

This is not an ADB material. The views expressed in this document are the views of the author/s and/or their organizations and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy and/or completeness of the material's contents, and accepts no responsibility for any direct or indirect consequence of their use or reliance, whether wholly or partially. Please feel free to contact the authors directly should you have queries.

# **FOOD SECURITY IN INDONESIA: CHALLENGES AND POLICY RESPONSES**

Tahlim Sudaryanto

National Research and Innovation Agency (BRIN), Indonesia

ADB Sustainable Food Webinar Series-Fighting for Food Security:  
Lesson from Cross Country Approaches,  
Asian Development Bank, 10 August 2022



# Overview on Food Security Situation (1)

Productivity growth, 2005-2020 (%/year)

Year	Rice	Maize	Soybean
2005-2010	1.92	5.19	1.09
2010-2015	1.14	3.43	2.68
2015-2020	-0.02	2.35	-0.20
2005-2020	0.79	3.43	1.16

Source: FAO.Stat

Food balance 2022 (1k ton)

Variable	Rice	Maize	Beef
Production	31,812	16,274	510
Consum'n	29,541	14,127	706
Import	-	-	193
Balance	7,543	2,866	(134)

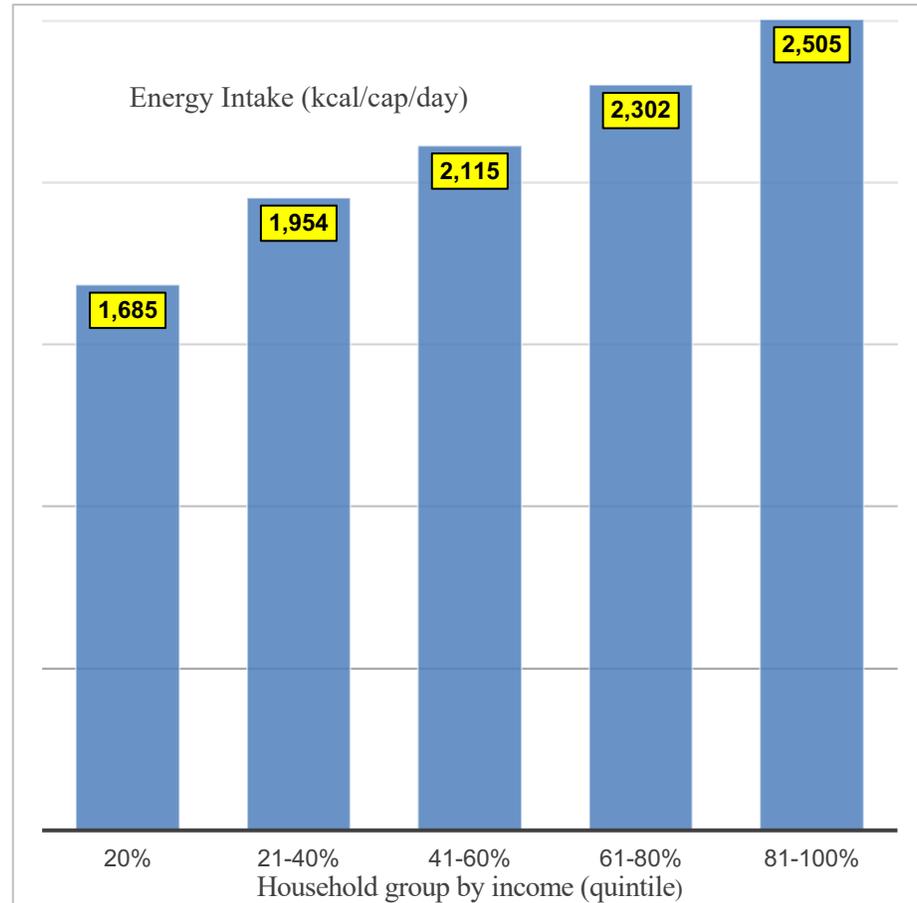
Source: National Food Agency



Surplus on rice and maize, but deficit on beef, soybean, and rely on import for wheat

# Overview on Food Security Situation (2)

Energy intake by income quintile



The prevalence of stunting, 2013-2020.

Year	National (%)	Urban (%)	Rural (%)
2013	37.2	32.5	42.1
2018	30.8	27.9	34,.9
2019	27.7	na	na
2020	24.4	na	na



Energy consumption/capita, 2015-2020 was above the standard (2.100), except the two lowest income quintile

# Challenges in Food Security (1)

## 1. Covid-19 pandemic:

- bottleneck on downstream segments of the supply chain
- decreased access to food for poor household

## 2. Rusia-Ukraine war:

- increased prices of wheat import=>impact to household and food processing industry
- limited supply and increased prices of imported fertilizer

## 3. Recent outbreak of foot and mouth diseases

- In 9 August 2022: 19 provinces infected, 470,797 heads of cattle, 8,160 heads must be slaughtered with compensation
- Loss of productive cattle (asset) for the farmers
- Increase beef prices
- Increase import of cattle and beef

# Challenges in Food Security (2)

## 1. Impact to domestic prices:

- Inflation rate in July 2022 increased to 4.94% (y-o-y), from 1.52% in 2021=> food and transportation as significant contributor;
- Wholesale price index in July increase to 5.35% from 2.71% in 2021

## 2. Impact on rural households, urban poor, and SMEs:

- constraints to access necessary inputs including labor
- slow down productive activity which finally reduce income
- decreased physical transaction for both input and output
- decreased food consumption due to limited access and higher prices
- decreased access to public services

# Policy Responses: short term steps (1)

- Social protection schemes:
  - ✓ farmers: direct assistance on input, expand target and value of KUR, connect to traders and processors; cash for work program
  - ✓ consumers: increase the target and value of direct payment (BPNT), cash for work program, promote online shopping in the farmers shop (TTI)
- To reduce fiscal burden=>increased subsidised prices of petroleum since 10 July (12-20%), and electricity since 1 July (17.64-36.61%)
- Changes on fertilizer subsidy policy: i) only urea and NPK are subsidized from 6 types in the past; limit fertilizer use for only 9 strategic commodities (rice, maize, soybean, chili, shallot, garlic, sugar cane, coffee, and cocoa) compared to 70 commodities in the past
- Respond to FMD: compensation for slaughtered cattle (IDR 10k/head), vaccination (1.2 mill head), biosecurity measures;

# Policy Responses: longterm strategy (2)

1. Grand strategy: rural transformation to accelerate rural income growth and reduce poverty
  - ✓ promote agriculture structure from staple food toward high value commodities: share of high value increased from 40.6% in 1990-1999 to 50.2% in 2010-2019
  - ✓ promote broader rural non-farm employment: rural non-farm employment increased from 48.0% in 1990-1999 to 66.0% in 2010-2019
2. Improving crop productivity:
  - ✓ promote adoption of high yielding varieties
  - ✓ promote application of balanced fertilizer use
  - ✓ application of Good Agricultural Practices (GAP)
3. Modernization of food systems:
  - ✓ characteristics: resilient, efficient, inclusive, and environment friendly
  - ✓ investment in irrigation, rural road
  - ✓ reducing post-harvest losses
  - ✓ promote application of improved technology

# Policy Responses: longterm strategy (3)

4. Agriculture R&D:
  - ✓ increase R&D budget
  - ✓ intensify R&D dissemination, in particular for smallholder farmers
  - ✓ reorient R&D program responding to the emerging issues: under nutrition, stunting, climate change, and environmental issues
  - ✓ promoting adoption of digital technology
  - ✓ manage the risk of slowing agricultural technology innovation in the process of current R&D reform
  
5. Promote more open, predictable, transparency trade policy
  - ✓ Covid-19 pandemic and other shocks motivate defensive policy for the interest of domestic market
  - ✓ consequences to commodity shortages and soaring world prices

# G20 Agriculture Working Group

1. Priority issue 1: Develop a sustainable and resilient food and agriculture system
  - promote diversification and reduces waste and losses
  - increase inclusiveness in the food value chain, in particular the role of women and youth
  - increase capacity and support to SMEs to contribute post pandemic recovery and food security
  
2. Priority issue 2: Promote an open, predictable, and transparency trade to secure food availability and accessibiltiy for all
  - strengthen supply and value chain across member countries to secure food availability and accessibiltiy
  - increase participation of member countries in the AMIS
  
3. Priority issue 3: Support an innovatif agricultural entrepreneurship though digital agriculture to improve farmers' livelihood in the rural regions
  - increase public and private collaboration of in digital agriculture, in particular for smallholder farmer
  - knowledge sharing on the aplication of digital agriculture for smallholder
  - increase access to financial services for smallholder

# Lessons learnt and way forward

1. Too much dependence of rice (and wheat to a lesser extent);
  - ✓ diversification by developing local food systems and production;
  - ✓ diversification toward wheat substitute (at least partially, e.g cassava mocaf)
2. Institutional development:
  - ✓ Strengthen the National Food Agency and Logistics Agency (BULOG)
  - ✓ Simplify coordination across line ministries
  - ✓ Strengthen management of downstream segment of the food value chains
  - ✓ BULOG as commercial and operational body of the NFA: domestic market operation and import of strategic commodities=>issues of crowding out private sector role
3. Agriculture support policy
  - ✓ Budget for fertilizer subsidy is accounted for more than 30% of total expenditure supporting agriculture=>phased out the subsidy and reallocate the budget to finance public good and services such as infrastructure, R&D, etc

# Thank You