

UNDERSTANDING FOOD SECURITY SITUATION IN THE PHILIPPINES

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Sept 27, 2019 Seminar

GLOBAL FOOD SECURITY RANKING: PHILIPPINES

Year	Rank	Number of countries
2012	63	105
2015	72	109
2017	72	113

70

Philippines

51.5 score

Figures are from annual baseline model (October 2018)

Explore the impact of GFSI's natural resources & resilience category

October 2018

score / 100

Strengths (7)

- 100 Nutritional standards
- 98.4 Volatility of agricultural production
- 96.8 Urban absorption capacity

[View all strengths](#)

Challenges (4)

- 0 Public expenditure on agricultural R&D
- 0 Corruption
- 6 Gross domestic product per capita (US\$ PPP)

[View all challenges](#)



74 category rank

AFFORDABILITY

46.3 category score



63 category rank

AVAILABILITY

55.6 category score



69 category rank

QUALITY AND SAFETY

▶ Malaysia	40	Percent of the population below the poverty line 2015	Stunting in children under 5
▶ Thailand	54	Malaysia 1	Malaysia 2016 22%
▶ Vietnam	62	Thailand 14	Thailand 2015 12%
▶ Indonesia	67	Vietnam 7	Vietnam 2015 25%
		Indonesia 11	Indonesia 2013 38%
		Philippines 22	Philippines 2015 33%

GLOBAL FOOD SECURITY INDEX 2018

Food Security defined

*“EXISTS WHEN ALL PEOPLE, AT ALL
TIMES,
HAVE PHYSICAL, SOCIAL AND
ECONOMIC ACCESS
TO SUFFICIENT, SAFE AND NUTRITIOUS
FOOD
THAT MEETS THEIR DIETARY NEEDS AND
FOOD PREFERENCES
FOR AN ACTIVE AND HEALTHY LIFE.”*

- UN

GLOBAL OPPORTUNITIES AND THREATS


(e.g. Climate Change/Globalization/GATT)

National Policies, Governance and RDE

FOOD AND NUTRITION SECURITY/SAFETY



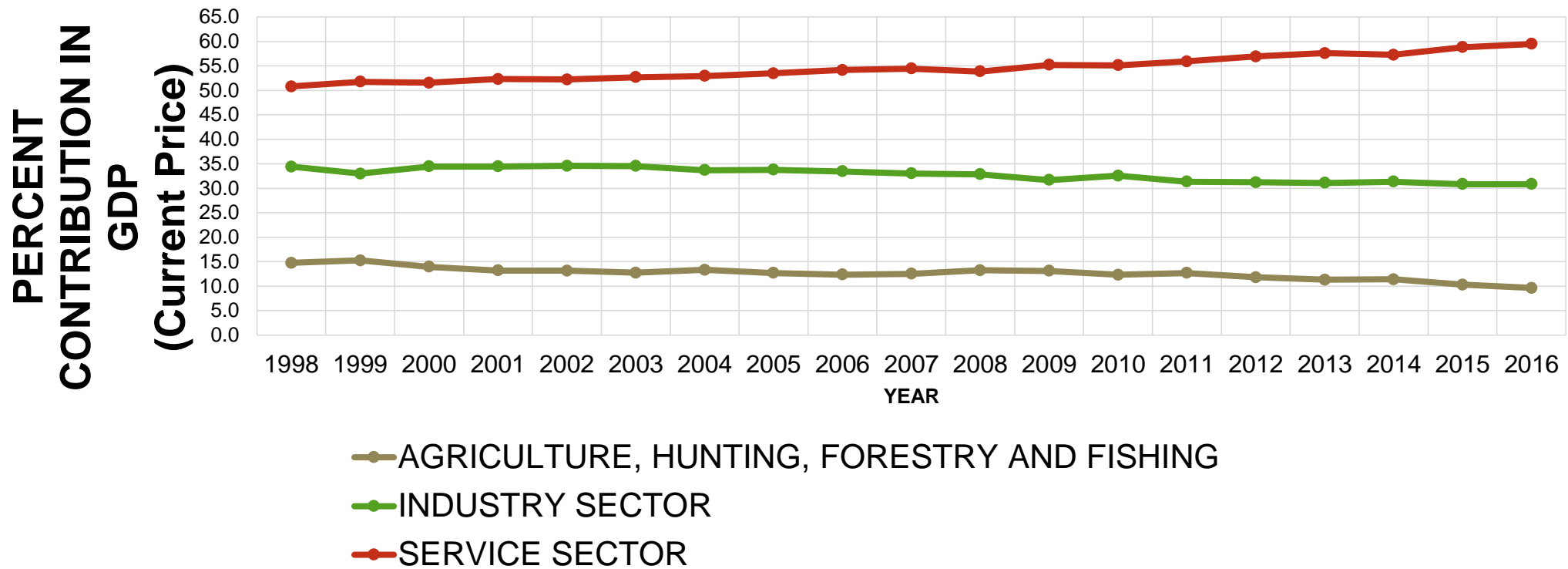
Elements/Dimension of food security

- ▶ *Availability*- trade, stocks, level of production
 - ▶ *Accessibility* –income, market prices, distribution
 - ▶ *Utilization* –food safety, eating habit, Food processing
 - ▶ *Stability*
- 
- A series of white diagonal lines of varying lengths and thicknesses are positioned on the right side of the slide, extending from the middle towards the bottom right corner.

Why are we food
insecure?



POVERTY INCIDENCE		MALNUTRITION	
National	21.6%	Underweight	21.6
Farmers	34.3%	Stunting	33.5
Fisherfolks	34%	Wasting	7.1
		Overweight	3.8
P8,000/MONTH ¾ IN RURAL AREA		Children aged 0-12 yrs	26.2



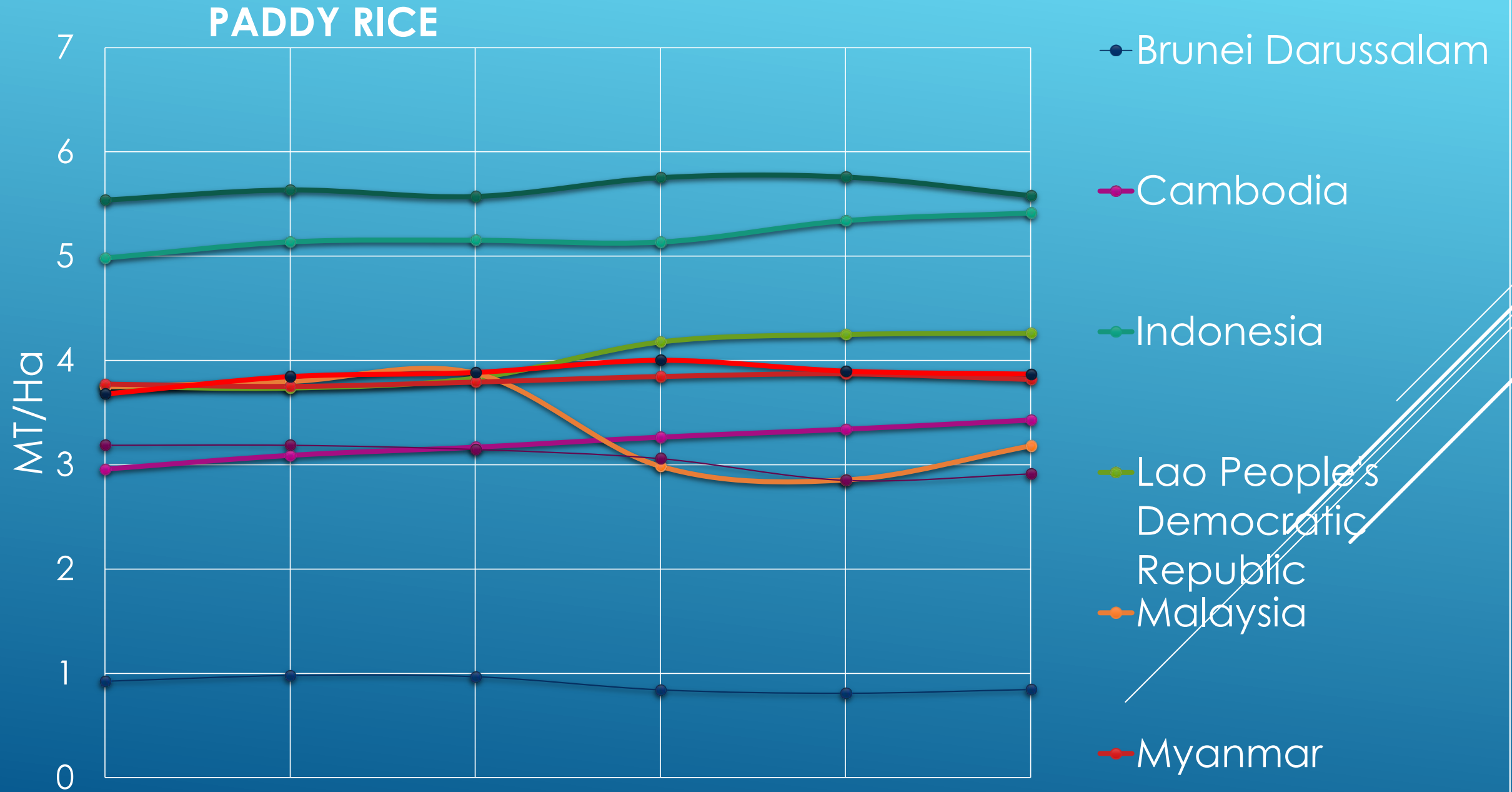
SOURCE: COUNTRYSTAT.PSA

GDP SHARE: 10% PRIMARY AGRICULTURE
30-35% AGGREGATE WITH
HIGH VALUE DIVERSIFIED AGRIBUSINESS

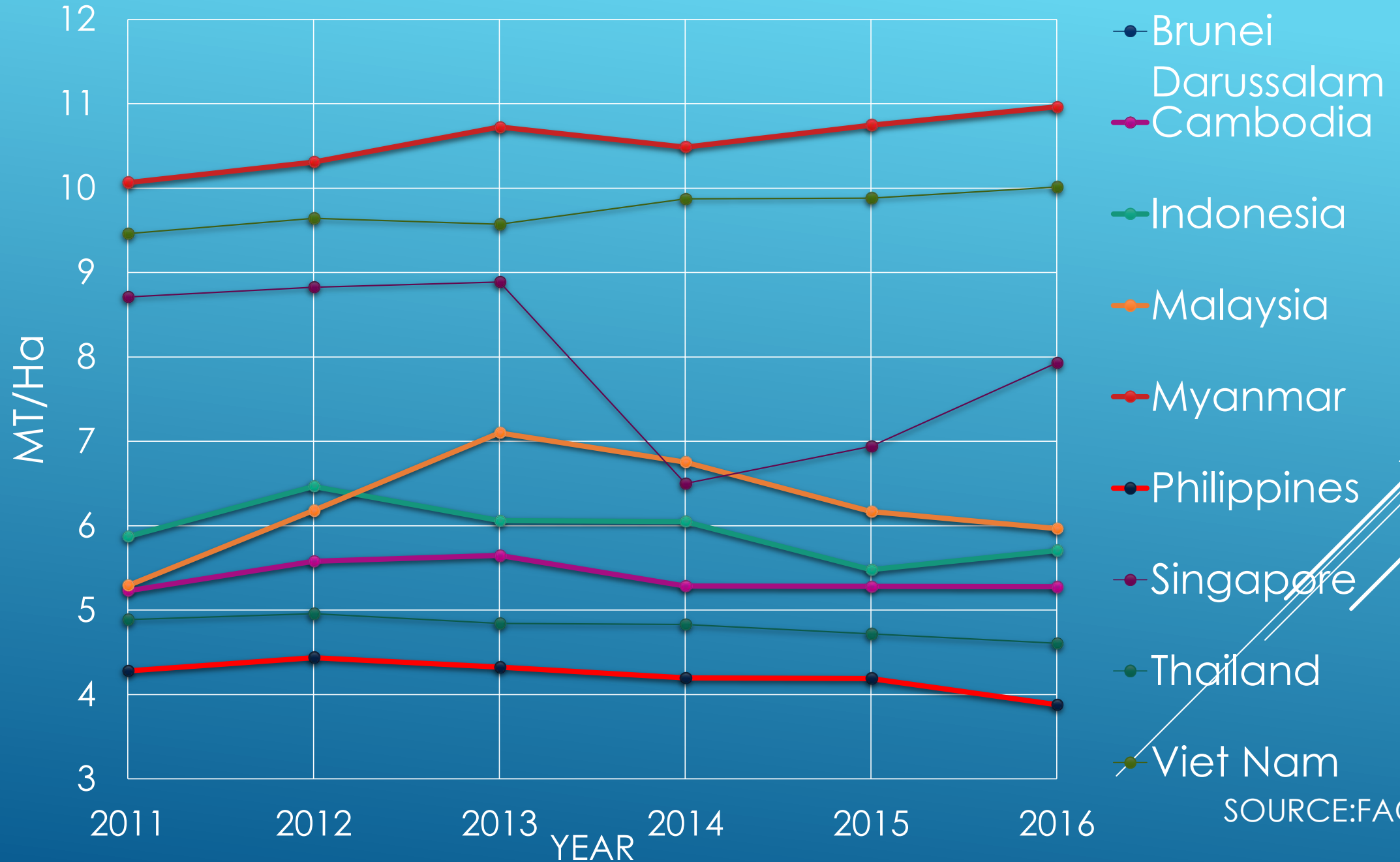
Yield levels (mt/ha)

Crops	2012	2013	2014	2015	2016
Rice	3.84	3.89	4.0	3.9	3.87
Corn	4.09	4.08	4.17	4.15	3.97
Banana	20.31	19.39	20.07	20.49	20.1
Mango	4.07	4.34	4.71	4.79	4.33
Pineapple	41.02	40.46	40.67	41.12	40.05
Coffee	0.74	0.68	0.64	0.64	0.60
Cacao	0.52	0.52	0.45	0.43	0.42
Coconut	4.44	4.32	4.2	4.19	3.88
Sugarcane	60.92	56.25	57.94	54.41	54.55

Are our yield levels at par with our ASEAN neighbors?

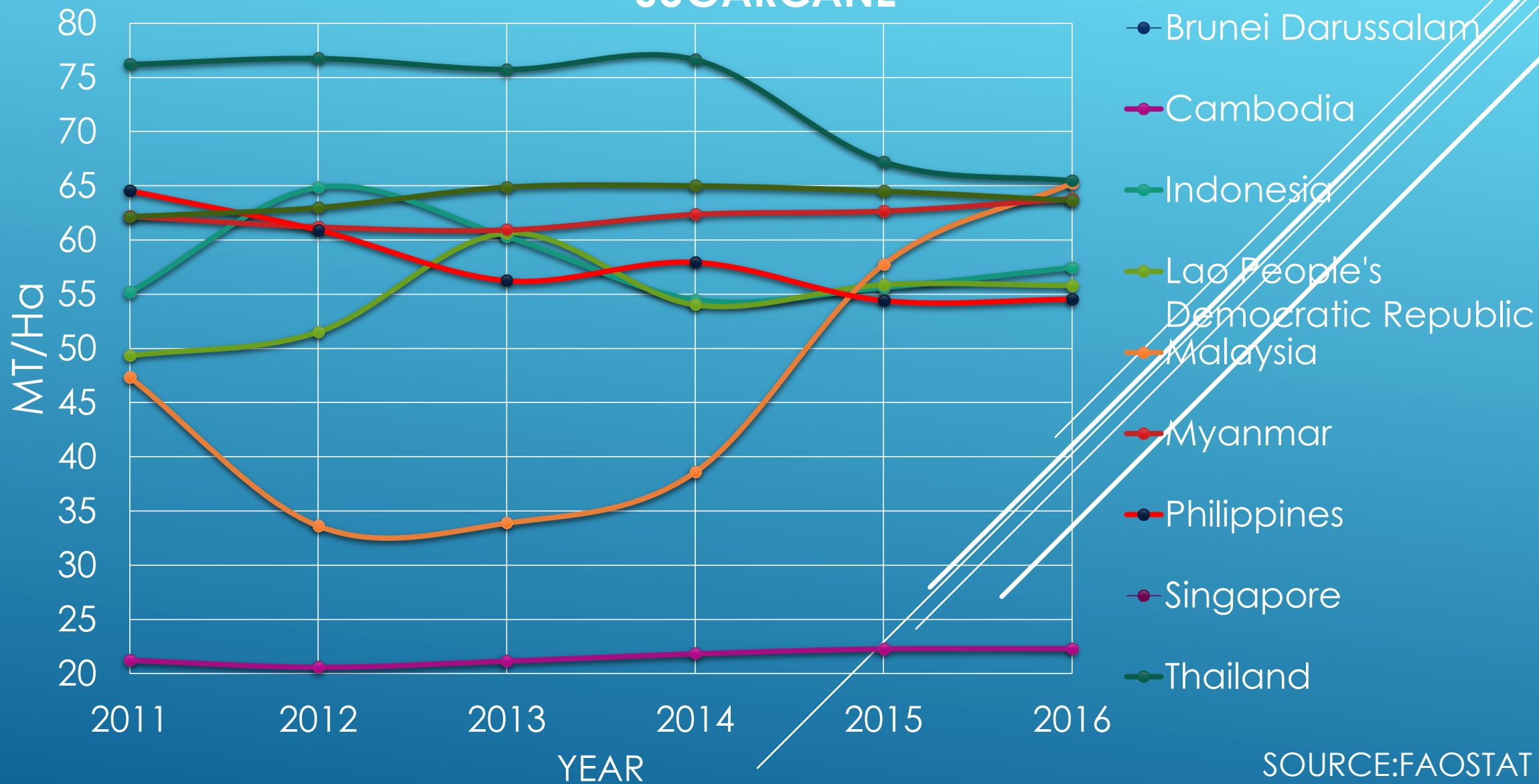


COCONUT



SOURCE:FAOSTAT

SUGARCANE



PRODUCTIVITY PERFORMANCE VS SELECTED ASEAN COUNTRIES



FARM PRODUCTIVITY RANKINGS, 2003 AND 2013

2013					
Country	1	2	3	4	Average
Philippines	0	2	10	8	3.30
Indonesia	9	7	2	2	1.85
Thailand	5	6	5	3	2.32
Vietnam	5	5	3	3	2.25

2003					
Country	1	2	3	4	Average
Philippines	1	4	9	6	3.00
Indonesia	9	4	4	3	2.05
Thailand	7	5	6	1	2.05
Vietnam	3	7	1	5	2.50

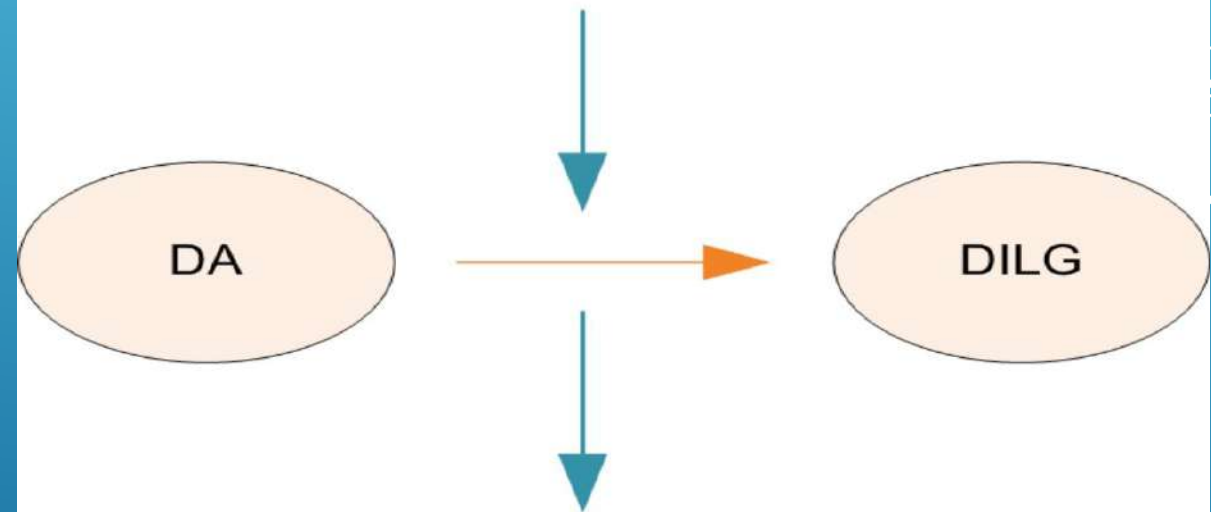
NOTE: 1 to 4 are yield rankings, with 1 indicating the country with highest yield; and 4, the lowest. The figures show the number of crops out of 20 crops which fall within the said rankings.

SOURCE: ROLANDO T. DY, AGRIBUSINESS AND RURAL PROGRESS, 2017

Slow delivery of
basic agriculture
services in local
governments

DEVOLUTION OF AGRICULTURE BASIC FUNCTIONS (Republic Act No. 7160)

PROPEL ECONOMIC GROWTH THROUGH
AGRICULTURAL DEVELOPMENT AT THE
REGIONAL AND PROVINCIAL LEVEL



REALITY

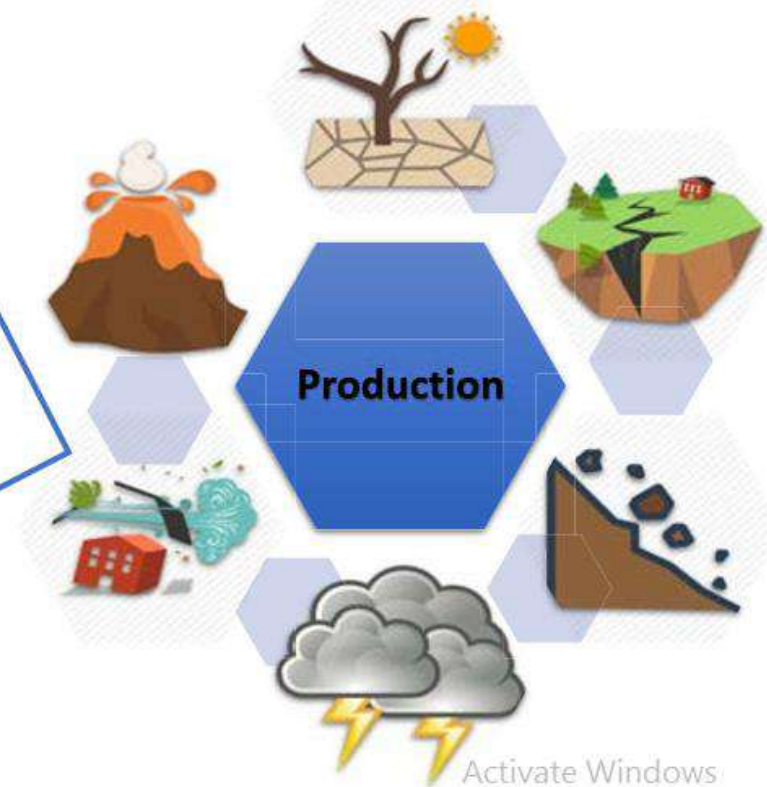
- Lack of resources
- Unharmonized and uncoordinated national and local agricultural program

Natural disasters

- Can disrupt the entire food system from production, processing, marketing, distribution and preparation of food

2006 -2013
75 disasters
25% damage & losses in
agriculture= 3.8 B USD

FAO, 2015



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Cited by Villarino, 2018

NATURAL DISASTERS

4th among countries hit by the highest
number of disasters from 1995-2015
affecting **130 million people**
(CRED & UNSIDR 2015).

27.69 WorldRisk Index and ranks
3rd amongst 171 countries based on
exposure to natural hazards,
vulnerability to hazards, coping
capacities and adapting capacities as
presented in the WorldRiskReport 2017
(Schrader, 2017).

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Go to Settings to activate

Volume of Rice Production (in '000 MT) and El Nino occurrences, Philippines, 1980-2012 (Mohanty, 2013)



ENSO Intensities:
Moderate to Strong El Niño

Sources:
BAS - Palay Production (converted to milled rice)
PAGASA - ENSO years

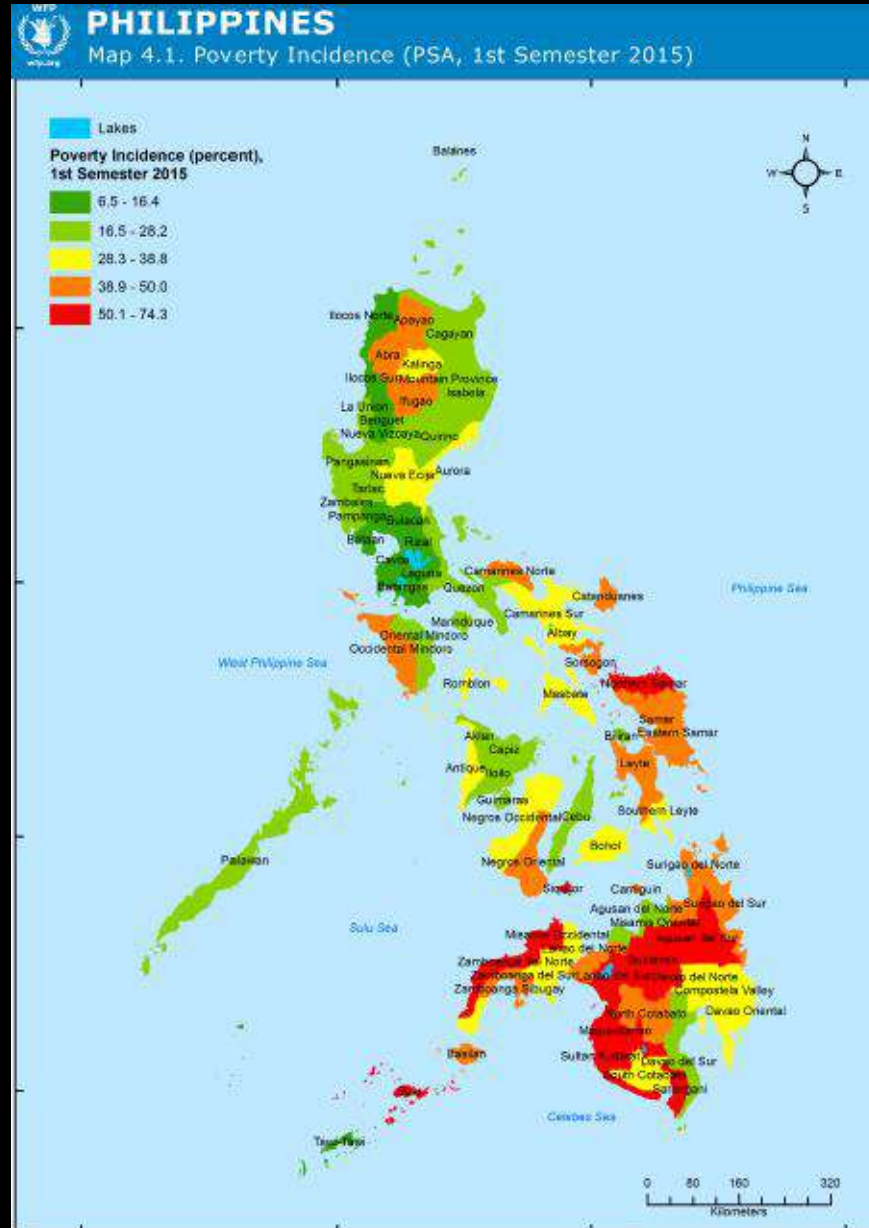
OTHER CAUSES OF LOW PRODUCTIVITY

- ▶ *Environmental degradation*
 - ▶ *Low investment in agriculture to increase productivity*
 - ▶ *Low adoption of technology*
 - ▶ *Low investment in R and D and other infrastructures*
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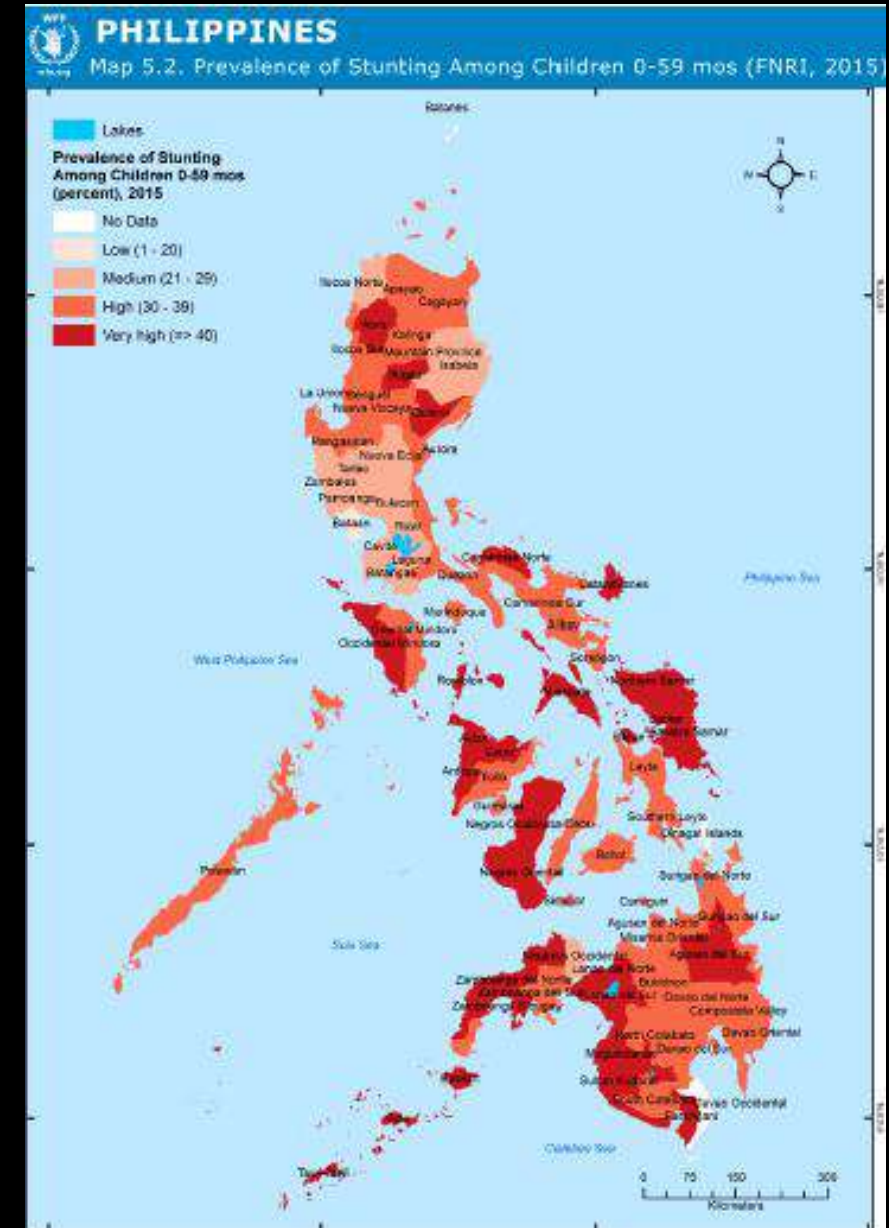
MALNUTRITION REMAINS HIGH

Type	Percent	
	2013	2015
Underweight	19.1	21.6
Stunting	30.3	33.5
Wasting	7.9	7.1
Overweight	5.0	3.8

POVERTY INCIDENCE 21.6% (PSA, 1st Sem 2015)



UNDER-5 STUNTING PREVALENCE 33.4% (NNS, 2015)



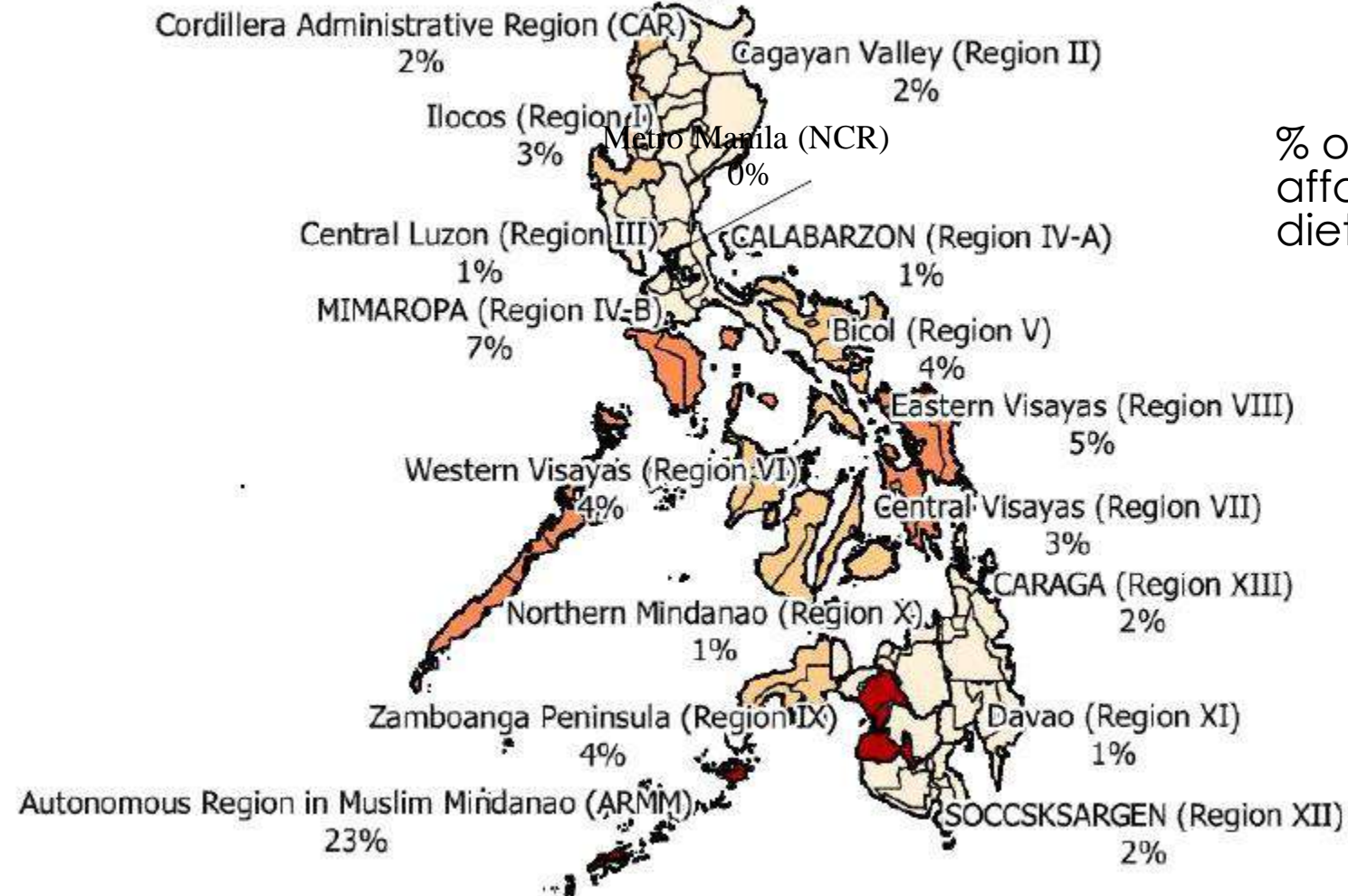
Good news - MAJORITY of households CAN afford Energy-only Diet

Gluning, 2018

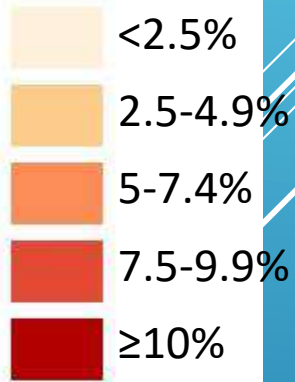
DRAFT

GO FOODS

1. Grains/Tubers



% of HH unable to afford energy-only diet



Bad news – up to HALF of Households CANNOT afford a NUTRITIOUS DIET

Gluning, 2018

DRAFT

GO FOODS

1. Grains/Tubers



GLOW FOODS

2. Vit-A rich Fruits/Vegetables



3. Other Fruits/Vegetables



GROW FOODS

4. Dairy Products



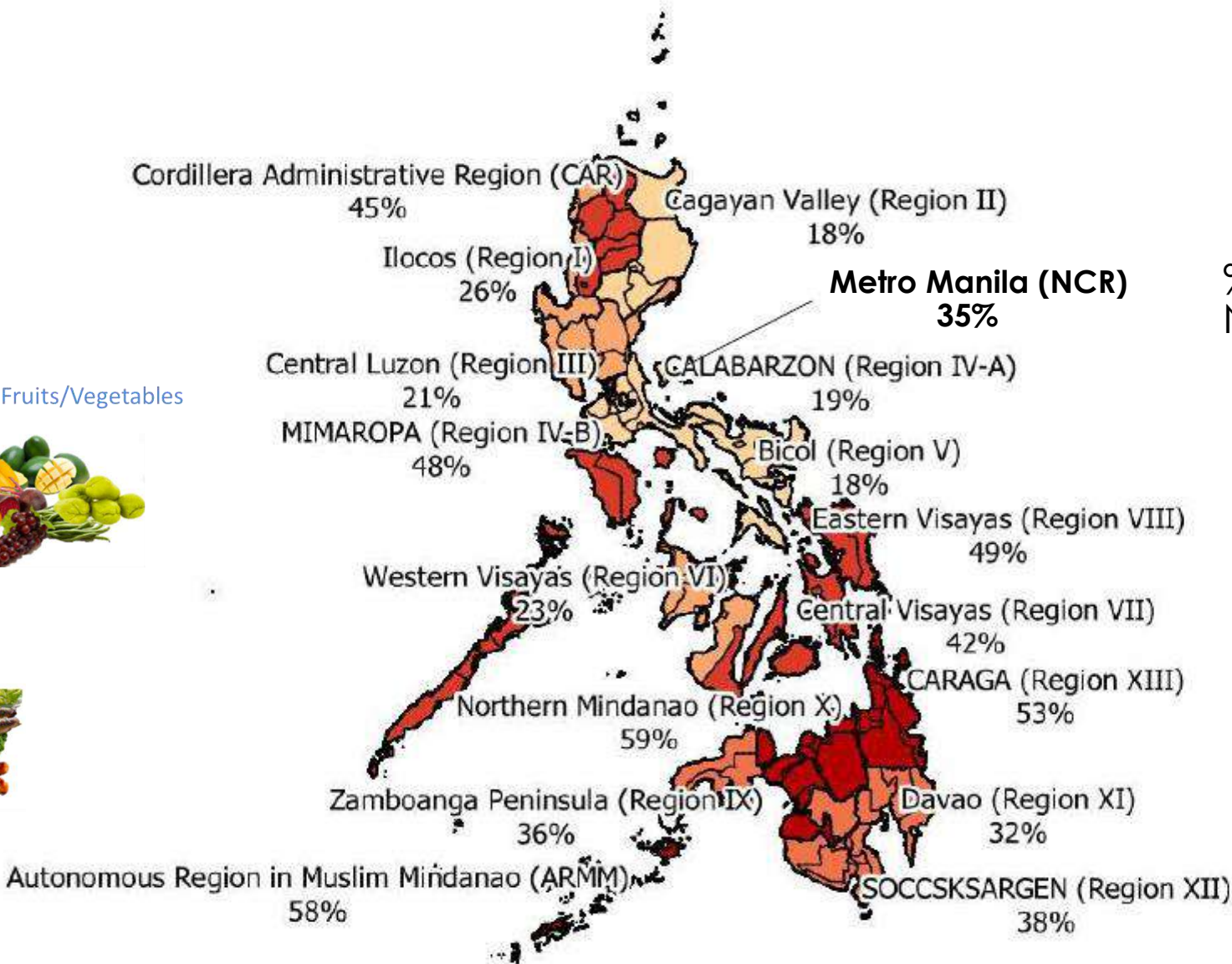
5. Flesh Meat



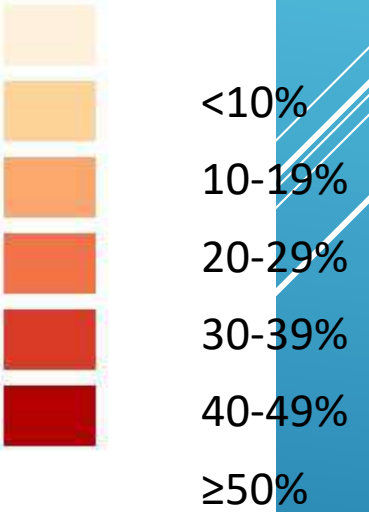
6. Eggs



7. Legumes/Nuts



% of HH unable to afford a nutritious diet

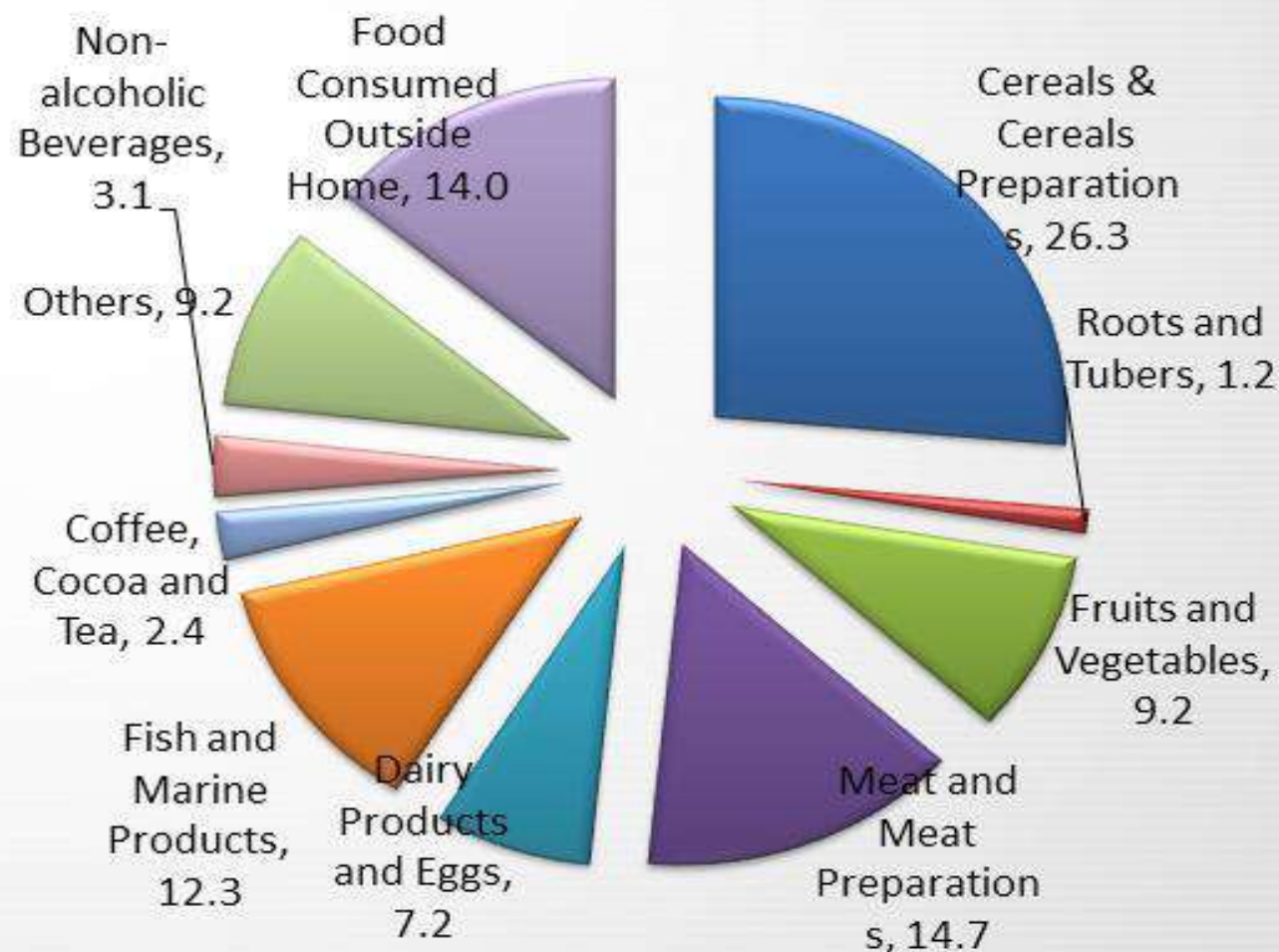


Source: Fill the Nutrient Gap Initial Result (WFP Philippines 2018)

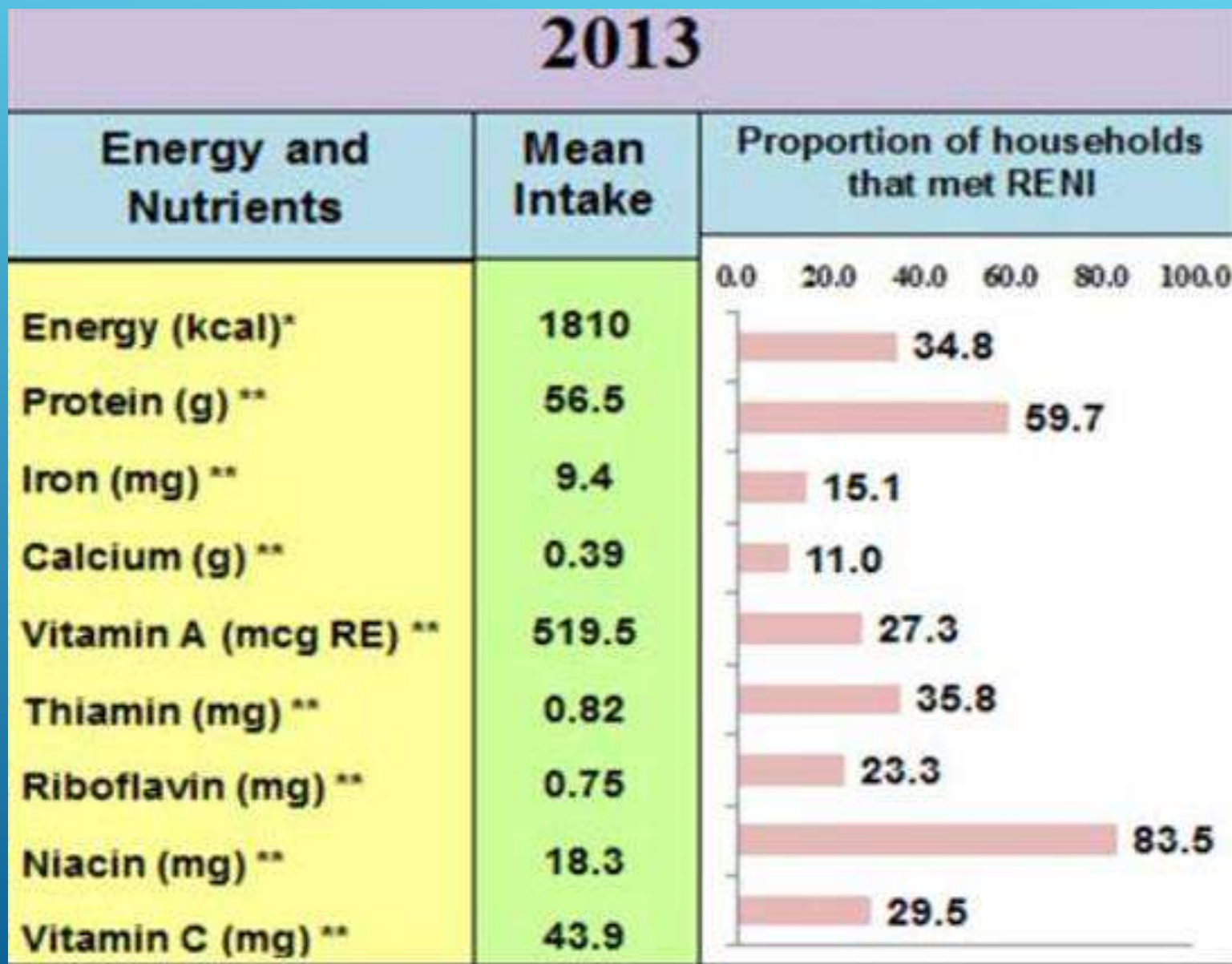
DISTRIBUTION OF FOOD EXPENDITURE

Food accounts for 41.4% of
total family expenditure.

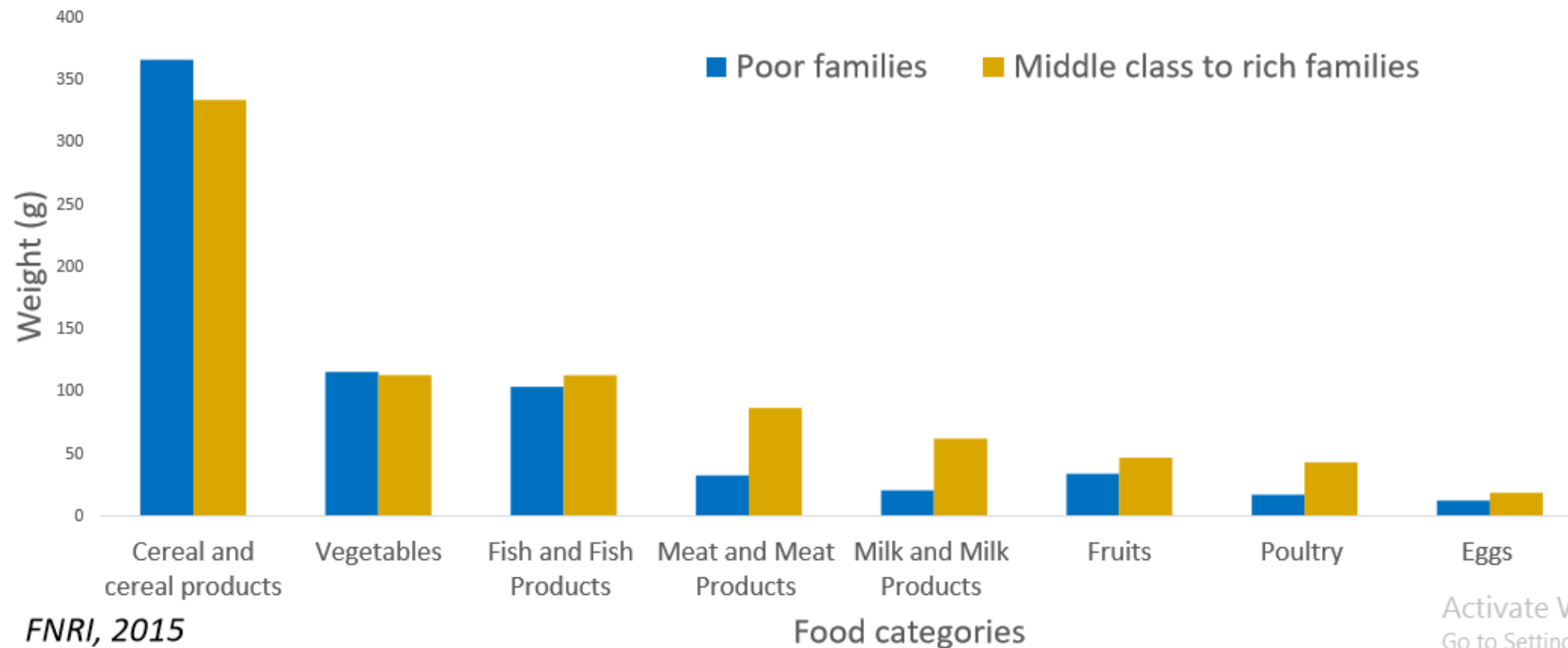
2018: 41.5%



Filipino household dietary intake (FNRI, 2015)

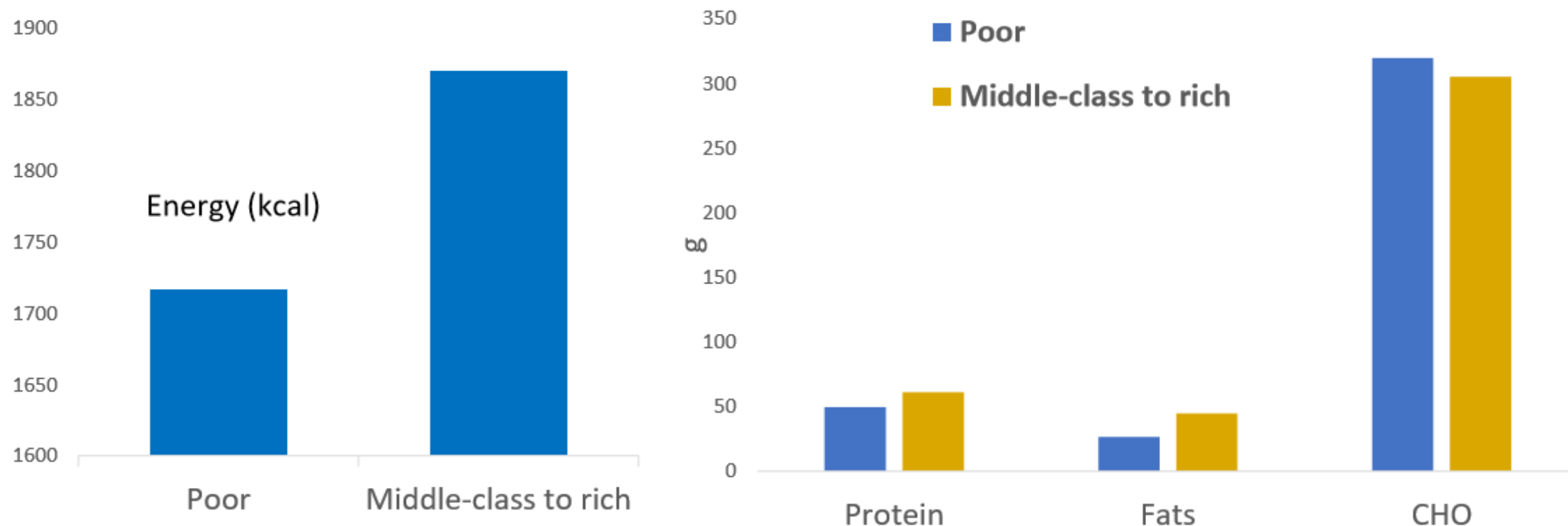


• Filipino households' food consumption pattern (per capita)



Cited by Villarino, 2018

• Filipino households' energy and nutrient intakes



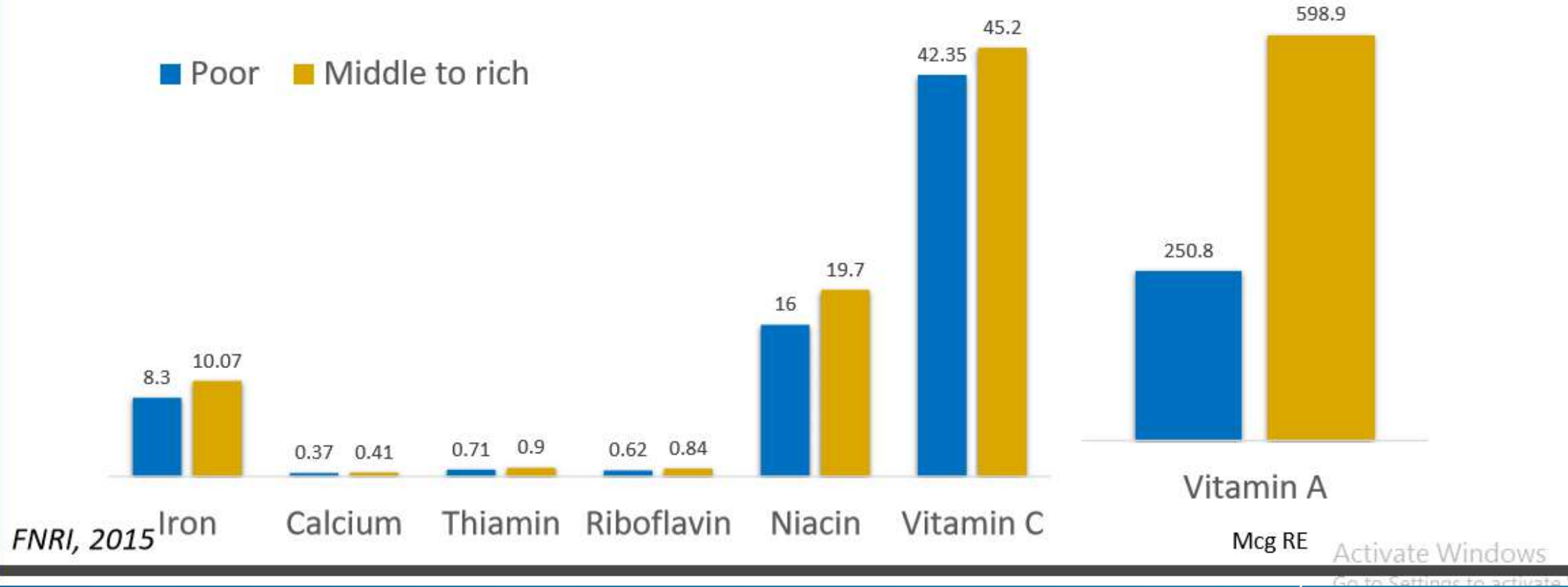
FNRI, 2015

Filipino household energy and macronutrient intake

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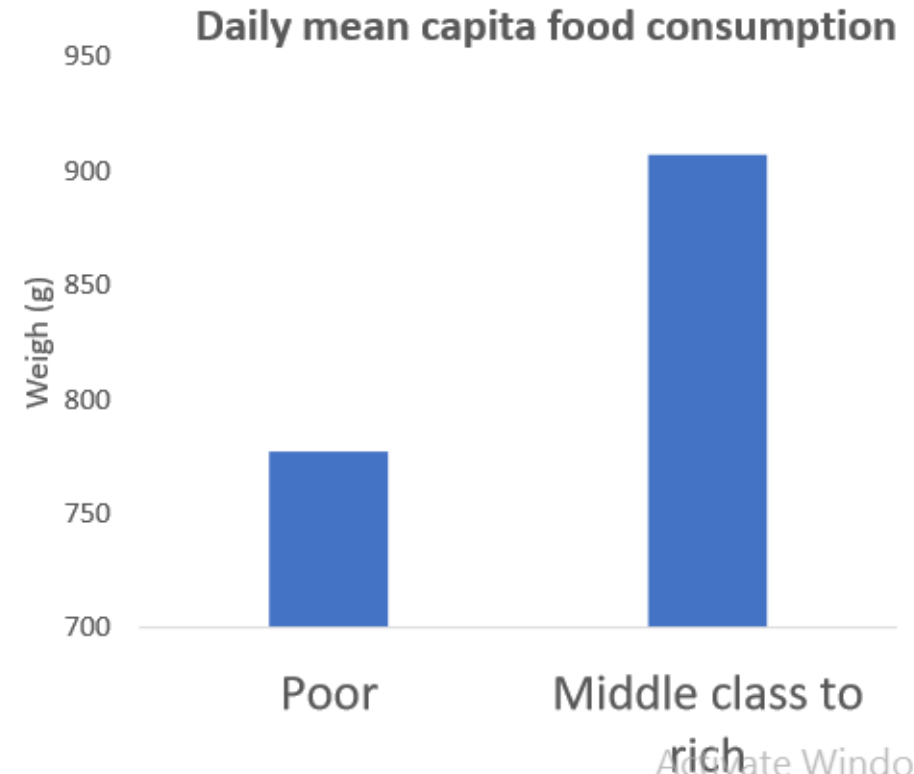
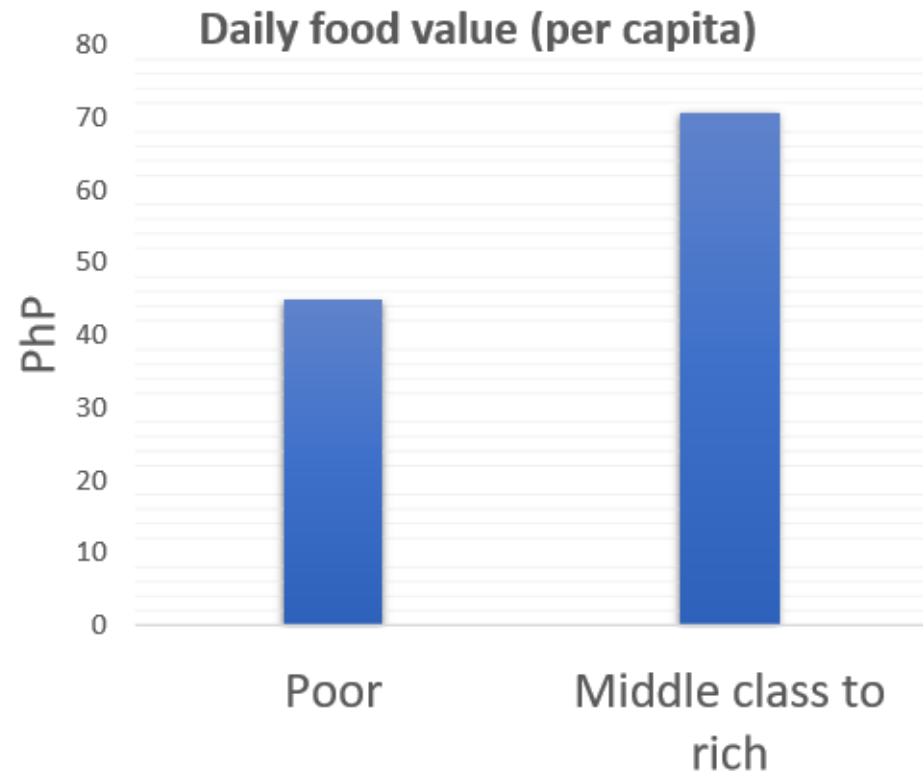
Cited by Villarino, 2018

- Filipino households' nutrient intakes



Cited by Villarino, 2018

- **Filipino household food consumption profile**

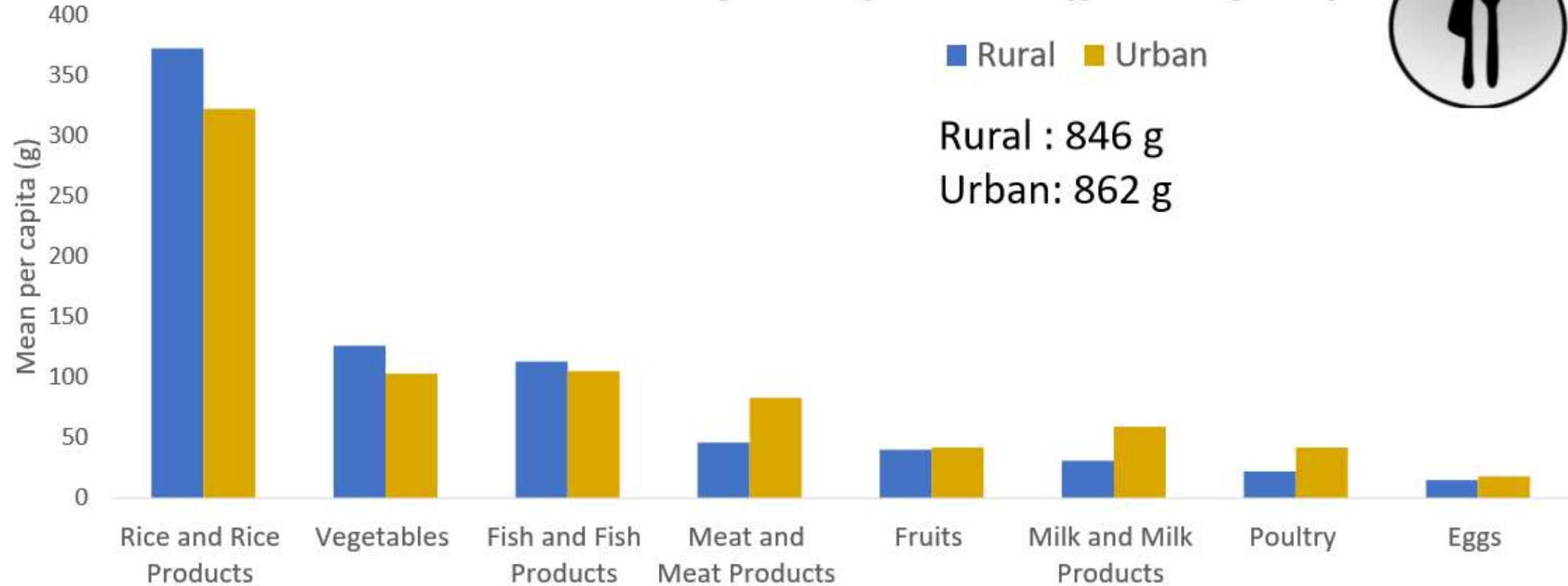


FNRI, 2015

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Cited by Villarino, 2018

• Urban households' consumption pattern (per capita)

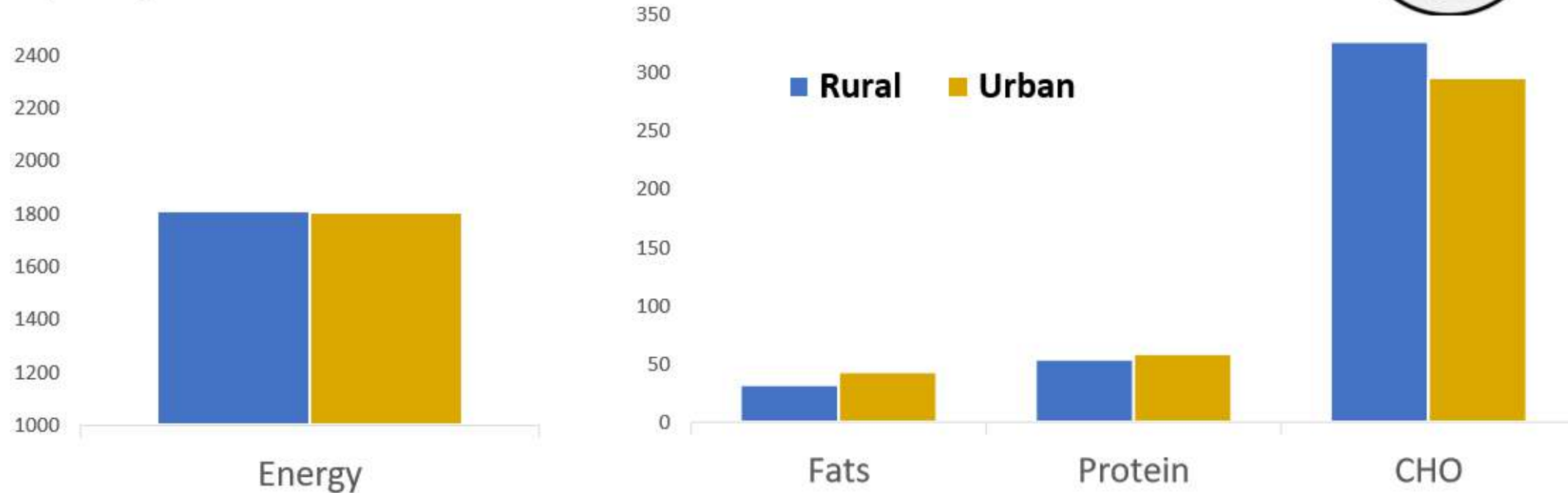


FNRI, 2015

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Cited by Villarino, 2018

- Urban households' energy and nutrient intakes (per capita)



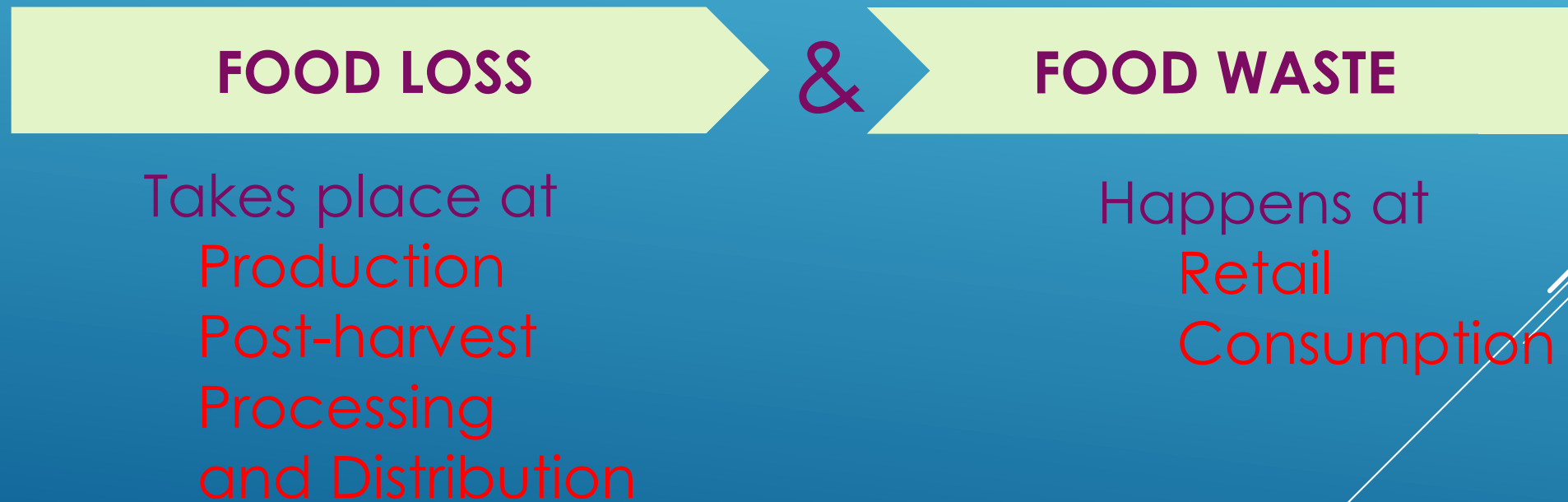
FNRI, 2015

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Cited by Villarino, 2018

Food Wastage

- ✓ Includes both food loss and food waste which refer to the decrease of food intended for human consumption in subsequent stages of the food supply chain (FAO, 2011).

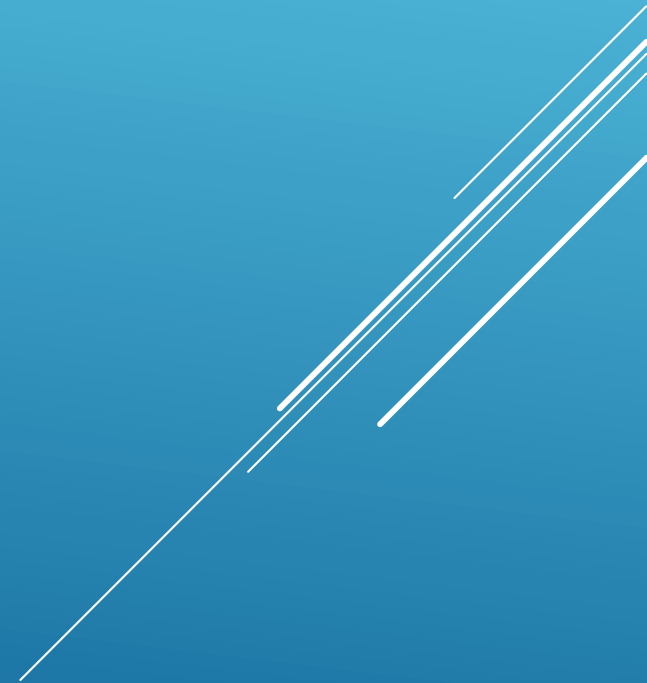


HIGHER POSTHARVEST LOSSES

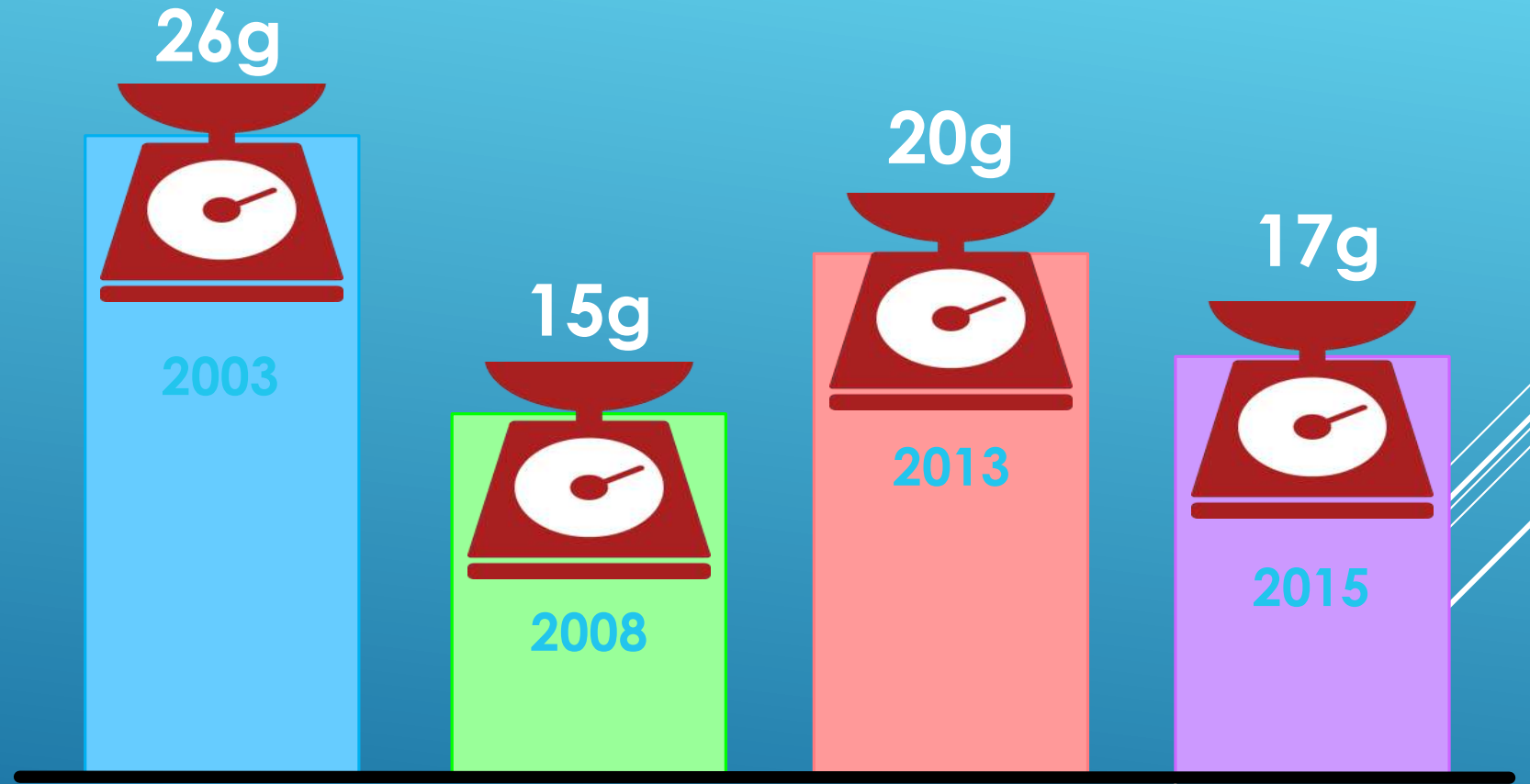
FRUITS 28%

VEGETABLES 42%

RICE 16%



Mean per capita total plate waste: Philippines, 2003-2015



Source: DOST-FNRI National Nutrition Survey, 2003-2015

Capanzana, 2018)

Calories LOST OR WASTED per person, per day from total plate waste

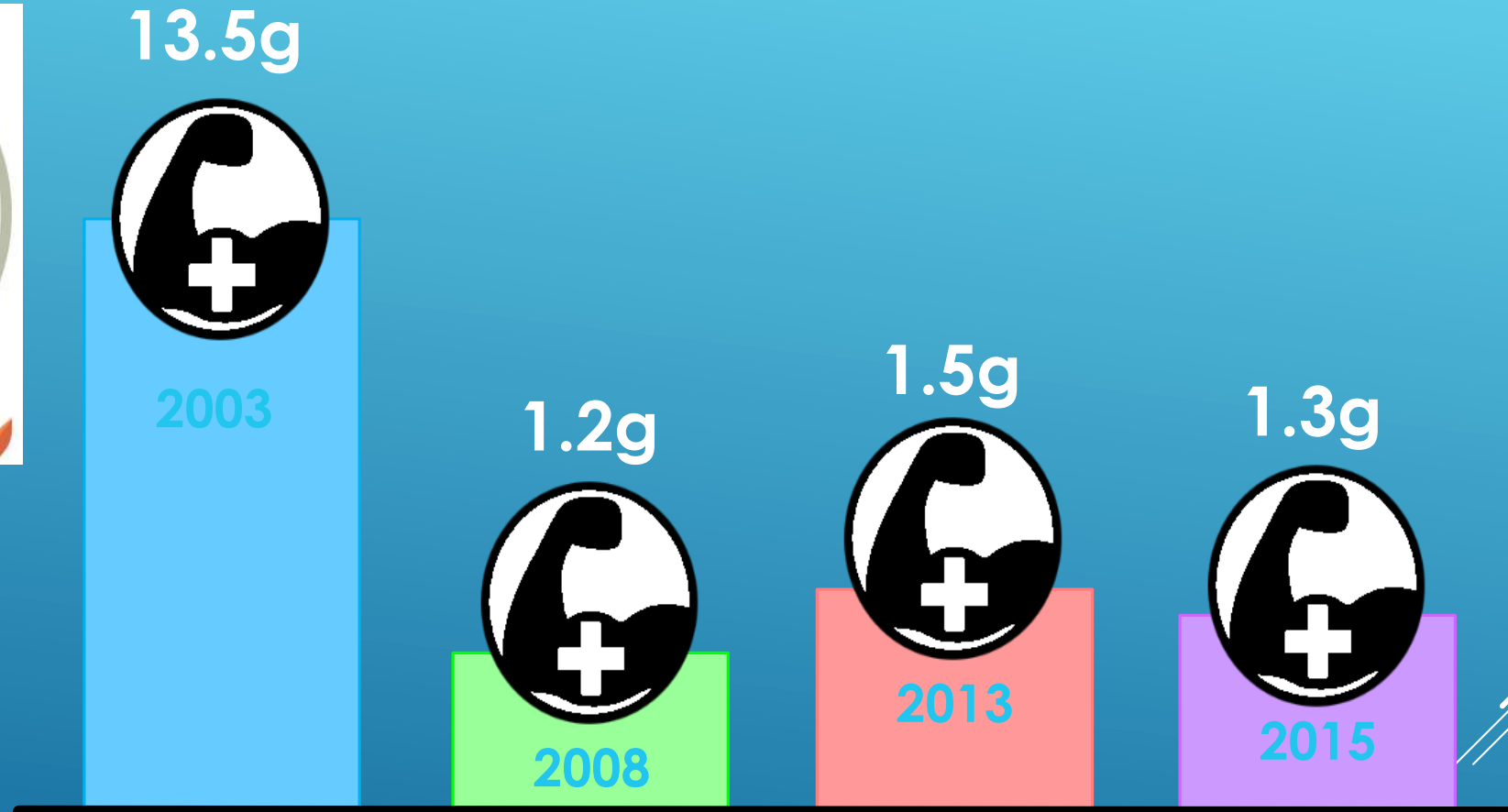


This is equivalent to a total of **5B kcal** that can supply **2.5M Filipinos** with 2000kcal requirement

Source: DOST-FNRI National Nutrition Survey, 2003-2015

Capanzana, 2018)

Protein LOST OR WASTED per person, per day from plate waste



Source: DOST-FNRI National Nutrition Survey, 2003-2015

Capanzana, 2018)

QUALITY OF FRESH PRODUCE CAN BE LOST DURING HANDLING



Ambient Storage

Increase in Vitamin C in pineapple and other fruits

Loss in Vitamin C in:

- ✓ Citrus
- ✓ Leafy vegetables and green beans
- ✓ Asparagus not in held under shade
- ✓ Spinach and other leafy vegetables = wilting due to ambient holding for 50 hrs results in loss by as high as 80% of ascorbic acid and 50% of carotene levels
- ✓ Potato = 50% loss during 4 mos. of ambient storage

β -carotene (yellow color) synthesis tomato

PRICE OF FOOD

Factor of production efficiency, inflation, market, transport, seasonality of food, taxes etc

Buying capacity of consumers

- ▶ *Fuel prices vs SWS hunger incidence ($r=0.971$, $p=0.001$);*
- ▶ *Peso-dollar exchange rates vs SWS hunger incidence ($r=-0.943$, $p=0.005$)*

ACCESS TO FOOD

AGRICULTURE/AGRIBUSINESS

Businesses: Farmers' plight 'birth pains' of promising rice tariffication law

By: [Roy Stephen C. Canivel](#) - @inquirerdotnet

Philippine Daily Inquirer / 05:26 AM September 27, 2019

Rice Tariffication Law - Updates

Rappler's latest stories on rice tariffication law

ARTICLE FINDER

 **interaksyon**

Why rice farmers are crying for help after the Rice Tariffication Law

By Catalina Ricci S. Madarang - September 5, 2019 - 6:28 PM

Home > FFTC Agricultural Policy Articles > Overview of agricultural policy > Philippines

The Philippine Rice Tariffication Law: Implications and Issues

2019-08-22

Annette M. Tobias¹

RICE TARIFFICATION: A BOON TO RICE INDUSTRY?

10:47 G 48%


☆ fnbreport.ph

F&B REPORT

AGRICULTURE

The Rice Tariffication Law, explained

Trading quotas with tariffs, RA 11203 will open doors to more foreign rice importers



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The way Forward

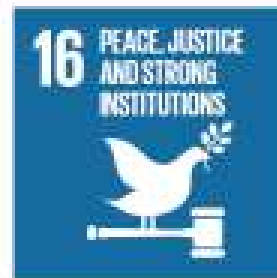
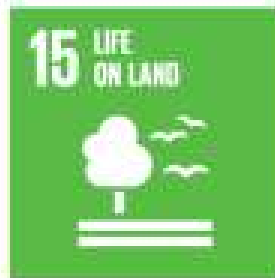
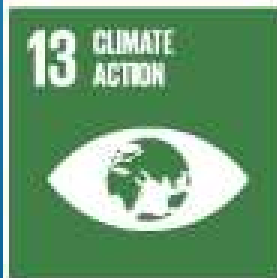


GLOBAL COMMITMENT

September
2015



SUSTAINABLE
DEVELOPMENT GOALS



GOAL 2: END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

By **2030**



- end hunger and ensure access by all people
- end all forms of malnutrition
- **double the agricultural productivity and incomes of small-scale food producers**
- ensure sustainable food production systems and implement resilient agricultural practices
- increase investment in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks
- adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information

GOAL 3: ENSURE HEALTHY LIVES AND PROMOTE WELL BEING FOR ALL AT ALL AGES

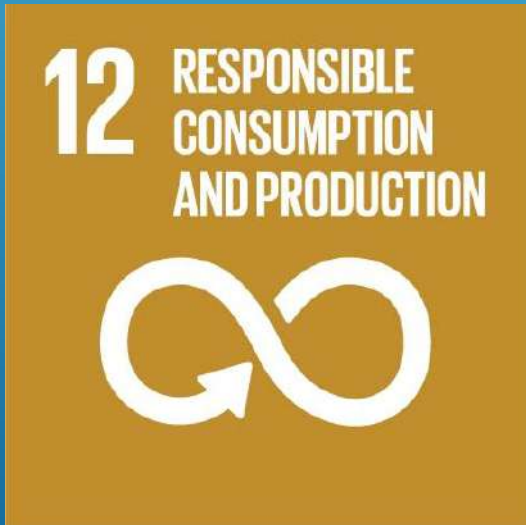
By **2030**



- reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
- support the research and development of vaccines and medicines for the communicable and non communicable diseases
- strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

GOAL 12: ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

By **2030**




- Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action
- halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains
- substantially reduce waste generation through prevention, reduction, recycling and reuse
- support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production

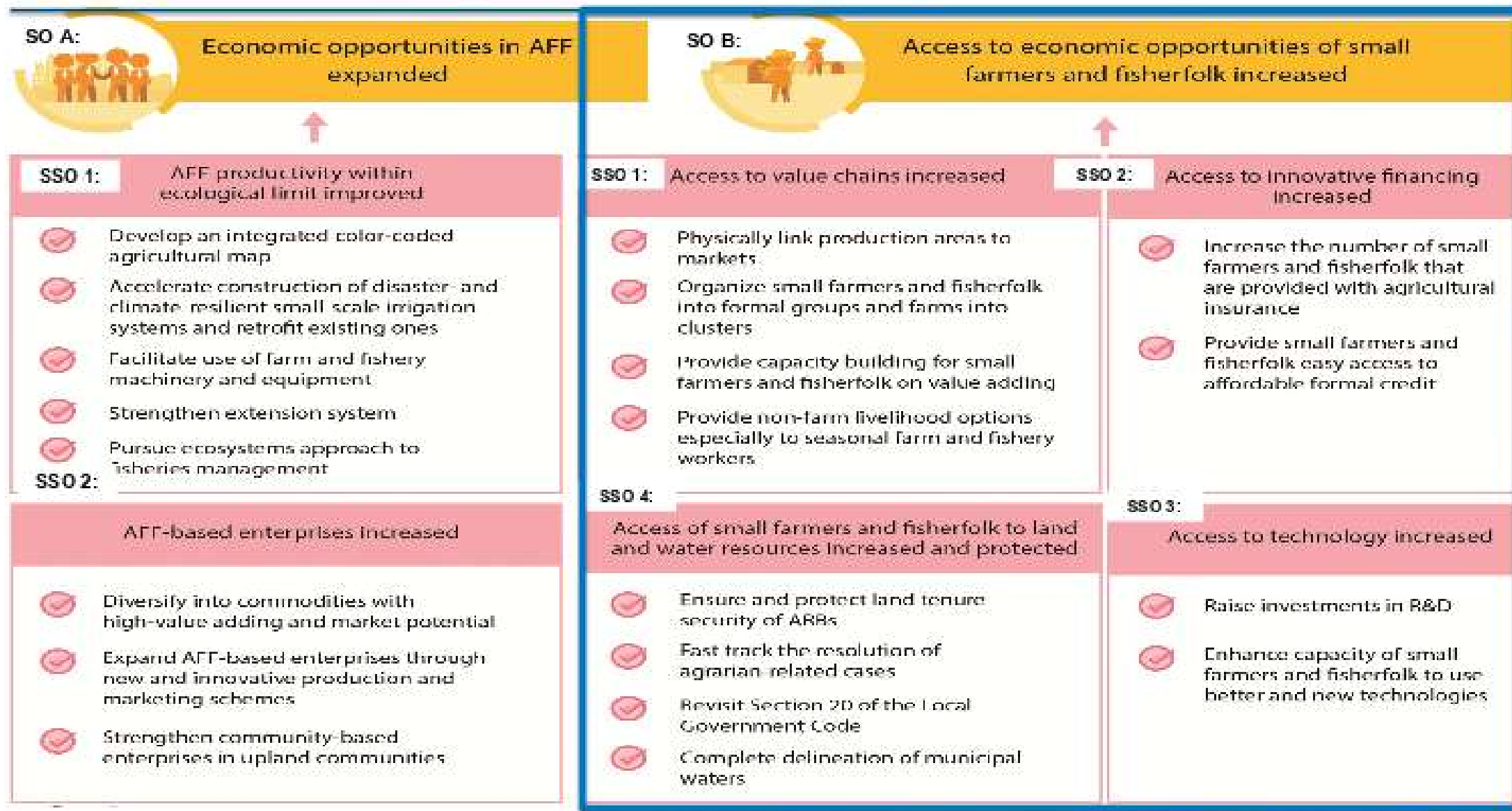
Improve the agricultural sector, improving technology from farm to market and better postharvest and processing technologies

Reduce food loss and wastage

Several thin, parallel white lines are positioned in the bottom right corner of the slide, extending diagonally upwards from the bottom edge towards the right edge.

- ▶ *Reduction of poverty and increase in farm and household income*
 - ▶ *Reduction of price of food through efficient production, processing, market and distribution*
 - ▶ *Reduce inflation due to increase in world fuel prices*
 - ▶ *Increase employment/livelihood*
- 
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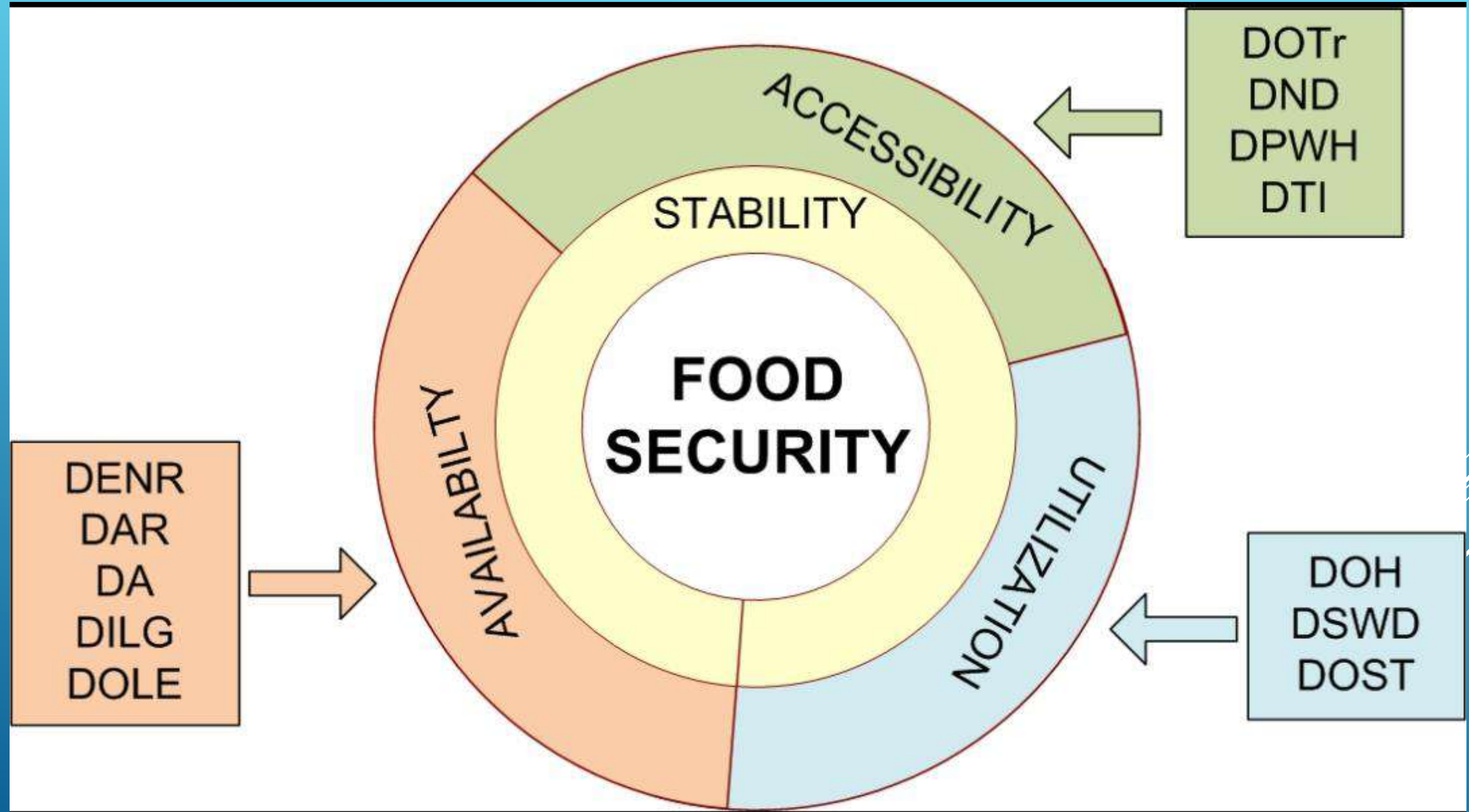
PDP 2017-2022 Chapter 8: List of Strategies



- ▶ Modernization of agriculture
- ▶ Industrialization of agriculture
- ▶ Promotion of exports
- ▶ Farm consolidation
- ▶ Infrastructure development
- ▶ Roadmap development
- ▶ Legislative support

DA 8 PARADIGMS TO IMPROVE THE
AGRICULTURE SECTOR (2019)

- ▶ Food security is interdisciplinary and involves multi-agency participation. DA should serve as coordinating agency on food security with other agencies which include:



Coordinated and Integrated Programs to ACHIEVE FOOD SECURITY

BETWEEN NATIONAL AND LOCAL
AGENCIES

WITHIN NATIONAL AGENCIES

EFFICIENT PROGRAM PLANNING AND
IMPLEMENTATION



Marami pong salammat

