# Urban Food Security of the Colombo Metropolitan Region (CMR) in Covid times

#### ▼ Outstation vegetables for CMR (Kotte) during COVID 19 Lockdown



Home Visits: Mobile Vegetable Vendors from Upcountry Nuwaraeliya

#### ▼ Interviews with CRFS actors



Author Interview a wholesale trader in Dambulla Economic Centre



Co-Author interview commercial farmer in Welimada & explore the solutions for vegetable logistics in Bandarawela

Colombo Municipality Region (CMR) consists of a highly complex food system that relies on the supply from distant outstations which literally collapsed during the pandemic situation. A requirement exists for empirical research to derive guidelines and recommendations to increase the sustainability and security in the food supply in CMR during a disaster situation.

#### Research Objectives

To investigate sources of urban food supply in CMR; identify the impacts for the City Region Food Supply System (CRFS) components during the COVID 19 & recommend guidelines & policies to address problems in the supply side of Urban Food System (UFS).

# Design/methodology/approach

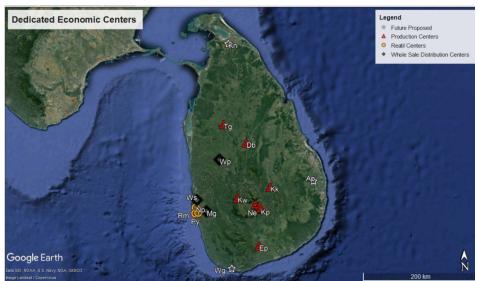
Qualitative thematic data analysis with purposive sampling with 25 respondents and face-to-face interviews were performed at the domicile of the CRFS actors, with many case studies.

#### Originality/Social Value

The first study is to use primary data to address the sustainability of UFS in CMR and helping farmers at origins and end urban consumers.

# Findings and Policy implications Sustainability of the food security within CMR,

- + Need some form of central and regional intervention during a pandemic to maintain the supply chain.
- + Alternative sources of food supplies Peri-urban agriculture, Home gardening, Community farming at Grama Sevaka levels.



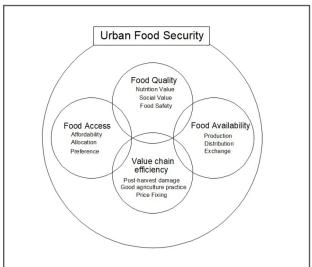
Strategically located 'dedicated economic centres'

Dedicated economic centres in Sri Lanka

Exploiting the price slumps at outstations, converting retail to the wholesale business model during COVID 19 -

Narahenpita Economic Center

▼ The study derived Urban Food Security Framework



Author defined UFS framework built upon (Ford,2008)

Bad transportation - one of the root causes of post-harvest damage



Dambulla Economic Center – wholesale vendor about to transport purchase to Colombo



Retail business switching to wholesale model

Key Player in UFS discussion - Price fixing by commission broker damage



Commission Broker (In the middle of the picture) at Keppetipola Economic Center

#### ▼ Refurbish abandoned and unused/under-utilized railway for vegetable transport



Abandoned logistic hub in Bandarawela linking road & railway network

## ▼ Why the use of Wooden Crates rather than Plastic ones?



Cheaper, practical solution for safe storing & transport

## Efficient and effective vegetable value chain,

- Increase connectivity within value chain partners.
- Increase information transparency of demand & supply.
- Encourage traditional 'attam kramaya' which has the character of EOS & resource sharing.

## Information sharing platform

- SMS service to communicate with farmers.
- Web platform to communicate with consumers.

# Post-harvest damage mitigation,

- Safe sorting & storing.
- Introduce railway for vegetable transport.
- Promote GAP to produce quality products, minimize chemical use, minimize hybrid seed use, create a niche market for organic vegetables.
- Reduce stress on outstation farmers, by urban agriculture.
- Promote Traditional knowledge ex: maze farming in Guatemala
- PAW- state-of-the-art technology.

### Eliminate price fluctuations in the value chain

- A data-driven approach for price-fixing.
- Need an independent authority to determine prices.
- Encourage more alternative trading platforms, ex: Embilipitiya pola & EC.
- Sorting & grading of vegetables sorted vegetables need price discrimination to encourage farmers.

### Article by

# Asanka O.R.B.E.W. D. Ovitipana, Sarath Dasanayaka

Department of Management of Technology, Faculty of Business, University of Moratuwa, Sri Lanka.