



FOOD SECURITY SITUATION REPORT

Madang and Northern (Oro)

Sitrep No: 05-2020

Reporting Date: 2 September, 2020

Situational overview

As of 2nd September, 2020, the total number of COVID-19 confirmed cases in PNG increased to 471, following the confirmation of 11 new cases. This brings the number of active cases to 234. Two hundred and thirty (232) COVID-19 patients have recovered in the country. The total number of provinces that have reported COVID-19 to date is 12, with West New Britain being the latest and 12th province to report COVID-19 cases. These provinces are the National Capital District, Bougainville, Central Province, Eastern Highlands, East New Britain, Milne Bay, Morobe, New Ireland, Southern Highlands, West New Britain, West Sepik and Western Province. The National Capital District has the largest number of cases to date, with 284 cases, followed by Western Province with 166 cases.

Table 1. COVID-19 in Papua New Guinea as of 2 September.

Province	Deaths	Total
Autonomous Region of Bougainville		1
Central		6
East New Britain		2
Eastern Highlands		1
Milne Bay		1
Morobe		5
National Capital District	5	284
New Ireland		1
Southern Highlands		1
West Sepik		1
West New Britain		2
Western		166
Total	5	471

Pandemic Measures

In addition to the existing 11 National Pandemic Measures, a new National Pandemic Measure, Measures No. 12, was issued regarding COVID-19 vaccination, testing and trial, and this came into effect on 20 August.

The following table provides a brief description of the 12 National Pandemic Measures

Table 2. PNG COVID-19 National Pandemic Measures

Measure	Description
Measure 1	Revocation of All Previous Measures
Measure 2	International Travel Measures
Measure 3	Domestic Travel Measures
Measure 4	Provincial Coordination Measures
Measure 5	Burial of Deceased Persons Measure
Measure 6	Customs Duties Measures
Measure 7	COVID-19 Testing Measures
Measure 8	COVID-19 Surveillance and Testing Measures
Measure 9	Business and Social Measures
Measure 10	Mandatory Mask Wearing - National Capital District
Measure 11	Public Transport – National Capital District and Central Province
Measure 12	COVID-19 Vaccination, Testing and Trials

Provincial maps of Madang and Oro provinces

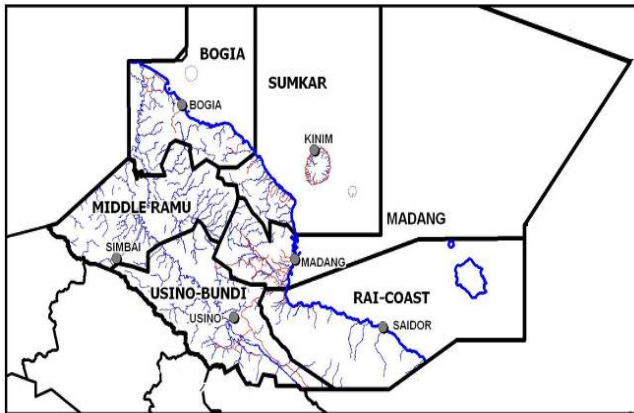


Figure 1. Madang Province Map. Source: NRI 2010

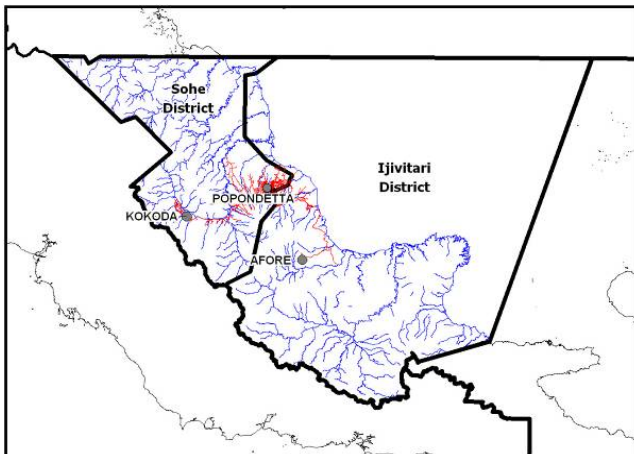


Figure 2. Oro Province Map. Source: NRI 2010

Fresh food Supply and seasonal crops

- In **Madang**, during the lockdown period, which commenced on 24 March 2020, fresh food supply of vegetable and fish were very low in the town area due to the closure of the main market and fish market.
- This limited sales of fresh food producers, mostly from Eastern Highlands, Western Highlands Provinces, as well as fishers from Madang. As a result, there were no fresh vegetables and other fresh produce in Supermarkets for 4 weeks.
- Fresh producers from the Highlands Region experienced great losses, from hundreds to several

thousands of kina depending on the type of food crop and quantity sold in **Madang**.

- The sales of the Kranget Island fishers’ (who reside near Madang town) was affected the most from no sale of fish before and during lockdown, as there was already a ban on fish harvest and sales imposed on 30 September 2019 in the Province following the Basamuk Bay slurry spill in August 2019.
- The Fish Market in Madang was reopened on 26 February 2020 but was forced to close nearly a month later due to COVID-19 lockdown. As a result, the urban population in Madang was greatly affected with no supply of fresh food. They had to purchase fresh food at the roadside markets in peri urban and rural areas.
- Also, due to market closures, roadside markets increased in numbers outside urban areas.
- There were reports of some urban residents increasing the practice of backyard food gardening, to sustain food supply when markets close.
- In **Madang**, both the main market and fish market were reopened after WASH facilities were put in place.
- The lockdown greatly affected food supply to Divine Word University’s student mess. The University had to go out to markets and shops in Madang to purchase food in bulk before the lockdown. This helped sustained food supply to the mess during and after the lockdown. The University was planning to develop a large eight-hectare food crop farm in Madang to supply fresh produce to its student mess.
- The supply of seasonal food crops grown in rural areas in Madang, mainly taro and yams, were reported to be greatly affected, and as a result, people who rely on these crops consumed more processed foods of low nutritional value such as rice, tinned fish and noodles.
- During the lockdown period, the **Popondetta market** was closed. Transport restrictions and limitations impeded and restricted the movement of people. As a result, fresh food supply of vegetables, fruits, nuts and fish were very low in Popondetta Town. However, there was sufficient food supply in shops and traders were allowed to open only 6 hours a day, from 9 am to 3 pm, which affected purchase of food within the time limit and also the purchasing power of the urban residents.
- There were restrictions on the sale of livestock in **Popondetta town**. The urban residents had to go out of town to roadside markets in peri-urban and even to



rural areas to purchase fresh food. Those who did not have vehicles had to walk out of town or did not purchase at all.

- The supply of taro, banana and sweet potato from **Kokoda to Popondetta** was very difficult due to transport restrictions.
- Also, fish supply from rural inland and coastal areas to the main market was greatly affected by market closure. Fish supply to supermarkets were not really affected, as supermarkets bought fish directly from fishers.
- Even though food security was intact in rural areas in **Popondetta**, it was not the case for some betel selling populations who rely on their betel nut sales to buy food and do not have any food gardens. These people experienced severe food shortage at that time.

Food safety, trade and private sector

- The **Madang** main market and fish market now open on Mondays to Saturday, 8 am to 5pm.
- Now that the Madang market is open, there has been an increase in certain food prices such as vegetables, especially from fresh produce vendors who travel by PMV from the Highlands Region, and a decrease in quantity sold. This is because the PMV fare and freight cost has increased as a result of the social distancing measures on PMV vehicles, thus, these vendors have to put a mark-up on their prices in order to recoup the loss. For example, a round cabbage sold for K2 prior to the lockdown is now selling for K8. Some vendors at the main market expressed that they are earning less income than before the lockdown and are taking longer time to sell their produce.
- In **Popondetta**, the price of vegetables, especially green vegetables which are quick to perish, increased in the temporary town market. For example, resellers bought bundled greens such as *aibika* for K1, divided the bundle into four bundles, and sold each again for K1.
- Ships transporting meat imports from overseas were subject to fumigation and were quarantined for 14 days in Lae, Morobe Province, before their cargoes were offloaded to smaller local vessels to be shipped to Popondetta.
- The sale of cooked foods on streets was banned. Kaibars had to comply with WASH standards by the Oro Provincial Health Authority before opening.
- Some shops increased the prices of their food items, especially rice. A 10 kg rice bag that usually sells for K57 was sold at K70 to K75 during the lockdown. It was reported that ICCC went to the province to check these incidences of price increase.
- There were reports of a shop in Town selling expired food goods at discount prices and repacking flour to sell.
- Some business houses, including shops, had to lay off their staff.
- Globe Manufacturing Limited in **Madang**, managed to retain all of its staff during and after the lockdown and provided food assistance to its employees during the lockdown, and transport and extra security. The manufacturing company, with its Good manufacturing practices (GMP) and health and hygiene standard operating practices (SOP) already in place, further increased its staff health and hygiene practices.
- Andersons Supermarket in Madang also retained all its staff and made sure health and hygiene practices were practiced by staff, by supplying them with PPEs and ensured social distancing was practiced in their shop.
- Outspan PNG Limited made sure its staff practiced social distancing and best health and hygiene practices. The cocoa exporter, provided COVID-19 awareness to cocoa farmers through posters at their warehouse and supplied soaps to their cocoa farmers' fermentaries.
- Cooked food was not allowed to be sold at the main market. There are plans to open a cooked food section in the market. Only vendors from Kranget Island are allowed to sell cooked fish and food at the Madang Fish Market, as these people were mostly affected from COVID-19 measures near the town area.
- There were reports of food prices increasing in some stores in **Madang** Town, especially for rice. For example, it was reported that a 10Kg rice bag sold for K32 was being sold for K62.
- Also, the price of bundled leafy greens such as *Aibika* increased from K0.30 to K1.00
- A COVID-19 Committee was set up in January 2020 that focused on monitoring prices, including food prices, in Madang.
- Food safety risks for food sold in the informal sector, especially cooked foods, and the rise in roadside markets which sell cooked foods is of concern in **Madang**. There are no proper food safety measures in place, hence, the informal sector health laws and regulations need to be revisited.



- Those that relied solely on betel nut for income were severely affected from the market closure and betel nut ban. Betel nut growers had great difficulty selling their betel nut to customers mainly from Highlands Provinces. This resulted in them smuggling betel nut out of the Province through bush tracks and traditional routes, as Police had set up checkpoints between Madang Districts and in-and-out of the Province.
- Hotels in **Madang** were all closed during the lockdown, resulting in huge revenue losses and laying off of staff. This affected the tourism industry in the Province. The Madang Resort lost K6 million in revenue and had to lay off 120 of its 150 staff.
- In relation to food manufacturing, Globe Manufacturing Limited in Madang reported that the major impacts of COVID-19 measures on the company were from importing meat (raw meat) from Australia and New Zealand during and after the lockdown, as some meat suppliers from the two countries had their operations affected from to COVID-19 measures, thus, some had to close down from purchasing caning materials from overseas due to restrictions on shipping and transport in PNG.
- Also, with limited people in supermarkets during the lockdown, Globe reported that the supermarkets they supply did not reach their sales target.
- The Andersons Supermarket in **Madang** had very limited supply of local fruits and vegetables, mostly supplied to them from fresh producers who came from Eastern Highlands Province and some from Western Highlands and Simbu Province, for three to four weeks after the lockdown.
- The fruits and vegetables sold in Andersons **Madang** were mainly bought from Highlands’ producers, which include English potato, round cabbage, carrots, onion, lettuce, capsicum, tomato, pineapple and certain herbs. The Supermarket manager reported that the quality decreased after the supply resumed. The Highlands producers are asking for higher selling price for the sales of their fresh food at Andersons due to increase in PMV charges as result of limited passenger capacity allowed in PMVs for social distancing.
- The Supermarket’s imported fruit and vegetable supply was affected with prices increased to meet the demand. Andersons stated that they have now limited the purchase of fruits and vegetables from Madang market

due to lack of quality in the local produce from the local market.

- The Supermarket’s trading hours was reduced from their normal hours of 7.30 am to 7 pm, to 8 am to 4pm, in accordance with the Madang Provincial Government’s emergency orders during the lockdown. There was panic buying in the store, as in other Madang stores, during the first week of lockdown. The shop reported a 30 percent loss in revenue as a result of the lockdown. However, sales has picked up after the SOE was lifted and the company is now only experiencing a five to ten percent loss in revenue. Furthermore, Andersons reported that ICCC monitored prices at Madang retail outlets including Andersons.

Table 1. Food Markets in Madang Town

Market Name	Comments
Madang Market	Open six days a week: Monday to Saturday- 8AM to 5PM
Madang Fish Market	Open six days a week: Monday to Saturday- 8AM to 5PM

Popondetta main market

- Since the lockdown, the Popondetta main market is still closed as it is not ready to operate. The market will be opened once all WASH facilities are installed, including a shower block, and all renovations to existing infrastructure are done. The electorate member for Sohe District has agreed to help fund the infrastructure renovation and upgrade. The main market is managed by the Higaturu LLG. The market should be opened in August 2020.
- Currently, a temporary market is allowed by the Urban Town Council, for vendors to sell their food items and other items, including firewood.
- Food sold at the temporary market include coconut, *kulau*, *aibika*, *aopa*, beans, *Kaukau* (sweet potato), banana, taro, corn, tapioca (cassava), tomato, pawpaw and other fruits and vegetables, and smoked fish.



Figure 4. Market vendors at the temporary Popondetta market



Figure 5. Vendors from Tufi selling smoked fish at the temporary Popondetta market

- The temporary market vendors include people from peri-urban and rural areas, and urban resellers.
- Some vendors stated that there were slight increase in PMV fares.
- Most vendors stated that they experienced total income loss during the main market closure and lockdown, and could not find alternative means and ways to generate income.
- Some vendors from *Girua* near Popondetta town who sell sweet potato, *aibika*, banana and tapioca (cassava), stated that selling prices of their goods decreased after the temporary market was open, thus, their daily income from sales dropped from their usual K50 to K60 profit to less than K50 a day.
- Another group of vendors from Tufi in Ijivitari District (which is 124 km from Popondetta) who sell smoked fish spend close to K100 for water and PMV road transport to get to the market to sell their goods. They experienced total loss of income during the market

closure and could not find other means to generate income.

- The market vendors did not face food shortages, obviously because they were suppliers of fresh produce but most of them reported that they lacked oil, salt and other store goods, thus, their diets increased with more fresh food.
- In general, income generation from most vendors' fresh produce sales were the same as prior to the market closure.
- No social distancing was practiced at the temporary market by vendors and buyers. The market was crowded with over a 100 persons. Also, there was no WASH facilities at the temporary market.

Food demand and social support

- In general, the public was not compliant to COVID-19 containment measures, especially to do with social distancing, in **Madang**, even though there was an observed slight increase in public hand washing facilities such as hand washing taps.
- Social distancing was practiced among most vendors in the Madang main market but not amongst buyers. WASH facilities were provided in the market but not at the market entrances.
- Health compliance certification done by the Madang Provincial Health Authority, and was needed by supermarkets and schools to operate after the lockdown.
- Due to the main market closure in **Madang**, the demand for fresh produce was high in urban areas. The variety of fresh produce decreased and price of fresh produce increased in markets, including roadside markets. As the main market is now open, the variety of fresh produce has picked up, however, the increase in PMV fare for fresh produce vendors from the Highlands Region has caused the price of certain foods to increase at the market.
- There was no formal food supply assistance in **Popondetta**. Certain individuals took it upon themselves to provide food assistance to vulnerable groups. The electorate member for Ijivitari provided food to settlements in Popondetta. There were reports of communities providing food to certain cash-for-food populations who experienced severe food shortage during the lockdown.



- A group of betel nut producers and sellers in the Higaturu area experienced severe food shortages during the nationwide ban on betel nut sale during lockdown. This was because these people depended solely on growing and selling betel nut for income. They lack food gardens and cash crops as back up. They were the group that were in need for food.
- There were reports of greens and vegetables being stolen from food gardens in **Popondetta** town as a result of food shortages.
- Papindo Supermarket in Popondetta remained for food shopping during the lock down.
- The Supermarket has WASH facilities provided outside the store for customers before they enter, and social distancing markings with tapes are in place inside the store. However, the Papindo staff did not wear masks in fear that it would cause panic in the public.
- Papindo manager reported that customers were compliant to health and hygiene measures within Papindo's premises. However, this was not continued after the lockdown as people felt this was not necessary.
- The operations of the Higaturu Oil Palms (a part of the NBPOL group) was allowed to continue by the Oro Provincial Government because they employ a very large number of people in the Province and support a large number of oil palm growers.
- The oil palm company enforced very strict social distancing, sanitation and hygiene practices on its employees.

Agricultural productivity and supply

- In **Madang**, Agriculture stakeholders from the Provincial Government reported the need for food planting materials, including drought and climate resistant seeds for rice, and agriculture training for farmers in rural areas. They also expressed that the National Government should look at producing flour from local farmers' taro, yams and cassava, to help preserve and increase staple food supply, especially during the off-season of seasonal crops, which will increase agricultural and economic productivity in Madang Province. Madang also needs to have freight subsidy for fresh produce supply out of the province.
- Furthermore, they stated that soil fertility in rural places are low due to increased population resulting in limited land, forcing farmers to plant their food crops in the same area and not allowing for sufficient fallow periods

between harvest and planting of food crops. Also, they raised concerns that climate change greatly affected agriculture productivity in the Province (drought and increased water tables).

- Areas in **Teptep in the Finisterre Range** in Madang have been reported to be prone to frost.

Innovation to link food to markets

There is a mobile application called *AgUnity* which is currently used by 40 cocoa farmers in **Madang** Province to sell their cocoa online and receive digital payments.

MERI Program

The Madang market is one of the markets in the Market Economic Recovery Inclusion (MERI) Program. Madang and other 13 markets will received support to meet health standards.

Impact on cocoa, coconut, coffee, vanilla and oil palm

- There were no ban or restriction on the production and sales of cocoa, copra and vanilla (the major cash crops) in **Madang** Province, however, there were impacts on the buying price, quality and overall production of cocoa and copra.
- For, Vanilla, there were four exporters in Madang Province. After the lockdown, two closed and two are still in operation.
- Vanilla prices have been affected due to COVID-19 impacts on importers overseas. The local buying price for vanilla in Madang dropped from K1000 per Kg to K400 per Kg. However, supply is still high.
- As for cocoa, there was a decline in production and sales from farmers during the lockdown due to exporters, such as Outspan PNG Limited, scaling down employees, and transport restrictions and PMV limitations making it difficult for cocoa farmers to bring their produce in to Madang Town to sell.
- Outspan in **Madang**, reported that during the lockdown, their cocoa supply from farmers dropped.
- Outspan usually purchase 16 bags of cocoa a day, which weighs around 1 tonne, however, during the lockdown the company was purchasing only 5 to 8 bags a day.
- Now that the transport and other measures have been relaxed in Madang, supply is very high for the company



and there is not enough space in their warehouse to accommodate over 100 bags.

- It was reported that the high supply of cocoa after the lockdown was also a result of betel nut traders switching to cocoa production as a result of the betel ban. There were also reports that the quality of cocoa slightly decreased and was inconsistent as few farmers sold wild cocoa and some people were stealing and selling the crop.
- There was a total ban on logging shipments out of Madang since the lockdown. The logging shipments resumed in early July.
- In **Popondetta**, there were reports of reduction in cocoa production, as some cocoa farmers experienced food shortage and had to divert their attention to sourcing of food, hence, the decrease in productivity of labor on cocoa. The quantity of cocoa sold by farmers decreased, however, quality was maintained.
- Coffee production was also affected. The restriction and limitation of transport delayed movement of shipment of cocoa and coffee from rural areas to Popondetta.
- In **Popondetta**, the most affected cash crop was betel nut, followed by cocoa, then coffee.
- There were no major impacts on the oil palm industry, as the Higturu New Britain Palm Oil was allowed to operate throughout the lockdown and SOE.

EMERGING BIOSECURITY ISSUES

African swine fever:

The African swine fever (ASF) Risk Communication and stock inspectors' workshop has been tentatively put forth to August 2020. The training will be communicated in two parts: risk communication and communication strategy. The NAQIA team in Popondetta will be part of the Momase training in Lae.

Fall armyworm:

With the recent detection of Fall armyworm (FAW) cases

in Ramu, Madang Province, and Markham, Morobe Province, the insect pest has potential to spread to Oro. The NARI and other stakeholders are currently monitoring this pest and will use pheromone traps to detect and monitor the presence of FAW from the Highlands to the coastal provinces of Madang and Morobe.

Other biosecurity issues

- Currently, in Madang Province, there are two other major biosecurity issues. The Bogia Coconut syndrome (BCS) or phytoplasma which affects and has killed hundreds of coconut palms in Madang. It has also been reported to affect banana and betel nut. The phytoplasma is only found in Madang Province. Sanitation of coconuts to prevent the disease has kicked off on the 13th of July 2020 by NAQIA in villages near Madang. The set-up of checkpoints between districts and in-and-out of the Province has resulted in the disease not spreading to coconut palms outside of the Province. The other biosecurity issue is the Coconut Rhinoceros Beetle (CRB-G) which also greatly affects coconut palms in the Province, and is a threat to oil palm in the country as well.
- The Cocoa Pod Borer, Bogia Coconut Syndrome, and Coconut Rhinoceros Beetle are emerging threats for Oro Province.

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