such as **insurance** from PCIC. Insure also the livestock and other farm assets;
- ♣ Use **early maturing, submergence-tolerant** and **saline-tolerant** varieties to avert yield reduction; Use **biological control** such as the **trichogramma** and **earwigs**.
- ♣ **Repair drainage system** to prevent water stagnation.
- ♣ Use of **postharvest machineries** (mechanical harvester, chopper, mechanical dryers) to hasten operations. For small areas, use UVS plastic as overlay in drying
- ♣ **Changing of cropping calendar** to ensure harvest coincides with dry season
- ♣ **Plant wind breakers.** In areas exposed to strong winds, plant wind breakers such as cacao and ipil-ipil.
- ♣ **Cover crops.** Plant indigenous **cover crops** in sloping areas to improve soil fertility and reduce soil erosion/conserves soil moisture in upland areas.
- ♣ Integrate **short-duration crops** (**legumes, vegetables, white corn**) to improve household food security;
- ♣ **Corn silage.** If properly processed, it can be stored for a year to cover the feeds needed by the ruminants.
- ♣ Practice **value-adding of vegetables** (eg. pickles) and **native fruits** (eg. nipa fruits). With proper processing, these products can be developed into an enterprise of the household;
- ♣ Seek **other** potential source of **livelihood/food** and or plant crops that can serve as an alternate staple during lean months.
- ♣ For high value crops, use **rainshelter** or grow crops in **greenhouses**. **Change of cropping calendar** is also advised.
- ♣ **Avoid overhead irrigation** during bolting stage for **cutflowers**. **Defoliate** sampaguita plants to induce flowering.
- ♣ **Cut and carry** of forages, **rotational grazing** and designated **evacuation** for animals. **Brood newly hatched chicks** if hatched in an incubator; or let the chicks go with the hen.
- ♣ **Climate information system.** Stay tuned to the weather and climate updates from PAGASA and issuance from the Department of Agriculture.
- ♣ Application of **Good Aquaculture Practices**
- ♣ During rainy season, **banana, papaya, vegetables** and **root crops** are advisable to be planted above the dike.
- ♣ **Community-based pest and disease monitoring.** Report to the Regional Crop Protection Center for any observed pest and diseases.
- ♣ Maintain the correct carrying capacity in stocking:
 - Bangus (3,000pc/ha)
 - Crabs (1,000-2,000/ha)
 - Shrimp (100,000/ha)