

# Rapid Qualitative Multi-Method Assessment of the Impacts of the COVID-19 Pandemic on Wet Market Biosecurity and Local Food Security in the Philippines

Renzo R. Guinto<sup>1,2</sup>, Marianne K. Bongcac<sup>1</sup>, Mara Ysabella M. de los Santos<sup>1</sup>

<sup>1</sup> Planetary and Global Health Program, St. Luke's Medical Center College of Medicine-William H. Quasha Memorial, Quezon City, Philippines

<sup>2</sup> Sunway Centre for Planetary Health, Sunway University, Selangor, Malaysia

## BACKGROUND

- In the wake of the COVID-19 pandemic, wet markets were perceived as potential sources of novel zoonotic diseases due to the sale of live animals.
- Meanwhile, wet markets were also heavily impacted by the pandemic due to various restrictions that were hastily enforced.
- This study examined the impacts of the COVID-19 pandemic on wet markets in the Philippines, specifically on biosecurity reforms and the restrictions' effect on local food security.

## METHODS



Figure 1. Data Collection Methods

- This exploratory qualitative research study utilized a multi-method approach consisting of media analysis, policy review, key informant interviews, and rapid ethnography in an urban and rural wet market in the Philippines.
- Data were collected from June to December 2021. These were triangulated and key findings were synthesized using thematic analysis.

## RESULTS

- Pandemic restrictions were found to be partly responsible for the decrease or even cessation in the sale of wildlife in markets known as "wildlife trade hubs."
- As part of the pandemic response, only a few additional hygiene and sanitation practices were enforced at wet markets, including the use of plastic barriers and conducting more intense market disinfection.
- It was found that wet market stakeholders were excluded during the policy creation and implementation of the pandemic restrictions even as wet markets were perceived as essential services. Hence, the restrictions initially caused a chain reaction across the domestic supply chain that unveiled underlying food system vulnerabilities, primarily the lack of financial capacity of small-scale producers to fully adapt and withstand sudden and prolonged disruptions to the economy.
- Ultimately, food prices increased (Fig 2), while alternative methods of food distribution emerged such as online retailing and satellite markets.



Figure 2. Impact of COVID-19 on Wet Market Supply, Demand, and Prices

## CONCLUSION

- Despite the additional temporary hygiene and sanitation practices enforced during the pandemic, overall wet market biosecurity needs to be further improved.
- The restrictions greatly affected the local food supply, disproportionately impacting both small-scale producers and low-income consumers.
- Moving forward, there is a need to apply a proactive, whole-of-society approach to pandemic response, especially in wet markets.
- Different sectors must exercise greater communication and collaboration in order to mitigate the negative impacts on local food security and maximize the positive benefits of improving biosecurity.

## ACKNOWLEDGEMENTS

We sincerely thank our key informants for their time and insight contributed to this study. We would also like to acknowledge the support of our partners: Royal Melbourne Institute of Technology (RMIT), Vietnam Academy of Social Sciences (VASS), and University of Nairobi. Funding was provided by the Australian Centre for International Agricultural Research (ACIAR).

