



FOOD INSECURITY DURING COVID-19

Poverty Despite
Growth in Indonesia

For: Sriganesh Lokanathan,
Data Innovation & Policy Lead at Pulse Lab Jakarta UN Global Pulse

By : Romauli Butarbutar, Student of Ms. Applied Analytics, Columbia University

A CASE FOR ANALYTICS OF FOOD INSECURITY

- **The achievement of Sustainable Development Goal (United Nations 2015)2 –
“End hunger, achieve food security”**
- **Jakarta as the case**
The current program to address food insecurity do not optimize expected reduction level of hunger
- **Using analytics**
Modeling trends for food distribution optimalization represents a more extensive advantage
- **Data source :**
 - ✓ <https://databank.worldbank.org/>
 - ✓ <https://data.jakarta.go.id/dataset?q=miskin&sort=1>
 - ✓ https://www.bps.go.id/indikator/indikator/list_/sdgs_2/



DOES HUNGER CORRELATE WITH COVID-19?

Food insecurity Rates have Risen dramatically During Covid-19

The prevalence of food insecurity due to poor in Jakarta Province dipped slightly until 2019, but surprisingly elevated in 2020 compared to the previous years

Source:

<https://www.bps.go.id/subject/23/kemiskinan-dan-ketimpangan.html#subjekViewTab5>

DKI JAKARTA PROVINCE

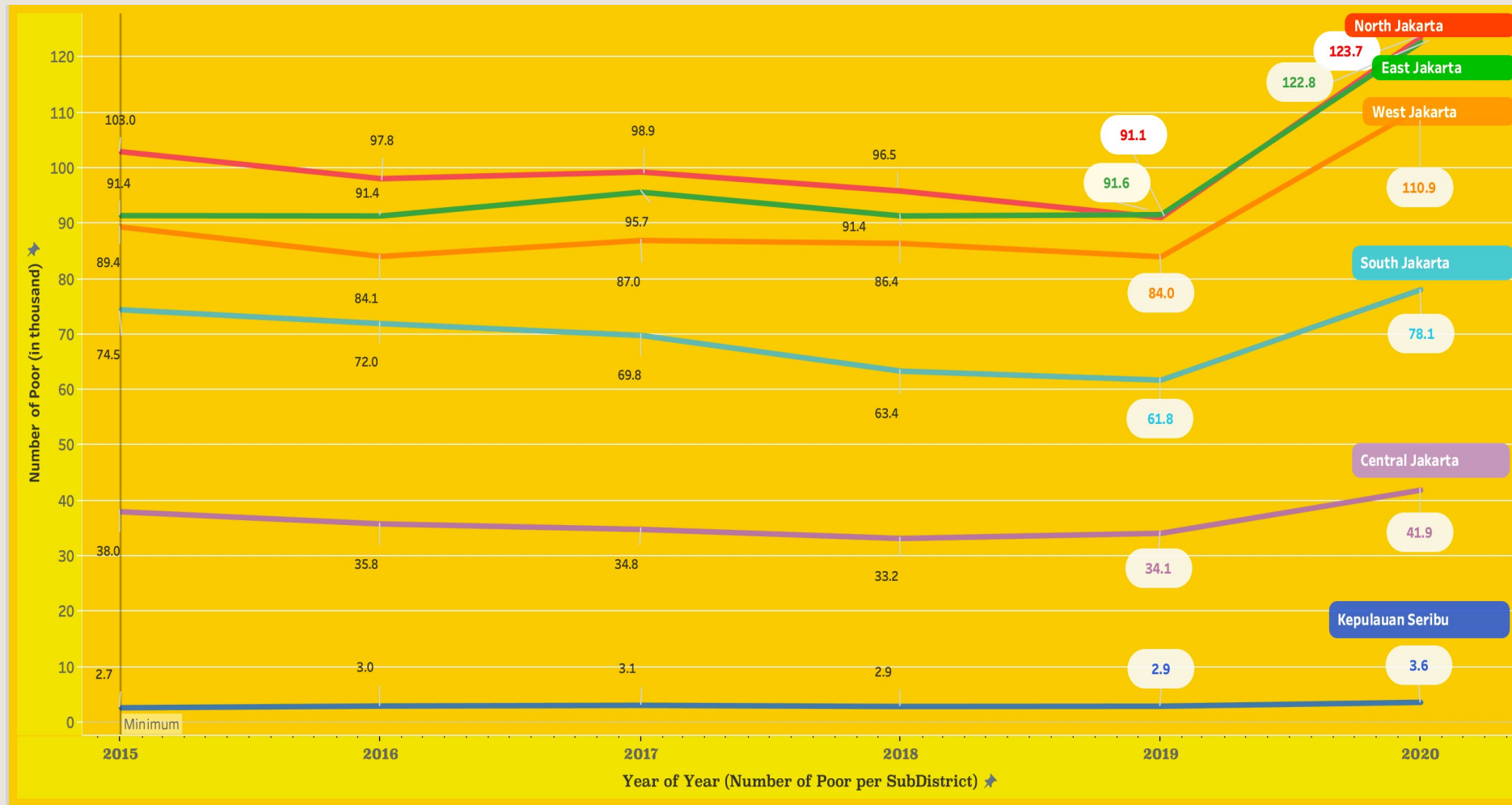


In 2020, 480.9 thousand poor people, or about 23% increasing before Covid-19

**The Increasing Trends of Food Insecurity
During COVID-19 in Jakarta,
23% in just 1 year**



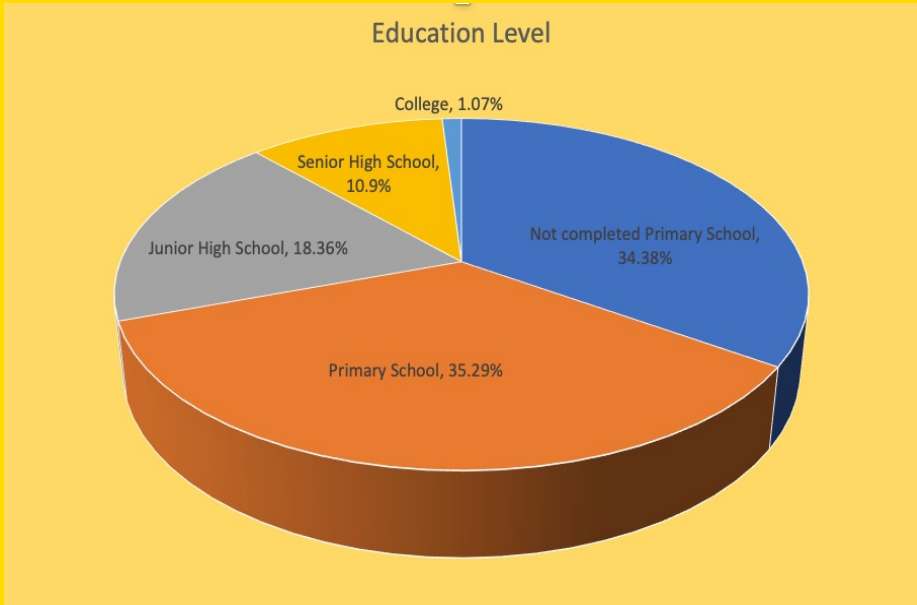
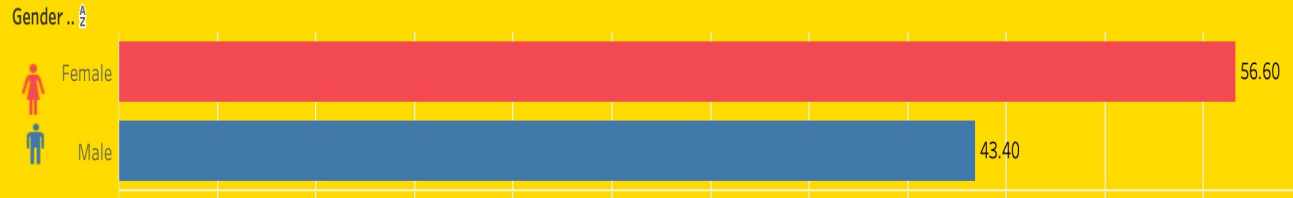
EXPLORE CONDITIONS OF FOOD INSECURITY, JAKARTA NEIGHBOURHOOD.



North Jakarta 26 %
East Jakarta 25%
West Jakarta 24%
South Jakarta 21%
Central Jakarta 19%
Kepulauan Seribu 19%

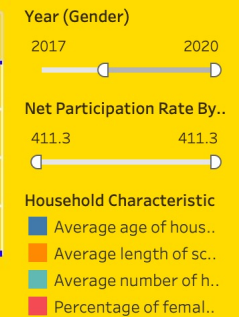


WHO IS THE MOST AFFECTED?



Household Characteristic

Average age of household heads (years)	49.49
Average length of schooling for heads of household (years)	5.94
Average number of household members (people)	4.61
Percentage of female household heads	15.83



About 57 % of Woman is very poor, and almost **16%** of responsible as **solo household heads**

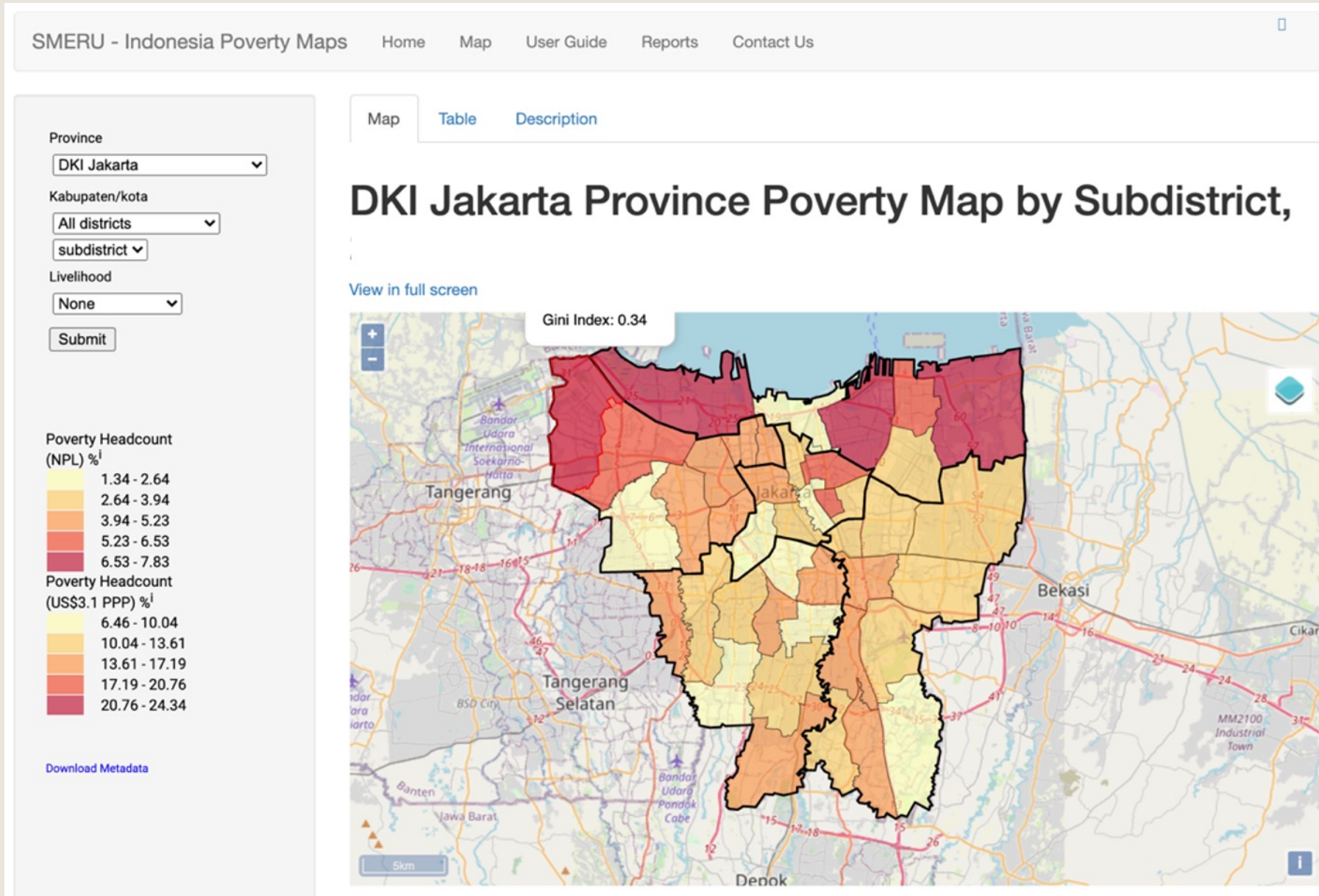


MEANWHILE FOOD WASTE?

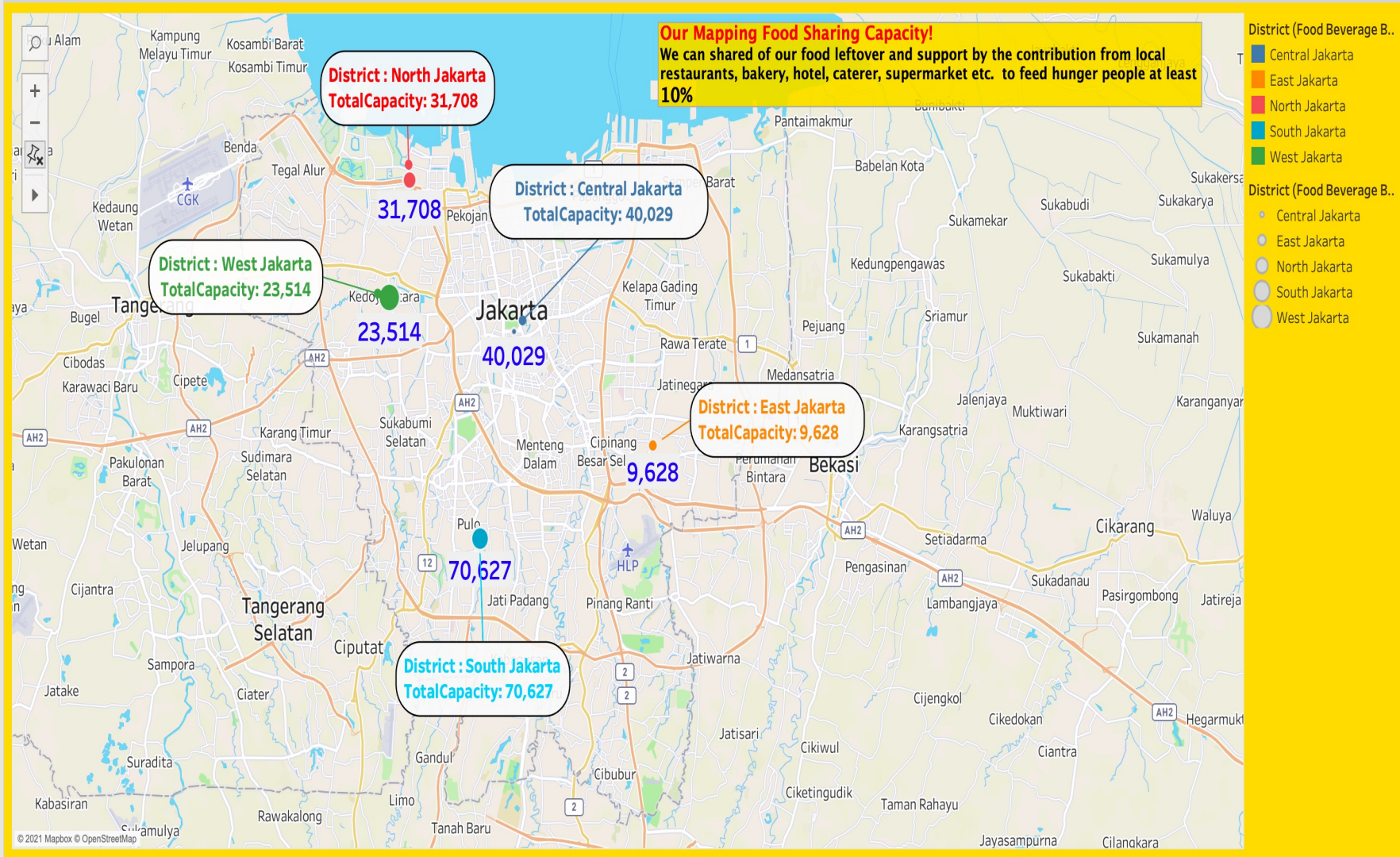
HOW CAN WE MINIMIZE THE FOOD WASTE



JAKARTA POVERTY MAP AS REFERENCE



INJURY TIME! LET'S GO FOR FOOD PANTRY, THIS IS OUR FOOD MAPPING CAPACITY!



We can **shared of our food leftover** and support by the contribution from local restaurants, bakery, hotel, caterer, supermarket etc. to **feed hunger people at least 10%**



FURTHER ANALYSIS FOR SUSTAINABILITY AND ACCURACY

- Coverage specific area with more detail and accurate data and provide food source data in order to support decision making in more effective distribution.
- A mobile application for the public as a community monitoring and reporting system of hunger people, and list of food donator which have leftovers sharing or whoever who wants to share food.
- To assess model performance : compare the accuracy against the Hunger Map.



BECOME A HUNGER FIGHTER



Growth in Indonesia

