

# Zamboanga del Norte

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Philippine Institute for Development Studies

*Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas*

# Activities

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## Field work

- Province LGU + 2 municipalities (Sindangan, Leon B. Postigo)
- Program managers, frontline workers, child caregivers
- ECCD/F1KD checklist
- September 2019

## Desk review

- Administrative data: CDP, LNAP, OPT, SAAOB, etc.
- National surveys/census: CP/H, NNS, FIES

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# Background

# History and Geography

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- Created in June 1952 (RA 711)
- 25 municipalities, 2 cities
  - 97% strongly sloping to very steep hills, mountains
  - <3% of land is suitable for agriculture
  - ca. 400 km of coastline
  - 596 of 691 classified as GIDA (DOH, 2017)



# Population

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- More than 1M population; 1/3 in 3 LGUs
- With young population (median age : 22.4)
  - 7% aged <2 years
  - 24% are women of reproductive age (15-49 years)
  - >5% young adult women (15-19 years)
- High literacy rate (95%) among age 15+
  - 72% literacy rate among aged 80+
  - 52% of aged 25-59 with high school degree or better

# Child nutritional and health status

## Higher child undernutrition prevalence but fewer deaths per live birth

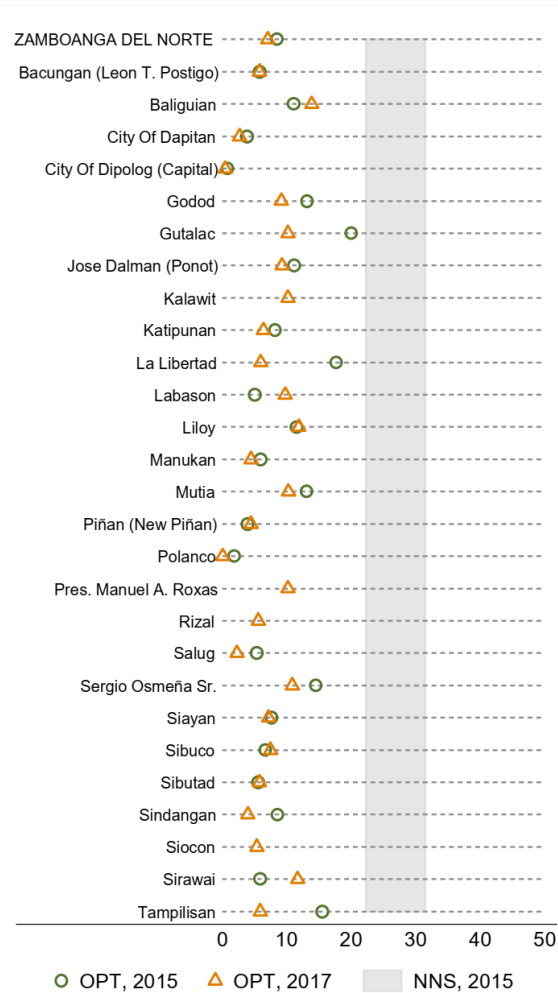
	2008			2015		
	Philippines	Zamboanga Peninsula	Zamboanga del Norte	Philippines	Zamboanga Peninsula	Zamboanga del Norte
A. Malnutrition prevalence among aged 0-59 months						
% Underweight	20.7	25.4	a	21.5	21.2	26.9
% Stunted	32.2	40.3	a	33.4	38.0	41.4
% Wasted	6.9	8.0	a	7.1	7.1	7.3
B. Deaths per 1,000 live births						
Infant deaths	12.5	11.5	9.7	11.9	9.1	7.7
Fetal deaths	4.7	3.3	1.0	4.4	2.3	0.3
Maternal deaths	1.0	1.3	0.9	1.0	1.1	0.9

Source: Undernutrition rates are from the 2008 and 2015 National Nutrition Survey (DOST-FNRI, 2010, 2016). Vital statistics are from administrative reports of the Department of Health, Epidemiology Bureau (DOH-National Epidemiology Center, n.d.; DOH-Epidemiology Bureau, n.d.)

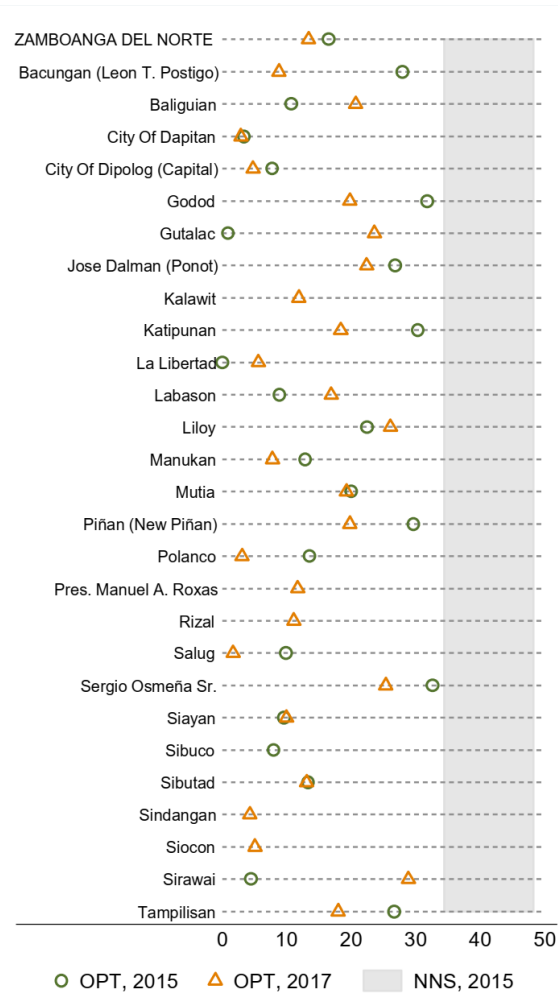
# OPT and NNS estimates

**Figure 3. Undernutrition prevalence among children (%): OPT 2015 and 2017, and NNS 2015**

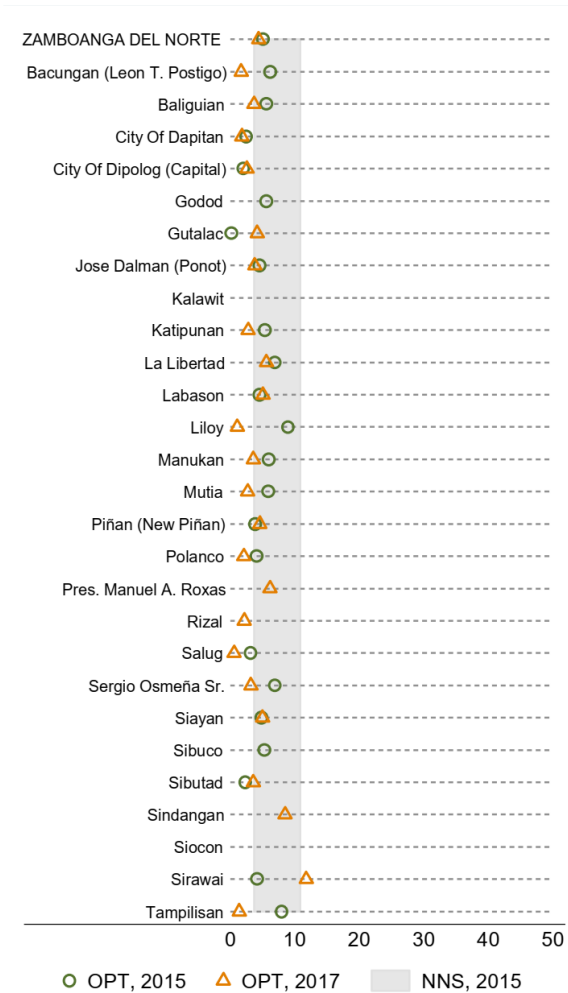
## A. Underweight



## B. Stunting



## C. Wasting



Source: 2015 NNS 95-percent confidence bands are from DOST-FNRI (2016); OPT plus results are from DOH-NNC (2019)

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# Policy and Governance



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## Local nutrition action officers

- Effectively serves as secretariat of local nutrition committees
- Often designated position to [P/C/M]HO, SWDO or PO

## Priority setting

- Executive-led: infrastructure in line with national BBB program
- Some program managers have been consulted
- Frontline workers appear to have minor role

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## Local nutrition plan

- Wide variation in quality and availability
- Many do not conform to suggested format
- Local nutrition committees have robust understanding of underlying causes of malnutrition – mainly household and community issues, rarely on government capacity
- Package of interventions vary with common interventions: nutrition education, feeding, food production, livelihood programs, nutrition month celebration, etc.
- Many are not sufficiently linked with Comprehensive Development Plan – a lost opportunity

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# Service Delivery

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## ECCD + F1KD law mandated services

- Many are government-provided as part of separate LGU programs for MCHN, ECCD, FP – vertical programs
- Those commonly not available
  - Not necessarily facility-based: nutrition counselling, organizing breastfeeding groups, support for home kitchen gardens
  - Require inter-office/agency coordination: enrollment to SHI, availability of lactation breaks in workplace
  - Psychosocial in nature: counselling and psychosocial support
  - Related to oral care

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# Identification of beneficiaries

- Program managers rely heavily on interpersonal interaction of frontline workers (FW) with household-patrons
- FW reported having intimate knowledge of demographic and health characteristics of households

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# Innovations

- Household census to profile needs
- LGU caravan, a one-stop shop for LGU services
- Food production: ice candy, food supplement (planned)

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# Challenges

- Program managers and frontline workers
  - Difficulty convincing households to participate
  - Limited transportation and communication facilities
- Care givers
  - Generally no problem with access to government services
  - Potential quality issues: “masungit” frontline workers
  - Hard quotas/schedule may dissuade further access

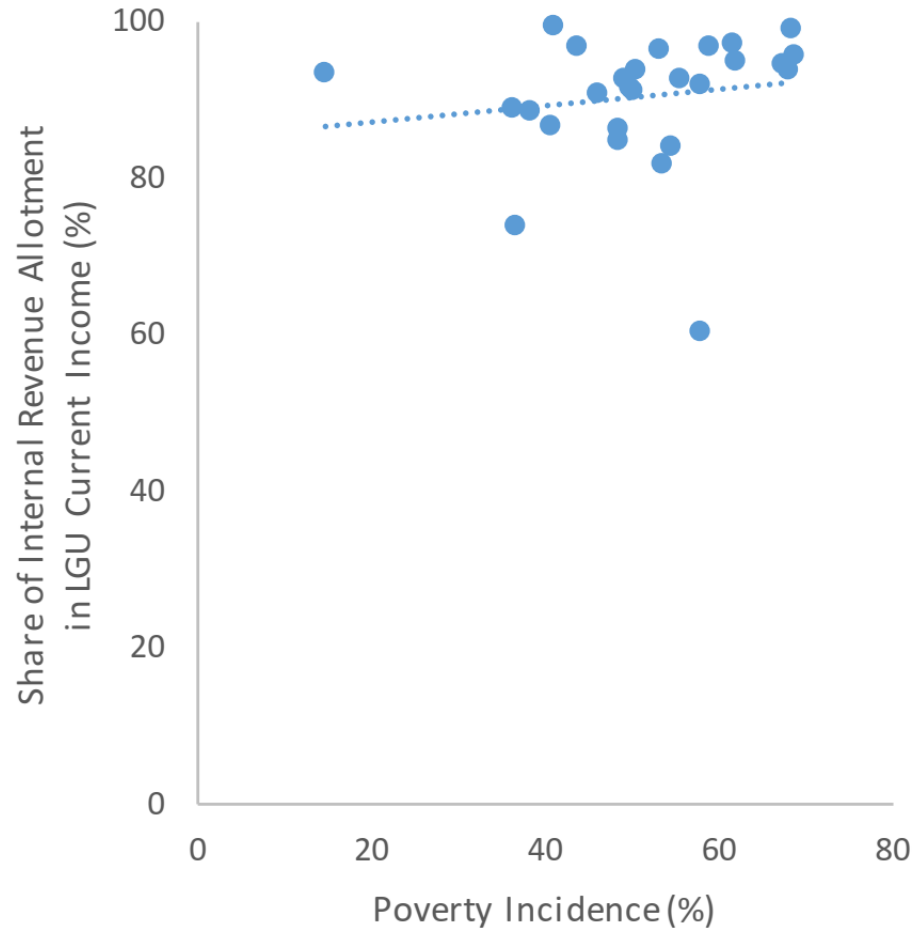
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# Financing



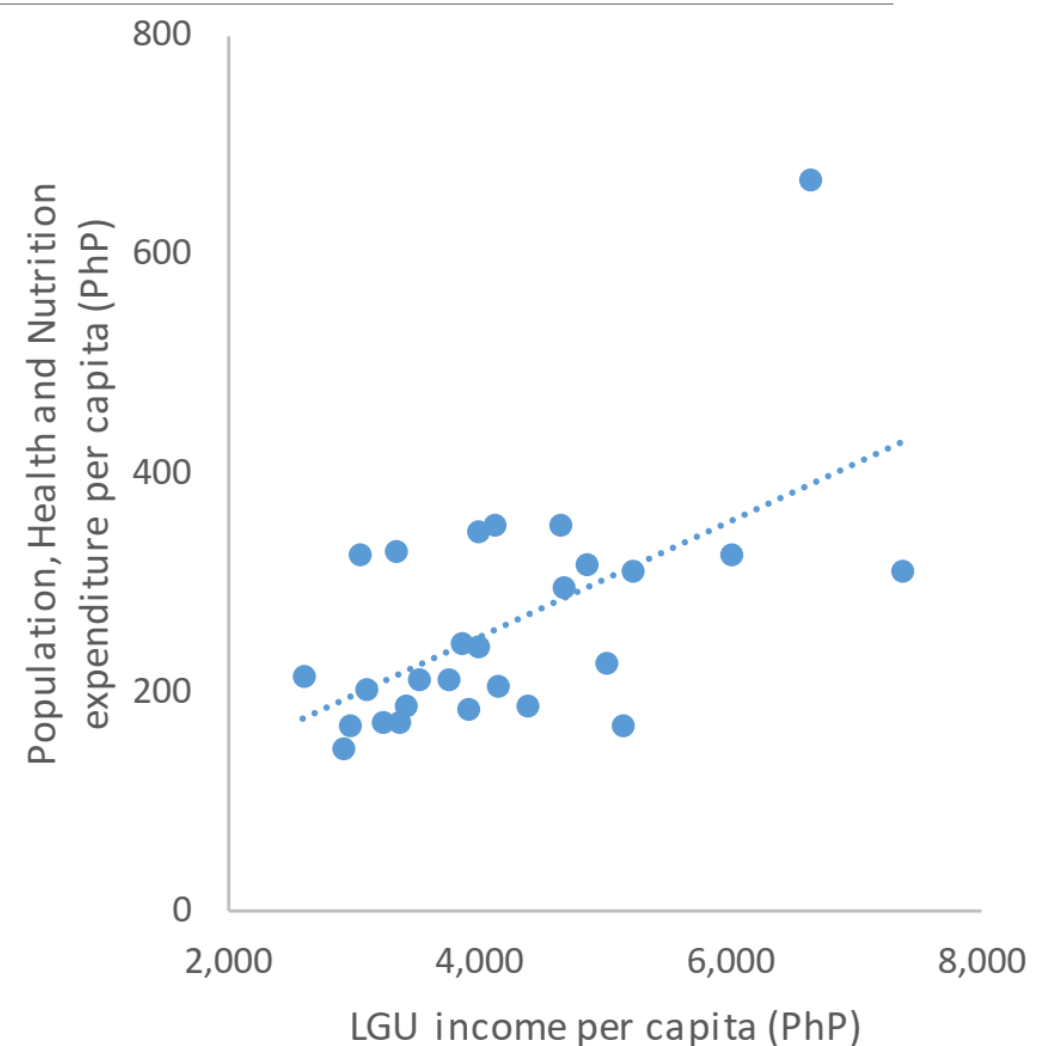
## High reliance on IRA

- Correlates with initial endowments, poverty
- Affects resources available for LGU services
- LGUs leverage on ties with national agencies

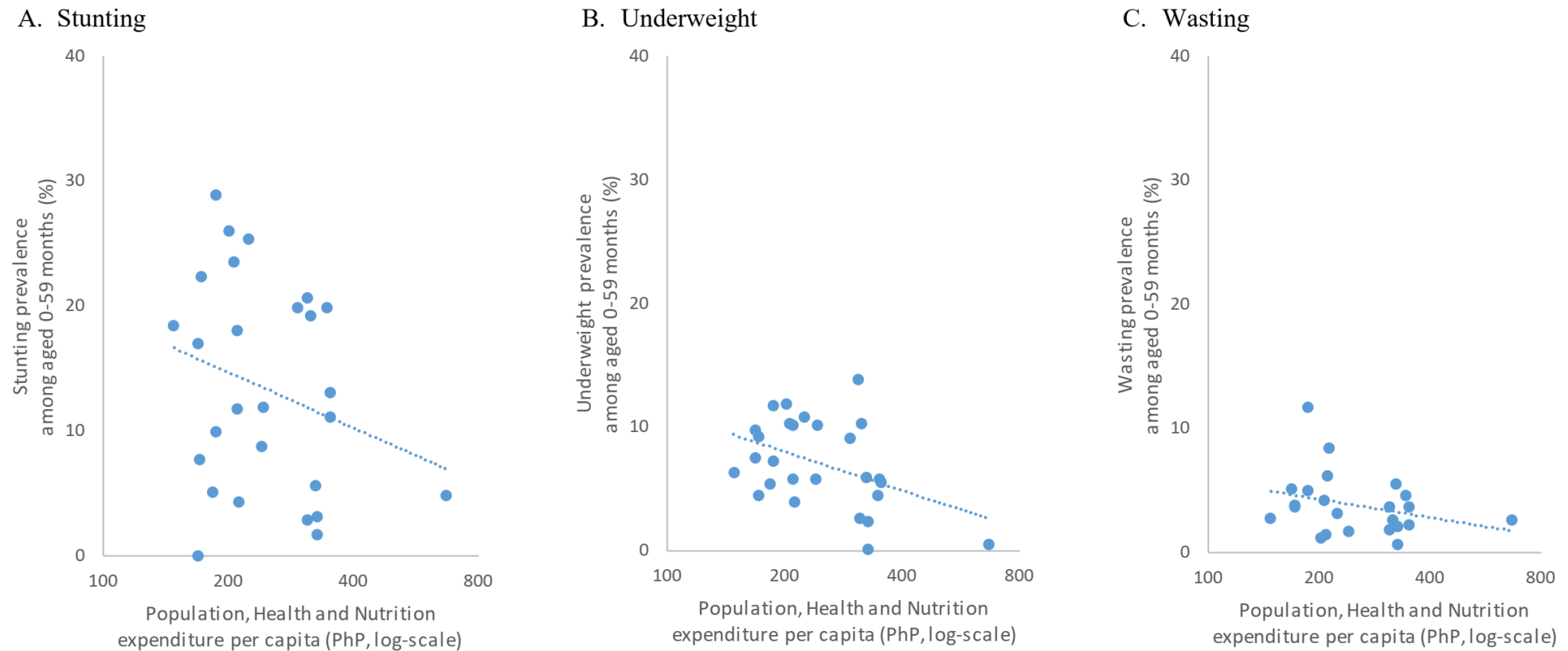


Limited resources usually mean limited services

- Not unique to ECCD-F1KD
- Expanding LGU income is critical to expand LGU services



# Higher undernutrition, less budget



Source: Local government finance data are from DOF-BLGF (2019); child undernutrition statistics are from NNC (2019)

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# Physical and Human Resource

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## Some LGUs are more fortunate than others

- Those with more resources can hire more because of PS cap
- Directly affects workload of frontline workers
- Relies on HHR deployment by DOH – many program managers are concerned with sustainability

# Some LGUs are more fortunate than others

	Barangay Health Stations		Public Sector Health Human Resource (HHR)					
	Existing	Target	Count			Population ('000) per HHR		
			Physician	Nurse	Midwife	Physician	Nurse	Midwife
Katipunan	12	12	0	6	18	a	4.5	1.5
La Libertad	12	13	1	18	8	23.2	1.3	2.9
Labason	11	b	2	13	17	8.6	1.3	1.0
Liloy	28	37	1	15	13	35.7	2.4	2.7
Manukan	15	22	1	8	15	27.5	3.4	1.8
Mutia	4	10	1	1	7	24.3	24.3	3.5
Piñan (New Piñan)	19	b	3	38	36	15.5	1.2	1.3
Polanco	12	12	2	20	28	4.3	0.4	0.3
Pres. Manuel A. Roxas	12	31	2	26	31	20.9	1.6	1.3
Salug	23	23	1	18	28	36.9	2.1	1.3
Sergio Osmeña Sr.	10	10	1	12	13	13.0	1.1	1.0
Siayan	23	23	2	3	8	10.1	6.7	2.5
Sibutad	7	7	1	11	19	40.0	3.6	2.1
Sindangan	19	52	1	47	47	14.0	0.3	0.3
Siocon	26	b	1	14	16	32.6	2.3	2.0
Tampilisan	4	5	2	1	8	17.5	35.0	4.4
Jose Dalman (Ponot)	14	b	1	18	22	35.7	2.0	1.6
Baliguian	7	17	2	19	24	50.8	5.3	4.2
Godod	12	17	2	9	11	24.6	5.5	4.5
Bacungan (Leon T. Postigo)	3	50	1	4	5	30.7	7.7	6.1

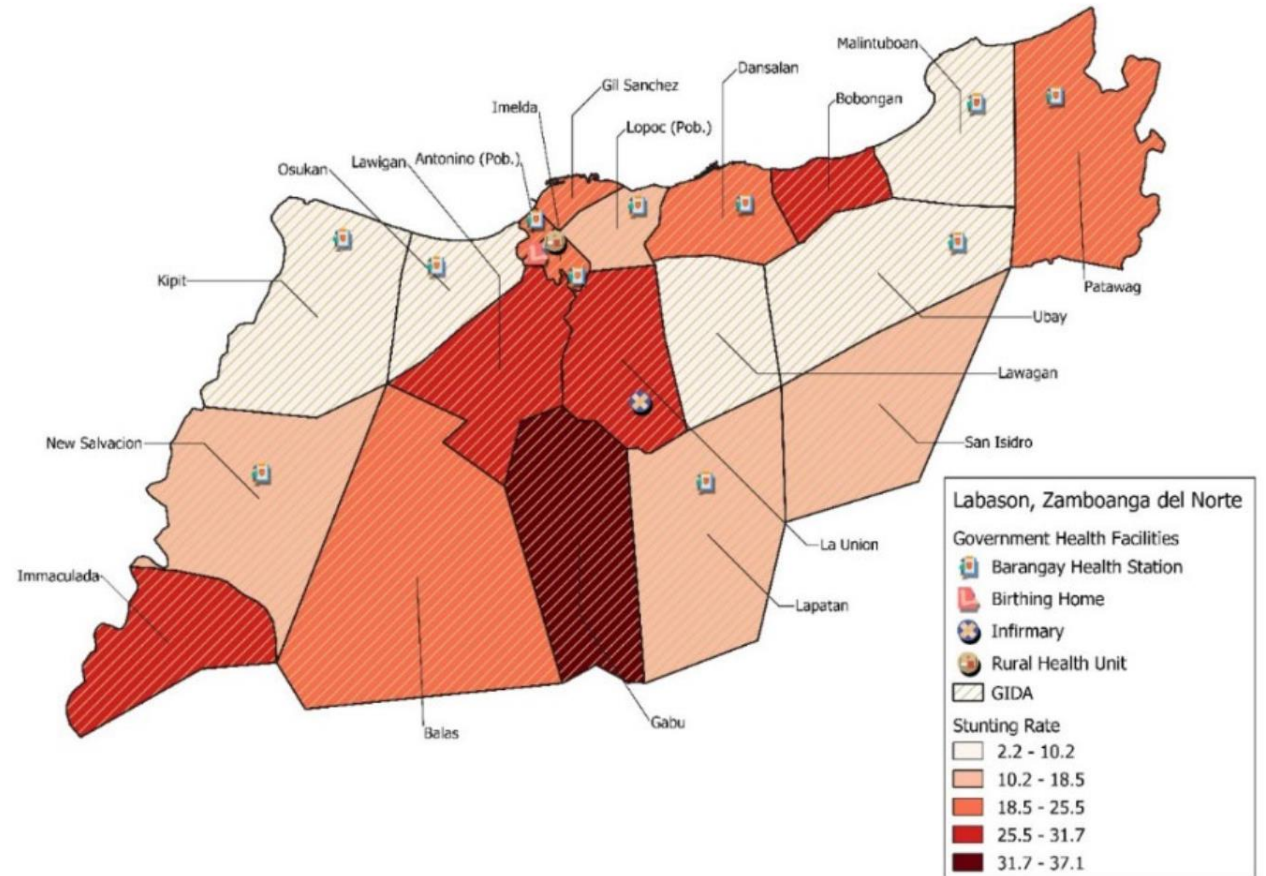
Notes: a – not available, b – no information provided. Source: Diokno-Sicat, et. al. (forthcoming).

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# Community volunteers are important

- Perform critical frontline services: monitoring, promotion
- Generally do not enjoy the same level of benefits, e.g. compensation, security of tenure, despite working (volunteering) virtually full time
  - As much 150 young children and 110 pregnant women
  - PHP350-1200 (depending on generosity of LGU)
- Generally at pleasure of local executive – important implication on supply of trained/capacitated frontline workers

Having barangay health station in close proximity is associated with lower child stunting – not necessarily causal



Note: Authors' rendition based on data from Labason local government statistics.



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## LGUs rely heavily on supplies from NG

- Although they also receive from COs, NGOs, etc.
- Potential miscommunication: NG “promised” to provide critical supplies for intervention, e.g. vaccines, MNP, etc.
- In cases of stock-out, programs are discontinued until supplies are replenished (by NG)

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## Bright spots

- Peer-to-peer learning among frontline workers, but rare
- Despite challenges, LGU personnel are generally fulfilled with their work and are looking forward to continue working in same position at least until the near future

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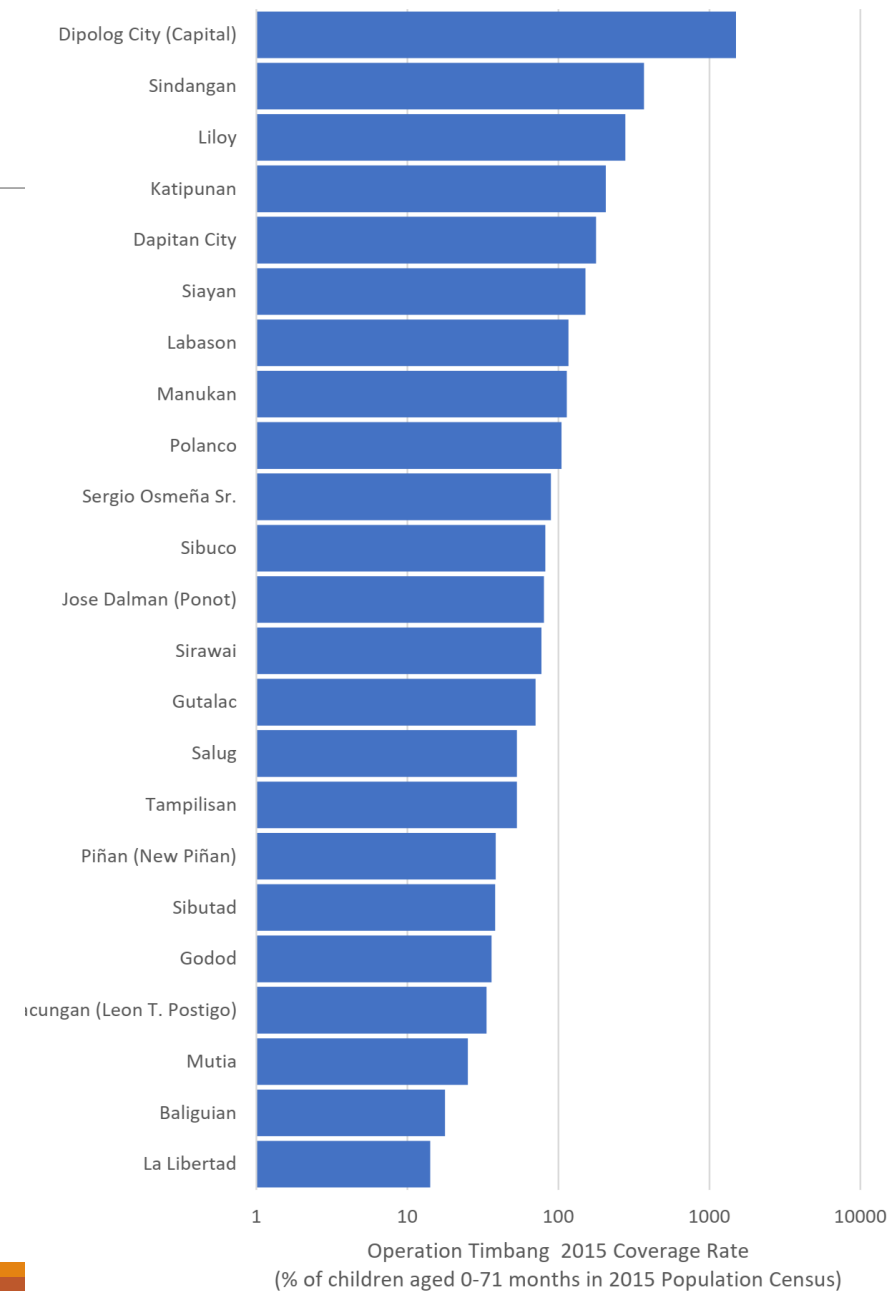
# Information and Communication

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## Managers use different information sources, but data quality may be suspect

- OPT measurement tools not properly calibrated
- How do you measure a baby?
- Difficulty calculating standardized scores

# “Missing” and “excess” children in OPT



# Aside

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## What does OPT actually measure?

- FYI only; Not part of the report
- Ongoing “for fun” study
- Combined “dirty” OPT data with better quality information
  - Coverage rate: “missing” and “excess” children
  - Selection issue: Not stunted more likely to be sampled
  - Capacity issue: Higher selectivity if poor, GIDA

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# Frontline workers are critical in dissemination

- For many parents and caregivers , frontline workers are key source of “trusted” information
- Other dissemination channels
  - Interaction with traditional media, e.g. “Kapehan”, guestings
  - Information blasts through barangay captain
  - Not so much on social media, but may be of limited importance especially since mobile phone signal is an issue

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# Nurturing Care Practices



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## Among FGD participants, generally good knowledge of nurturing care practices at home

- Ideal timing of ANC, optimal breastfeeding duration, child immunization schedule, complementary feeding practices, etc.
- Sources of information: Parents, health workers, social media
- Appreciative of information from frontline workers

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## But knowledge does not necessarily equate to actual practice or behavior

- Those more experienced, e.g. grandmothers or with multiple children, are more confident with knowledge and practices
- Some reported engaging child through playing and storytelling, but many do not because of housework and other activities

	2013			2017		
	Philippines	Zamboanga Peninsula	Zamboanga del Norte	Philippines	Zamboanga Peninsula	Zamboanga del Norte
Early reproductive age (age 15 to 24 years)						
% Have begun childbearing	26.8	26.4	26.9	24.7	24.5	31.5
Pregnant women						
% With ante-natal care from skilled provider	95.4	94.0	93.6	93.8	88.7	72.5
% Took iron tablets	92.4	89.9	94.9	91.9	92.6	88.6
% Delivered by a skilled provider	72.8	52.0	57.1	84.4	77.1	68.0
Age 0 to 2 years						
% Ever breastfed	93.7	93.1	91.8	93.2	94.8	95.8
% Breastfed within 1 hour from birth	49.7	59.1	66.7	56.9	65.9	88.1
Age 6 to 59 months						
% Given vitamin A supplement in past 6 months	86.3	87.1	93.9	75.5	77.4	70.3
% Given deworming medication in past 6 months	40.9	48.5	46.9	43.2	48.0	41.8
Age 12 to 23 months						
% with BCG vaccination	95.4	87.9	95.5	90.0	87.0	77.5
% with DPT vaccination, third dose	86.1	84.6	95.5	79.8	75.5	64.6
% with Hepatitis-B vaccination, third dose	77.6	79.1	63.6	81.2	75.5	64.6
% with Polio vaccination, third dose	84.6	83.5	95.5	79.0	84.5	75.0
% with Measles/MMR vaccination	83.9	76.9	77.2	80.4	71.8	54.8

Source: PSA and ICF (2018), and PSA and ICF International (2014)

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## Mothers are usually child caregivers

- But fathers and others take over when mothers work for pay

## Some children are unattended or with neighbors

- If primary caregiver has important errand outside the home
- FGD participants agree that accidents may happen when children are left unattended

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## Some challenges

- Income may be insufficient to provide best quality care
- Delay in ANC: walang pera, nahihiya, hindi sigurado, sabi ni ina

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# Resource Access

# Food prices

Generally more  
expensive  
relative to  
national and  
regional  
average

Index of Retailer and Relative Prices of Food Commodities, 2015 and 2018						
	2015			2018		
	Philippines	Zamboanga Peninsula	Zamboanga del Norte	Philippines	Zamboanga Peninsula	Zamboanga del Norte
Basic wage per day, median	300.0	210.0	210.0	350.0	269.0	269.0
Price per kilo						
Well-milled rice	42.0	41.6	45.1	45.0	46.4	49.6
Sweet potato	32.3	28.4	26.5	39.8	32.8	35.2
Mongo	87.1	83.4	93.4	85.8	81.2	88.9
Stringbeans	51.0	37.9	42.3	62.6	43.3	52.9
Ampalaya	62.2	55.7	57.5	75.5	65.9	67.6
Eggplant	43.3	37.9	40.1	56.0	41.3	51.7
Squash	26.3	21.9	23.7	33.5	28.4	32.7
Beef	243.7	251.2	249.3	288.7	280.2	291.3
Pork	190.9	186.8	...	217.6	205.3	...
Chicken	137.5	134.4	145.3	152.3	156.3	169.8
Bangus	126.8	112.7	124.8	156.2	135.0	166.5
Galunggong	118.3	92.0	100.9	144.2	114.4	123.4
Tilapia	106.4	101.9	127.8	115.9	105.4	106.1
Price per kilo as % of median basic wage per day						
Well-milled rice	14.0	19.8	21.5	12.9	17.2	18.4
Sweet potato	10.8	13.5	12.6	11.4	12.2	13.1
Mongo	29.0	39.7	44.5	24.5	30.2	33.1
Stringbeans	17.0	18.0	20.2	17.9	16.1	19.7
Ampalaya	20.7	26.5	27.4	21.6	24.5	25.1
Eggplant	14.4	18.0	19.1	16.0	15.4	19.2
Squash	8.8	10.4	11.3	9.6	10.6	12.1
Beef	81.2	119.6	118.7	82.5	104.2	108.3
Pork	63.6	89.0	...	62.2	76.3	...
Bangus	42.3	53.7	59.4	44.6	50.2	61.9
Galunggong	39.4	43.8	48.0	41.2	42.5	45.9
Tilapia	35.5	48.5	60.8	33.1	39.2	39.4

# Employment

Annex C. Employment among working age population, Zamboanga del Norte, 2019

	Employed ('000)	By occupation type (%)			Share (%) of working age population
		High-skilled	Skilled	Low-skilled	
Zamboanga del Norte	649.7	11.6	61.5	26.9	58.3
Dapitan City	55.0	10.7	58.0	31.4	61.6
Dipolog City (Capital)	90.2	11.4	53.6	35.1	56.7
Katipunan	29.0	12.2	54.7	33.1	62.3
La Libertad	5.3	14.9	59.5	25.7	60.2
Labason	26.6	9.7	66.5	23.9	60.8
Liloy	26.2	16.1	60.7	23.2	54.6
Manukan	23.1	12.3	67.5	20.3	57.4
Mutia	8.9	9.1	69.3	21.6	62.8
Piñan (New Piñan)	13.7	6.7	69.9	23.4	57.2
Polanco	26.4	11.4	72.2	16.4	56.1
Pres. Manuel A. Roxas	24.2	13.2	53.6	33.2	58.0
Rizal	9.9	14.2	63.4	22.5	58.8
Salug	20.6	12.2	66.4	21.4	53.2
Sergio Osmeña Sr.	18.5	9.5	62.9	27.6	53.8
Siayan	20.5	13.2	71.4	15.4	58.7
Sibuco	21.0	8.5	65.8	25.7	60.0
Sibutad	12.1	8.9	70.0	21.2	55.2
Sindangan	63.6	8.5	55.6	35.9	58.0
Siocon	28.8	8.4	74.9	16.8	57.5
Sirawai	18.1	10.3	65.3	24.4	61.2
Tampilisan	15.2	8.6	68.7	22.8	58.2
Jose Dalman (Ponot)	17.1	11.3	65.3	23.5	59.3
Gutalac	21.0	17.2	60.3	22.6	59.1
Baliguian	14.1	25.1	54.8	20.1	59.5
Godod	10.8	14.8	64.5	20.7	54.6
Bacungan (Leon T. Postigo)	16.0	17.3	57.0	25.7	61.7
Kalawit	13.7	14.0	58.5	27.6	60.6

## Similar EPR as national

- Higher for women
- 36% employed in agriculture
- 27% are low-skilled



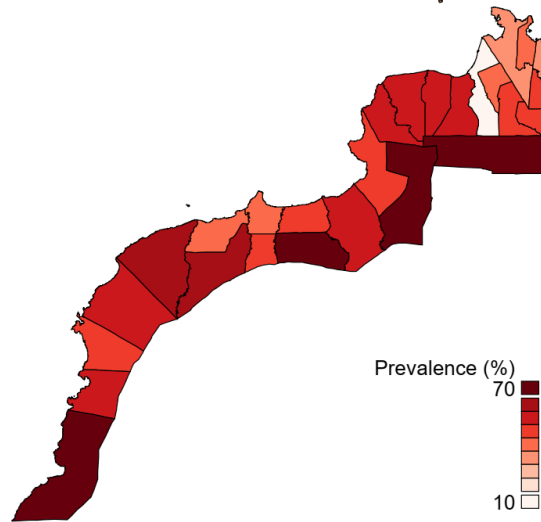
# Poverty incidence

## Declining poverty rate but remains high

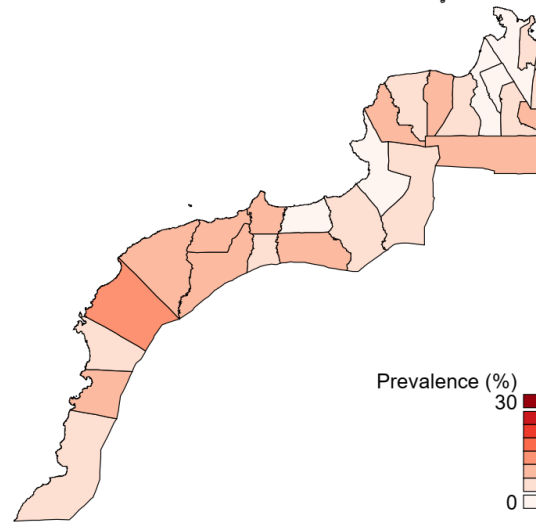
- Half of all ZDN population in 2015
- As much as 2/3 in some municipalities

	2006	2009	2012	2015
Food-poverty incidence among population (%)				
Philippines	12.0	10.9	10.4	8.1
Zamboanga Peninsula	26.2	26.4	19.1	13.3
Zamboanga del Norte	47.5	46.4	34.4	27.9
Poverty incidence among population (%)				
Philippines	26.6	26.3	25.2	21.6
Zamboanga Peninsula	45.0	45.8	40.1	33.9
Zamboanga del Norte	65.5	68.5	54.4	51.6

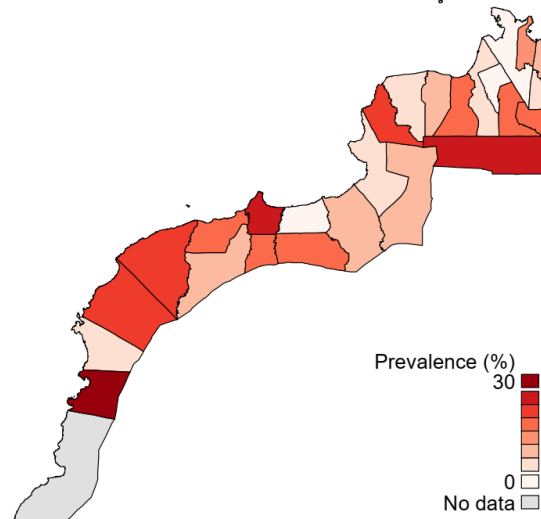
A. Poverty incidence, 2015



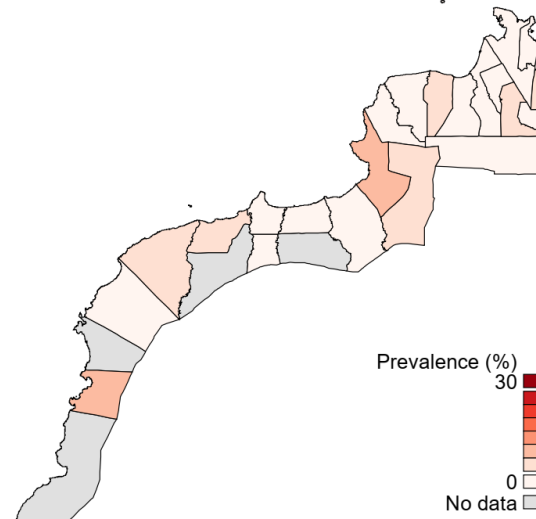
B. Underweight, 2017



C. Stunting, 2017

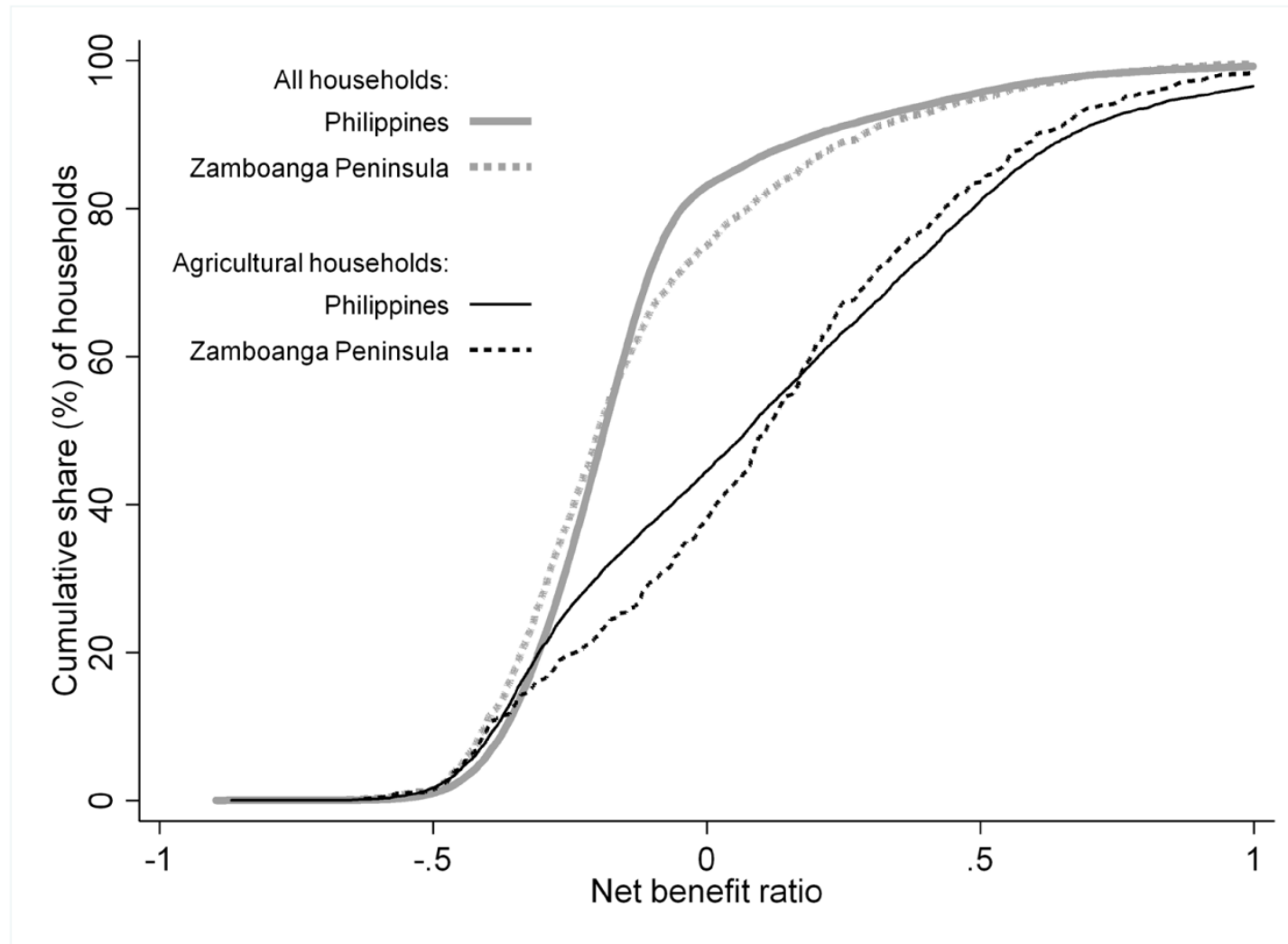


D. Wasting, 2017



Higher poverty incidence correlated with higher child undernutrition prevalence

Source: Municipal and city level headcount poverty rates are from PSA (2019c). Child underweight, stunting and wasting prevalence are from DOH-NNC (2019)



Who will be affected by food price increase?  
*It depends.*

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# Environmental Health

# Drinking water source (2010)

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## Poorer conditions relative to country, region

- Only 1 in 5 households have own piped water
- >1/10 use unimproved water sources

	Piped water on premises	Other improved water sources	Unimproved water sources	Bottled water
Philippines	38.9	39.8	4.6	16.6
Zamboanga Peninsula	31.0	55.1	8.6	5.3
Zamboanga del Norte	19.0	61.5	11.9	7.7

# Toilet facility (2010)

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## Poorer conditions relative to country, region

- >1/10 without toilet facility
- About a third with unimproved facility

	Improved toilet facility	Unimproved toilet facility	No toilet facility
Philippines	69.8	24.6	5.6
Zamboanga Peninsula	55.6	35.5	8.9
Zamboanga del Norte	55.8	31.8	12.4

# Handwashing practices

## Largely with soap and water (84%)

- >1/10 with water only
- Some with no water or soap

	Philippines	Zamboanga Peninsula	Zamboanga del Norte
% Households in which place for washing hands was observed	92.6	98.0	99.7
And place for hand-washing was a fixed place	79.7	88.2	87.9
And place for hand-washing was mobile	12.9	9.9	11.8
Among households in which place for handwashing was observed			
% with soap and water	89.0	88.0	84.0
% with water only	5.5	9.3	13.9
% with soap but no water	2.4	1.2	0.0
% with no water or soap	3.0	1.6	2.2

Source: PSA and ICF (2018)



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