

Inequality of Opportunities in Education among Ethnic Groups

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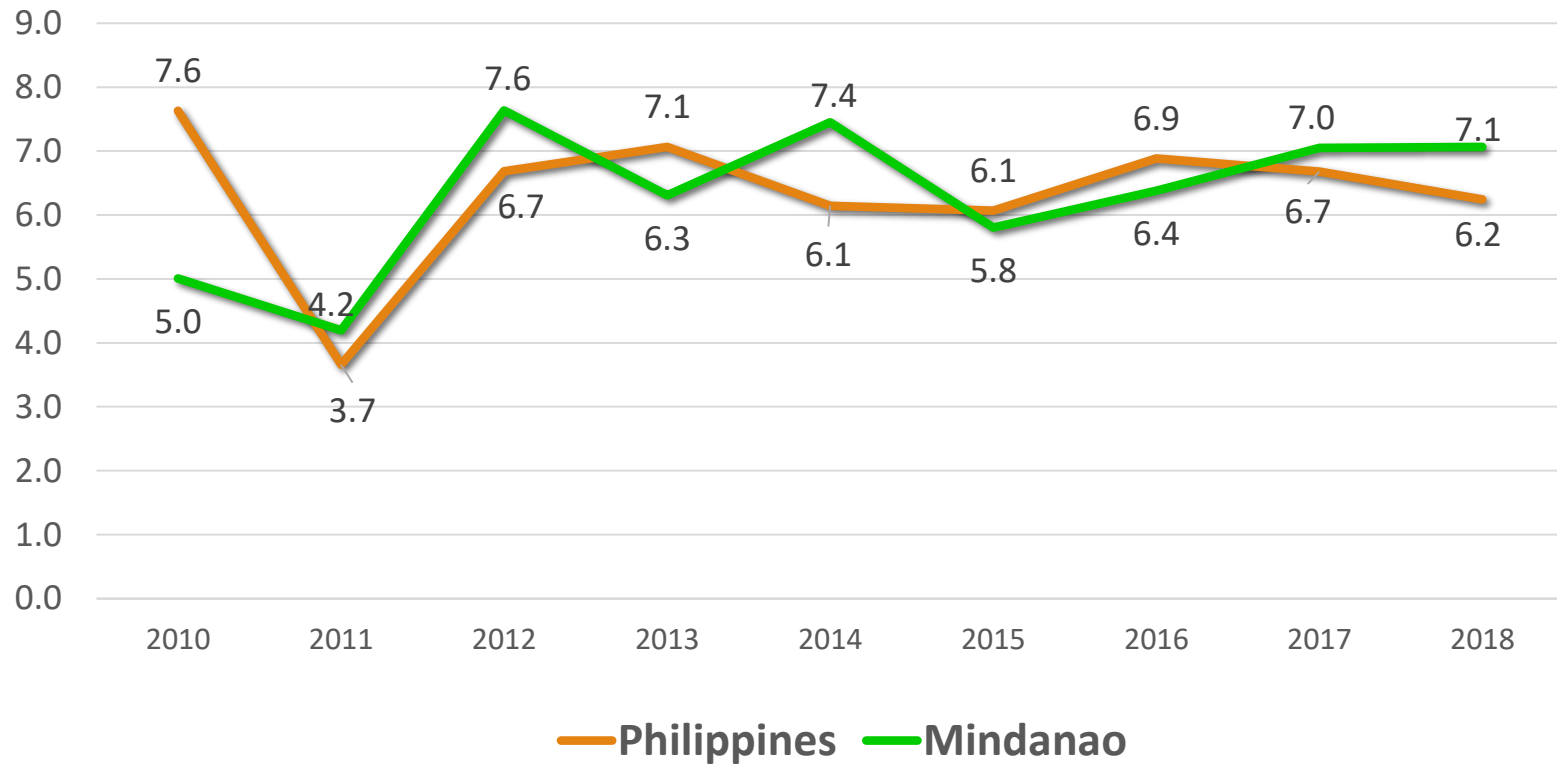
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Outline

- ❖ Background
- ❖ Objectives
- ❖ Methodology
- ❖ Key Findings
- ❖ Concluding Remarks

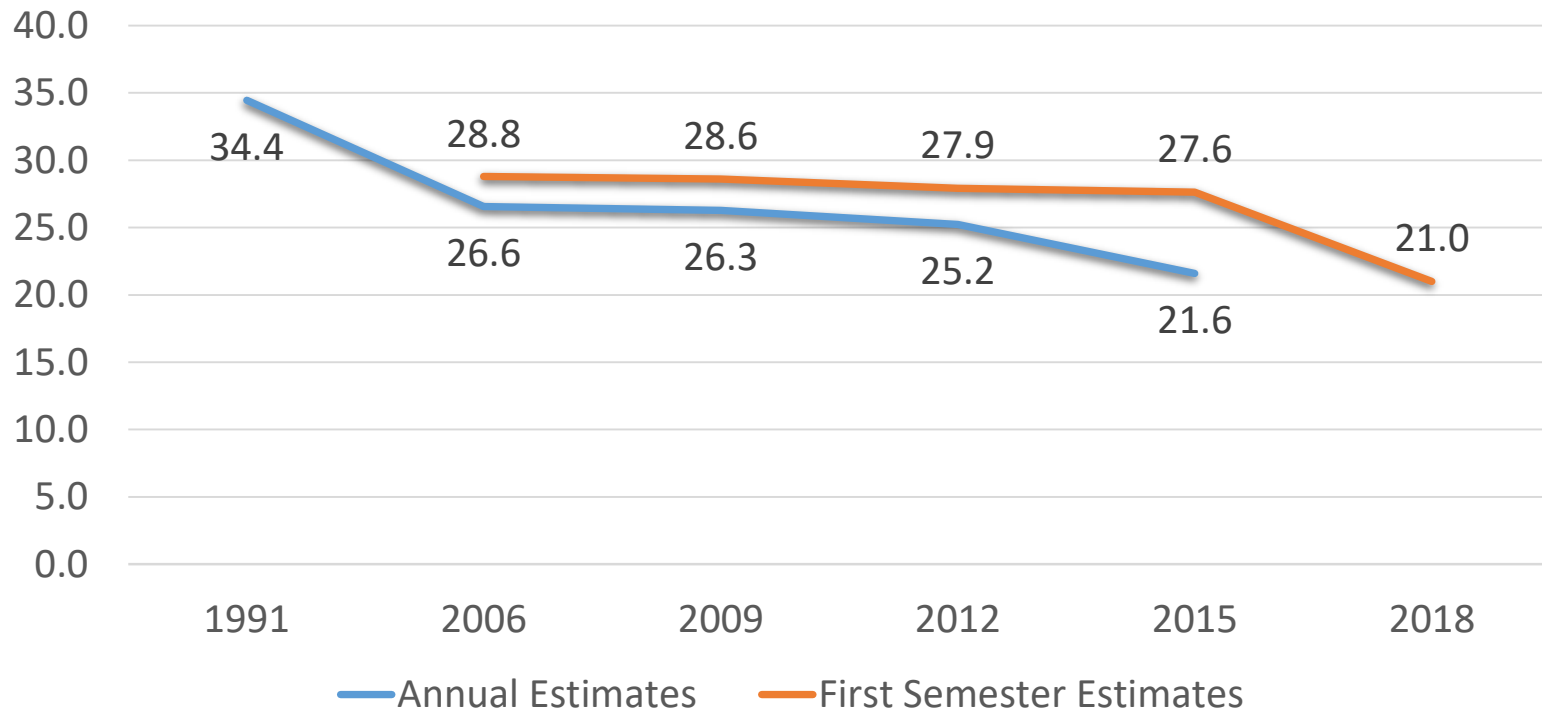
Since 2012, GDP growth in the Philippines and Mindanao have been above 6%.

Gross Domestic Product, Growth Rates, 2010 - 2018



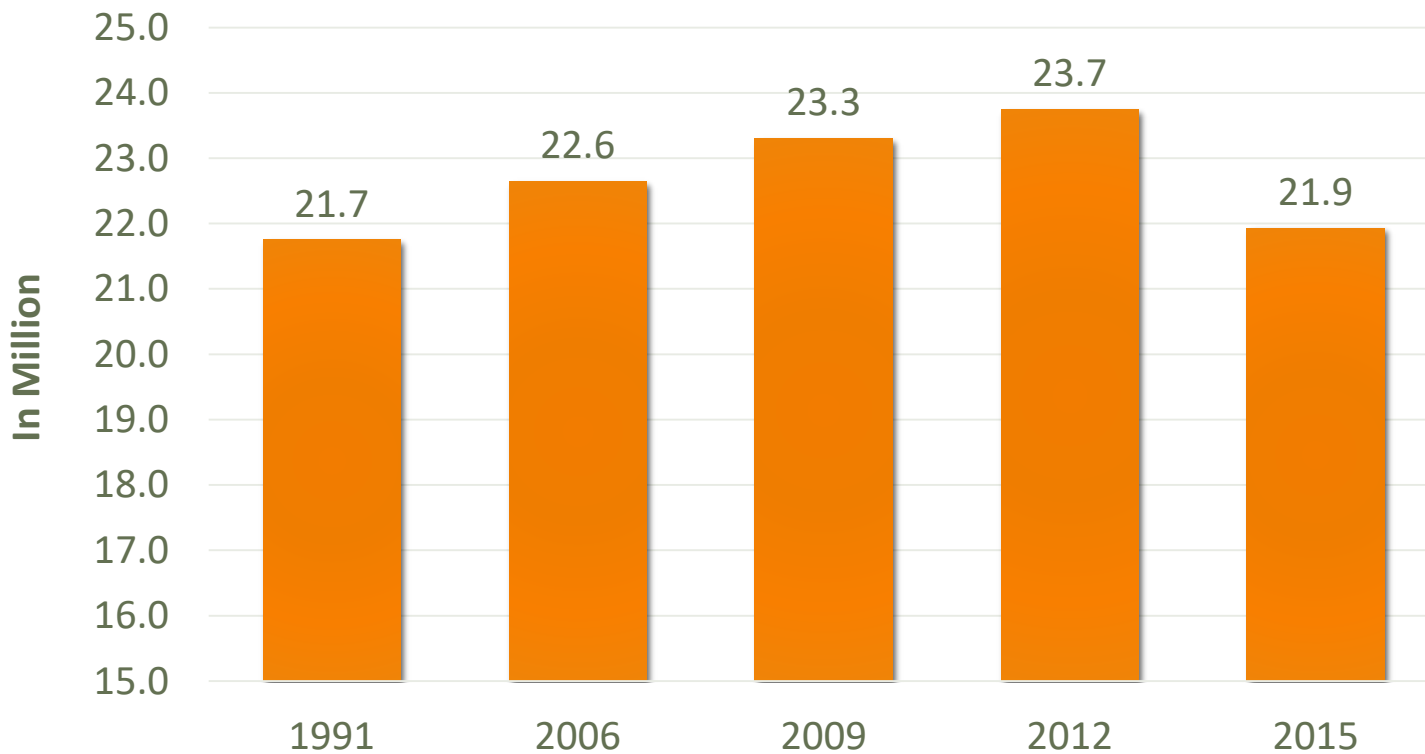
Poverty rate has gone down

Poverty incidence among Population, 1991 - 2018



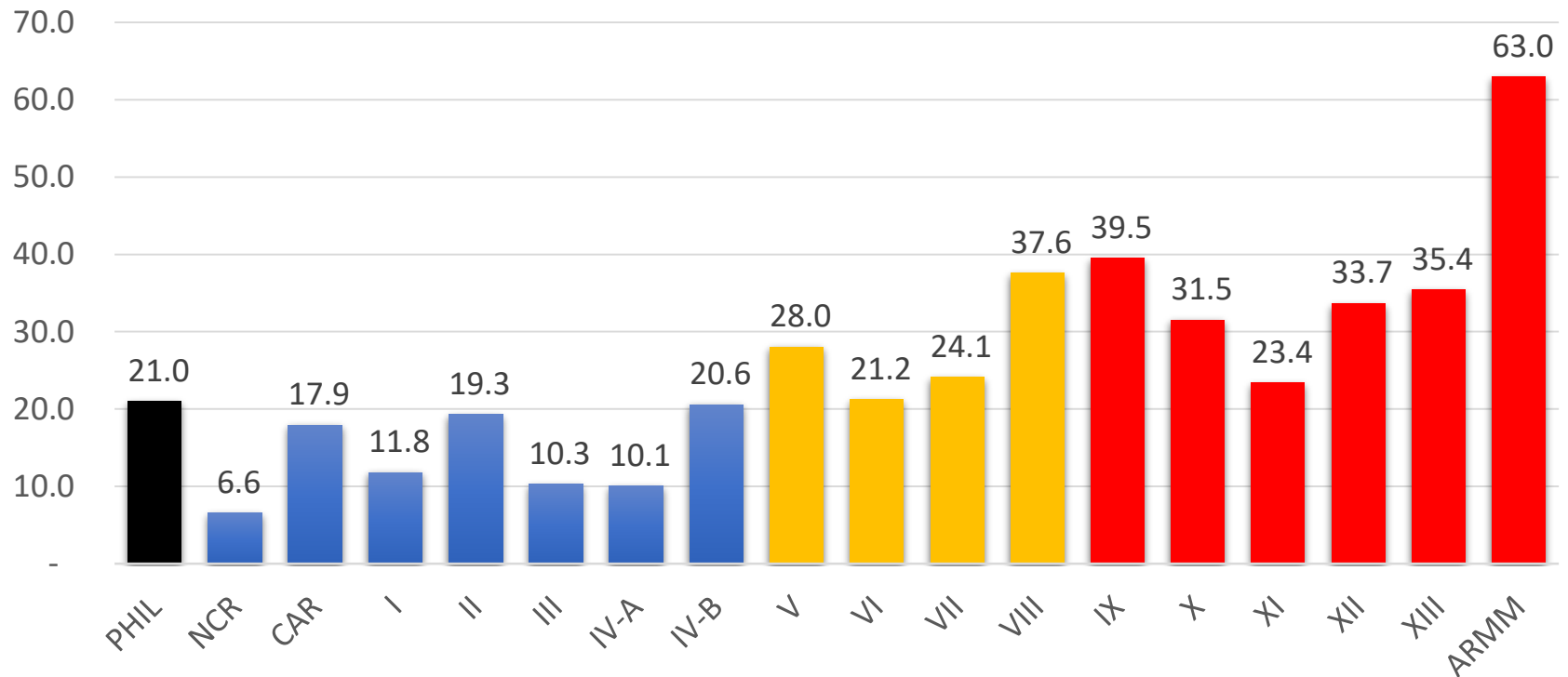
But number of poor has not changed

Magnitude of Poor Population: 1991, 2006, 2009, 2012 and 2015 (Annual Estimates)

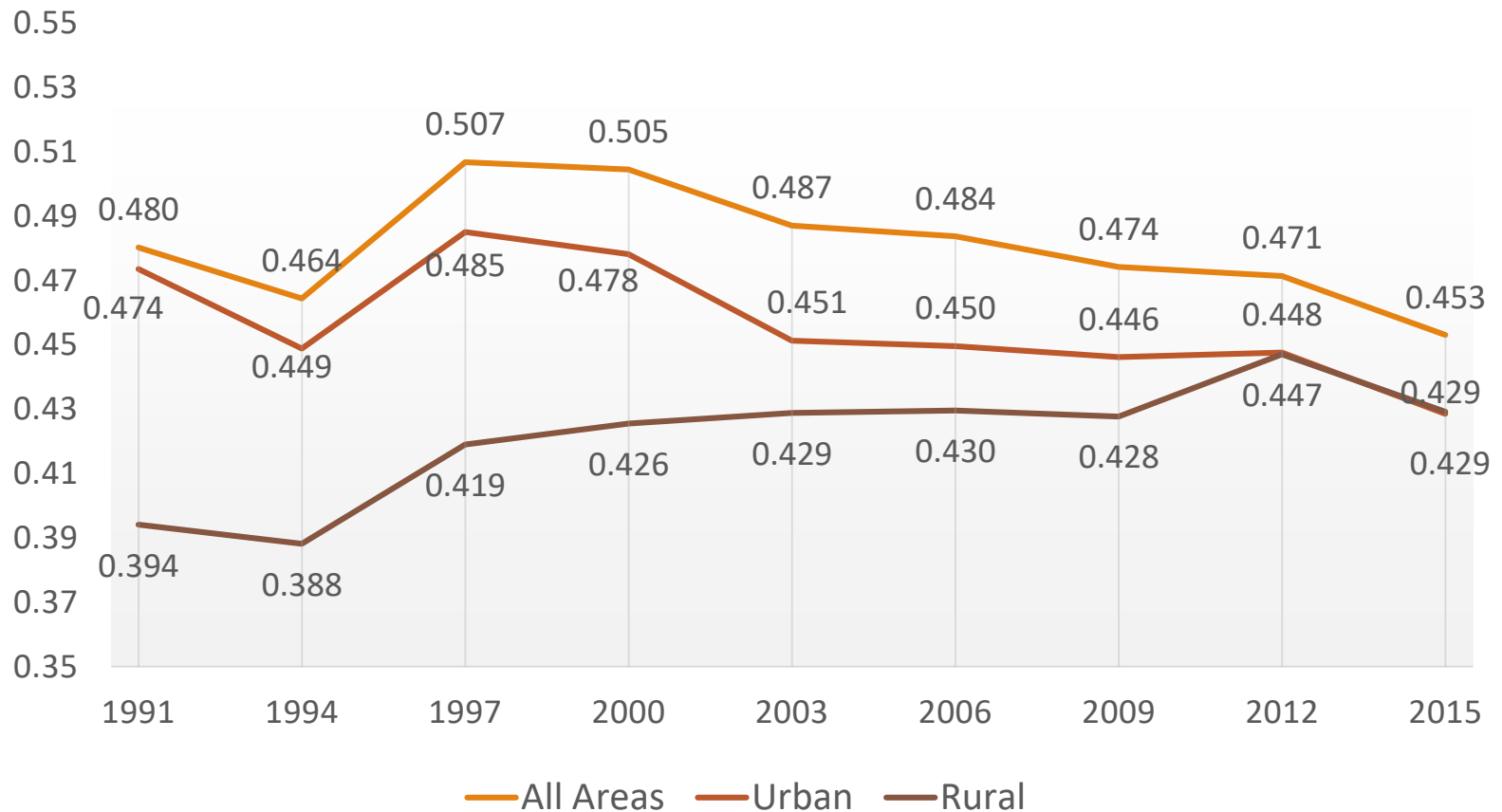


In 2018, 5 out of the 6 regions with high poverty rate (over 30%) are in Mindanao

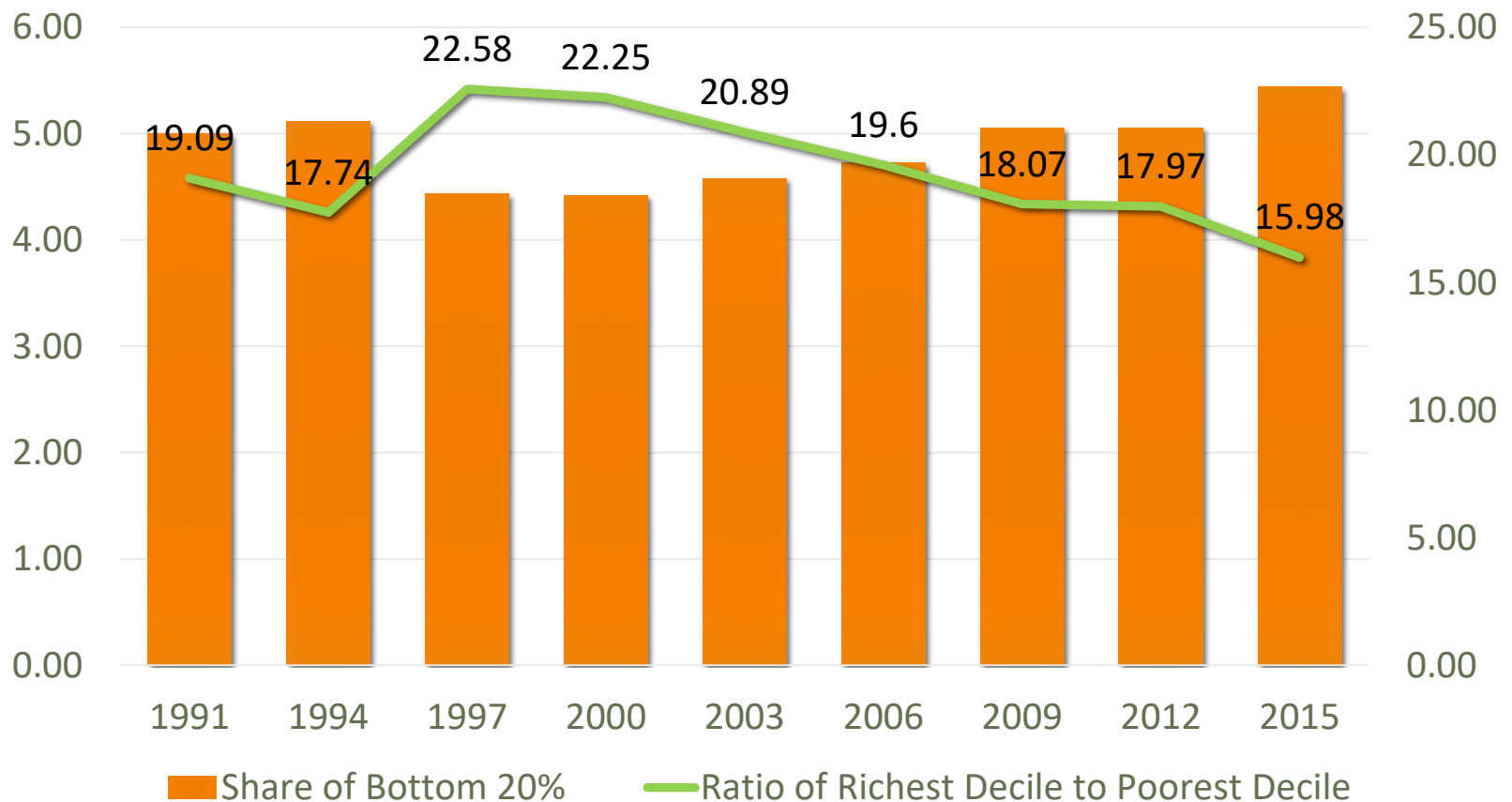
Poverty Incidence among Population by Region, 2018 (First semester)



The country has not made significant progress in reducing inequality



Very slow increase in share of poorest 20 percent while ratio of richest decile to poorest decile further decreased from 1997 to 2015



Objectives

- ❑ To examine inequality of educational opportunity across regions and among ethnic groups in the Philippines
- ❑ To provide insights on how to address such inequalities

Methodology

Data

- 2000 and 2010 Censuses of Population and Housing (CPH)
- 2000 – 10% sample, 2010 – 20% sample

Variables

- Outcome: Years of schooling (aged 25 & above); Literacy rate (aged 10 & above); Access to primary education (aged 6-11) and secondary education (aged 12-18)
- Grouping: ethnicity

Inequality measures

- Gini coefficient
- Theil's index
- Human opportunity index (HOI)

Ethnicity and ethnic groups

- ❑ Ethnicity – is the primary sense of belonging to an ethnolinguistic group, which is blood-related in nature in the sense that the ties are reckoned by blood and traced through family tree (Philippine Statistics Authority)
- ❑ Philippines: 182 ethnolinguistic groups;
151 are indigenous people (IP) groups
- ❑ Major ethnic groups (based on classification of the National Commission on Indigenous Peoples or NCIP):
 1. Muslim ethnic group (IPs and non-IPs)
 2. Non-Muslim IPs ethnic group
 3. Non-Muslim, non-IPs ethnic group

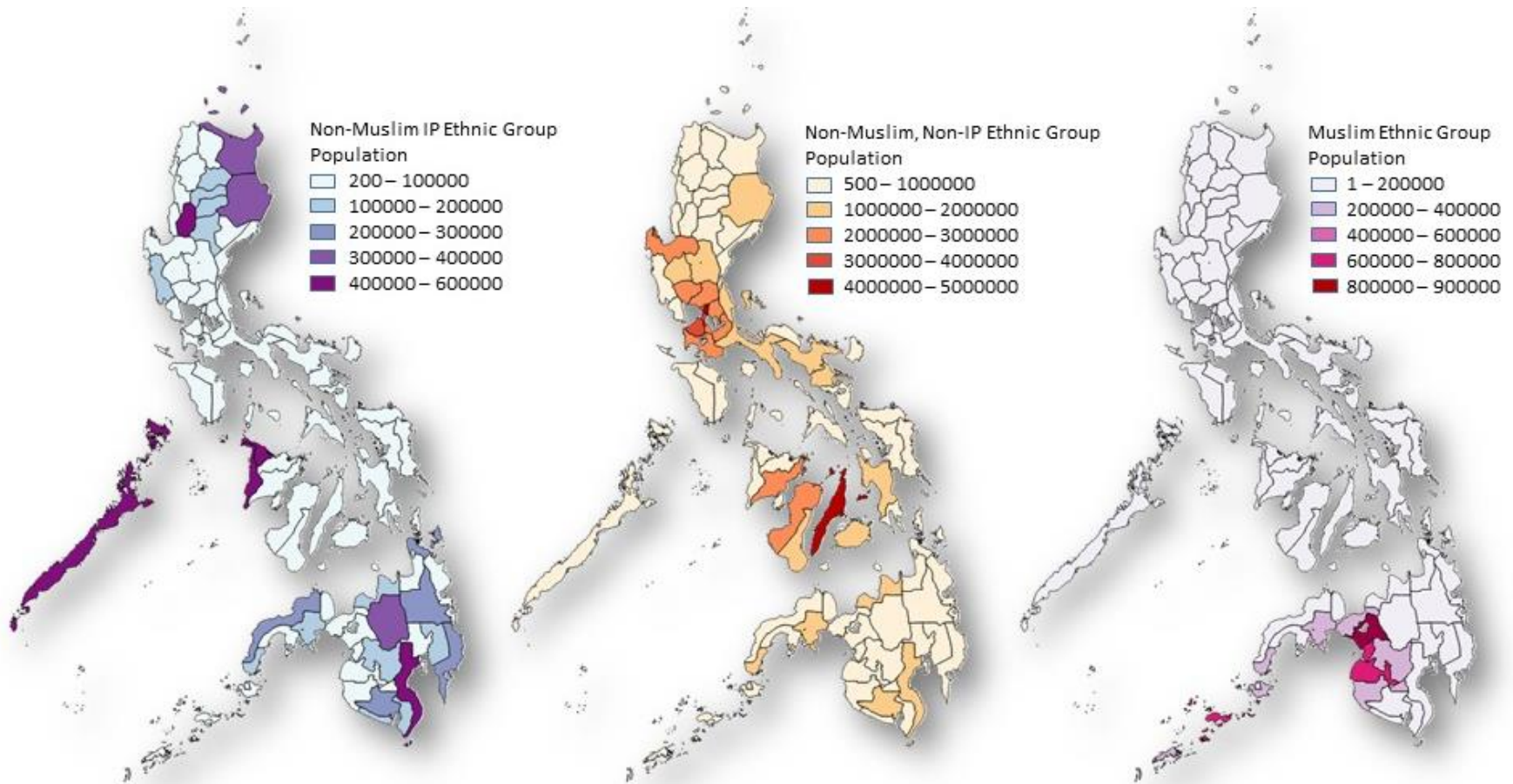
(1) Muslim ethnic group**(2) Non-Muslim IPs ethnic group****(3) Non-Muslim/non-IPs ethnic group**

Muslim IPs sub-group	Muslim Non-IPs sub-group					
1. Badjao	1. Maguindanao	1. Abelling/Abellen/Aberling/Aborlin	37. Bontok	106. Mangguangan	109. Manobo-Dulangan	1. Bikol/Bicol
2. Iranon/Iranun/Iraynon	2. Maranao	2. Adasen	38. Bugkalot/Ilongot	107. Manobo	110. Mansaka	2. Bisaya/Binisaya
3. Jama Mapun	3. Palawani	3. Aeta/Ayta	39. Buhid	108. Manobo-Blit	111. Manubo-Ubo/ Manobo-Ubo	3. Boholano
4. Kalagan	4. Sangil	4. Agta	40. Buhid (Bangon)	73. Itawis	112. Masadiit	4. Capizeño
5. Kalibugan/Kolibugan	5. Tausug	5. Agta-Cimaron	41. Bukidnon	74. Itneg/Tingguian	113. Matigsalug/Matigsalug	5. Caviteño
6. Sama Badjao	6. Yakan	6. Agta-Agay	42. Cagayanen	75. Ivatan	114. Molbog	6. Caviteño-Chavacano
7. Sama Bangingi		7. Agta-Dumagat	43. Calinga	76. Iwak/Iowak/Owak/I-wak	115. Muyadan	7. Cebuano
8. Sama Laut		8. Agta-Tabangnon	44. Clata/Klata	77. Kabayukan	116. Obu-Manuvu/ Ubo-Manobo	8. Chinese
9. Sama/Samal		9. Agta-Taboy	45. Cuyonon/Cuyonen	78. Kabihug	117. Pala'wan/Palawan-o	9. Cotabateño
		10. Agutaynen	46. Diangan	79. Kadaklan/Kachakran	118. Pan-ayanon	10. Cotabateño -Chavacano
		11. Akeanon	47. Dibabawon	80. Kailawan/Kaylawan	119. Panay-Bukidnon	11. Davao-Chavacano
		12. Alangan	48. Dibabeen Mulitaan	81. Kalanguya	120. Parananum	12. Davaweño
		13. Ambala	49. Dibaben	82. Kalanguya-Ikalahan	121. Pulangien/Pulangiyen	13. Hiligaynon/Ilonggo
		14. Applai	50. Direrayaan	83. Kalinga	122. Ratagnon	14. Ilocano
		15. Aromanen-Manobo	51. Dumagat	84. Kamiguin	123. Remontado	15. Kapampangan
		16. Ata	52. Dumagat/Alta	85. Kankanaey	124. Sibuyan Mangyan-Tagabukid	16. Masbateño/Masbatenon
		17. Ata/Negrilo	53. Dumagat/Remontado	86. Karao	125. Subanen/Subanon/Subanun	17. Pangasinan/Panggalato
		18. Ata-Manobo	54. Eskaya	87. Karulano	126. T'boli/Tboli	18. Tagalog
		19. Ati	55. Gaddang	88. Kaunana	127. Tadyawan	19. Waray
		20. Ayanan	56. Gubang	89. Ke'ney or Ken-ey/ Tau't-Bato	128. Tagabawa	
		21. B'laan/Blaan	57. Gubatnon	90. Kirenteken	129. Tagakaulo	
		22. Bago	58. Guiangan	91. Lahitanen	130. Tagbanua	
		23. Bagobo	59. Halawodnon	92. Lambangian	131. Tagbanua (Kalamianen)	
		24. Bagobo-Tagabawa	60. Hanunuo	93. Langilan	132. Tagbanua/Calamian	
		25. Bajao/Bajau	61. Henanga	94. Livunganen	133. Talaandig	
		26. Balangao	62. Higaonon	95. Mabaka	134. Talaingod	
		27. Balatok	63. Ibaloi/Ibaloy	96. Maeng	135. Tau-buid	
		28. Baliwon/Gaddang	64. Ibanag	97. Magahats	136. Teduray	
		29. Banao	65. Ibatan	98. Mag-anti/Mag-Antsi/Mag-anchi	137. Tigwahanon	
		30. Bangon	66. Ifugao	99. Magbekin/Magbukon/Magbukun	138. Tinananen	
		31. Bantoanon	67. Ilianen	100. Mag-indi	139. Tuwali	
		32. Banwaon	68. Illaud	101. Magkunana	140. Yapayao	
		33. Batak	69. Iraya	102. Majokayong	141. Yogad	
		34. Batangan	70. Isinai	103. Malaueg	142. Zambal	
		35. Belwang	71. Isneg/Isnag/Apayao	104. Mamanwa		
		36. Binongan	72. Isoroken	105. Mandaya		

Ethnic groupings by the NCIP

Key findings - Philippines

Non-Muslim, non-IPs dominate the population in all regions, except ARMM & CAR; ARMM is home for most of Muslim; CAR is home for many Non-Muslim IPs



Majority of Filipinos are neither Muslims nor IPs; non-Muslim IPs – 9%; Muslims – 6%

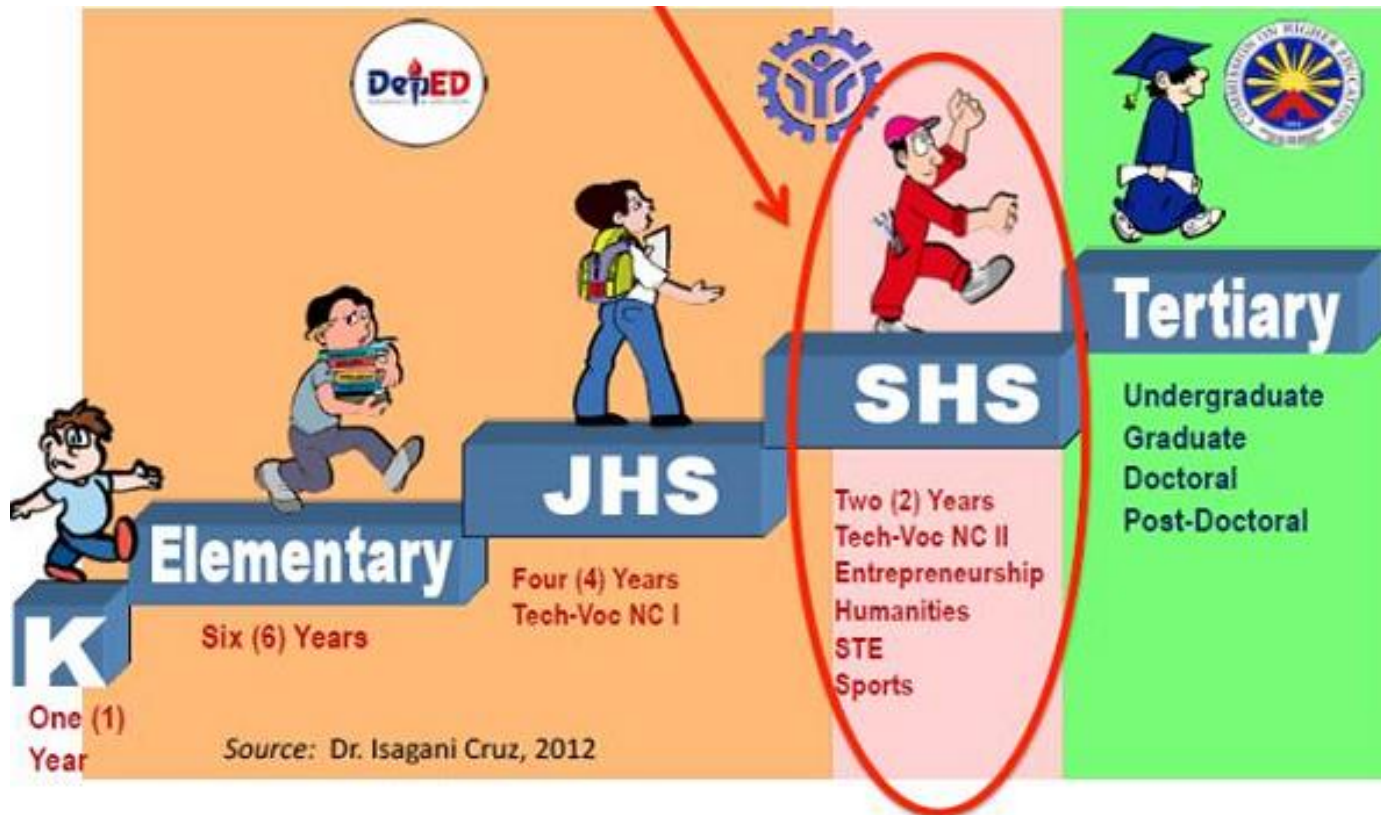
Philippine population by major ethnic group, 2000 and 2010

Ethnic Group	2000		2010	
	Number	Percent (%)	Number	Percent (%)
Philippines	69,168,155	100.0	91,012,285	100.0
Muslim	3,036,228	4.4	4,998,559	5.5
Non-Muslim IPs	5,641,657	8.2	7,792,792	8.6
Non-Muslim, non-IPs	60,490,270	87.5	78,220,933	86.0

Note: The figures in the table exclude population who did not state/report their ethnicity and/or other variables used in the analysis. These samples account for around 10 percent and 2 percent of the total population of the country and of Mindanao, respectively.

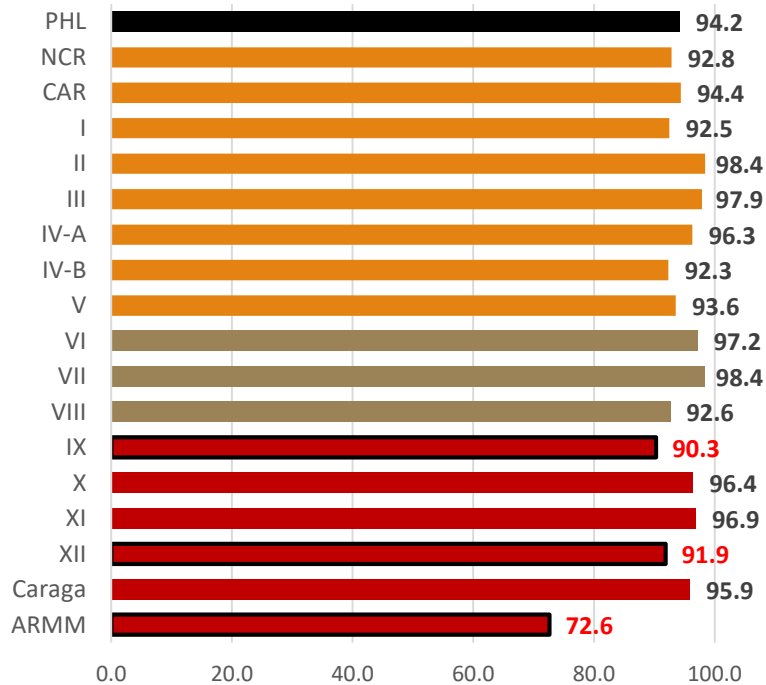
Philippine educational system

K to 12 Basic Education Curriculum

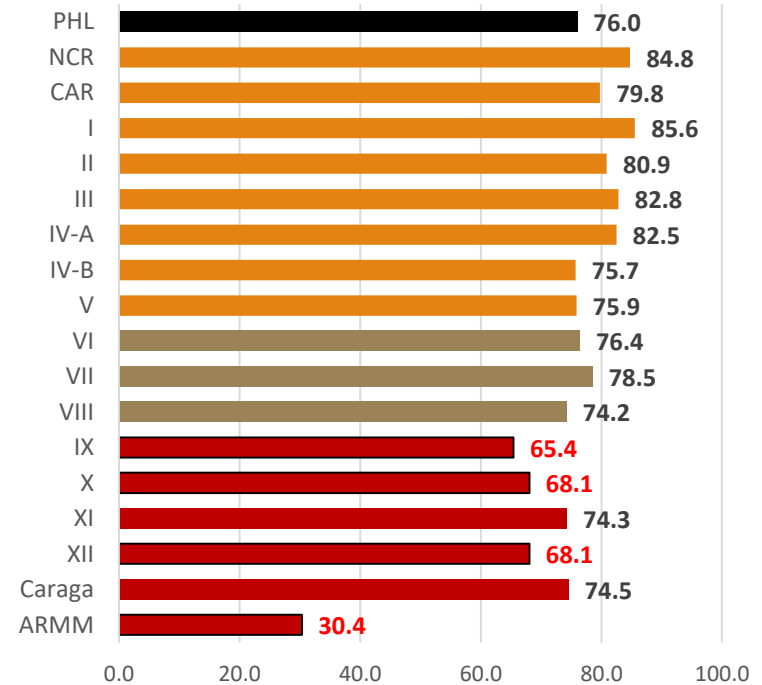


Regions 9, 12 and ARMM have the lowest net enrolment rates in elementary and secondary education in 2017

Net enrolment rate in elementary education, 2017

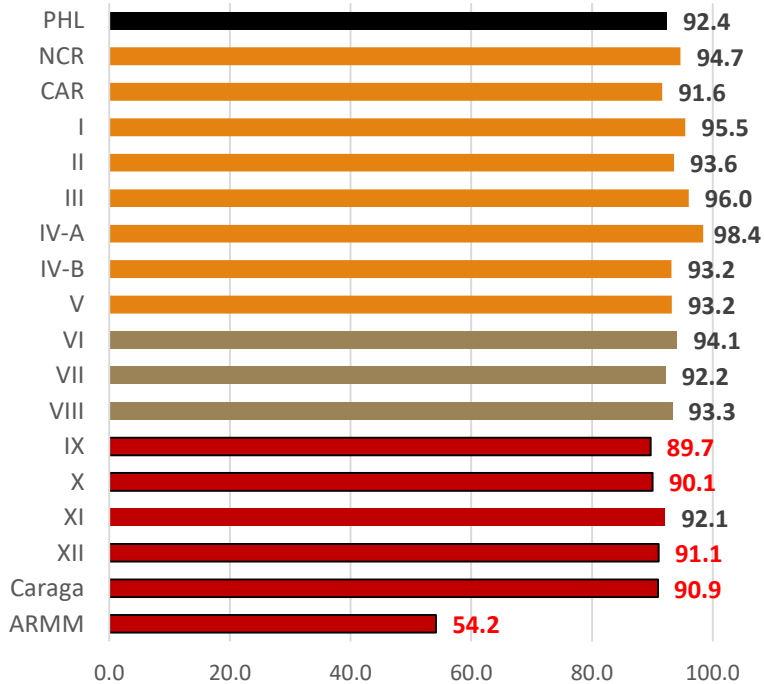


Net enrolment rate in secondary education, 2017

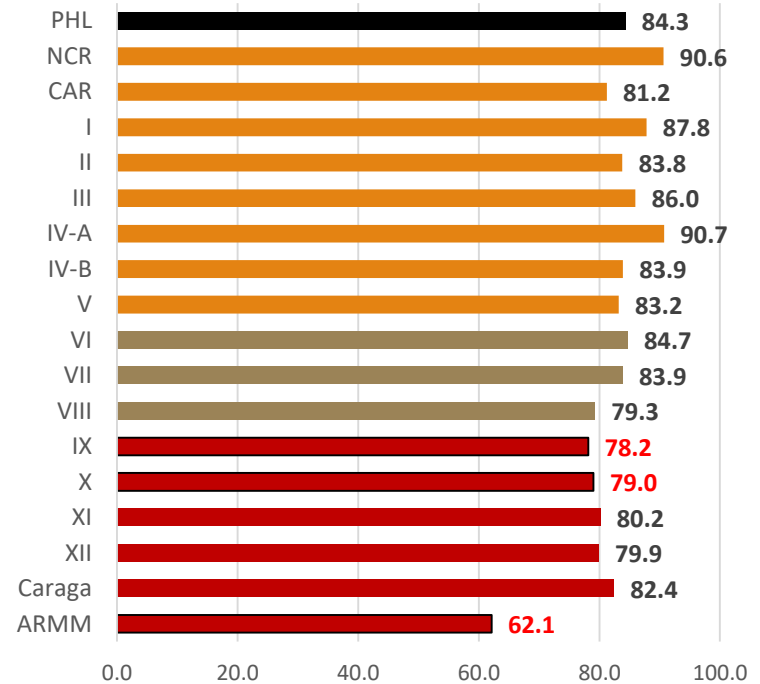


Completion rates are lower for regions in Mindanao (lowest in ARMM, Regions 9 and 10)

Completion rate in elementary education, 2017

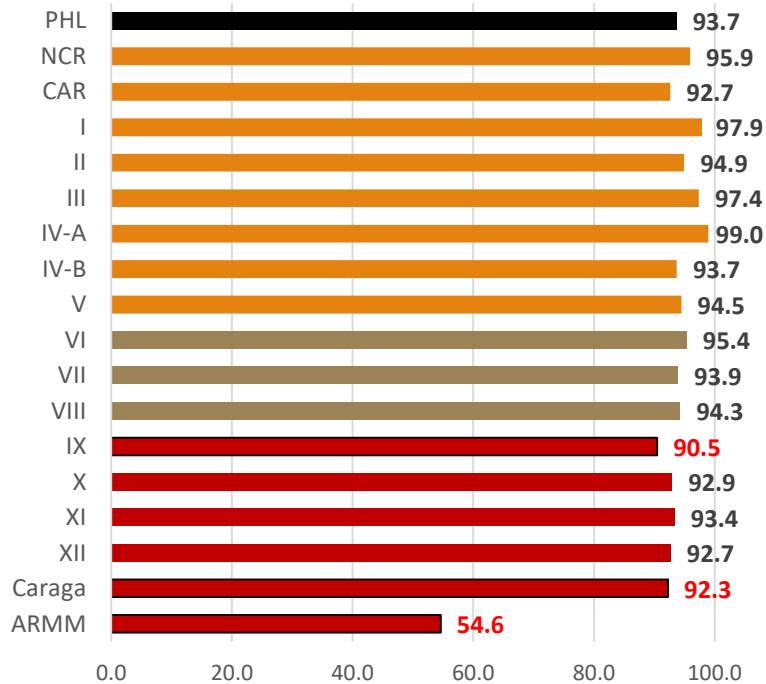


Completion rate in secondary education, 2017

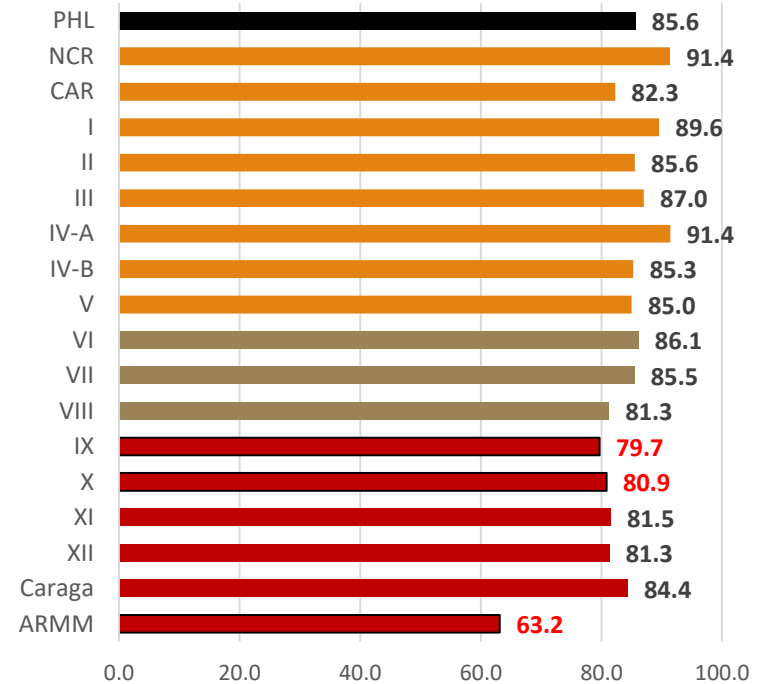


Region 9 and ARMM have the lowest cohort survival rates in elementary and secondary education in 2017

Cohort survival rate in elementary education, 2017

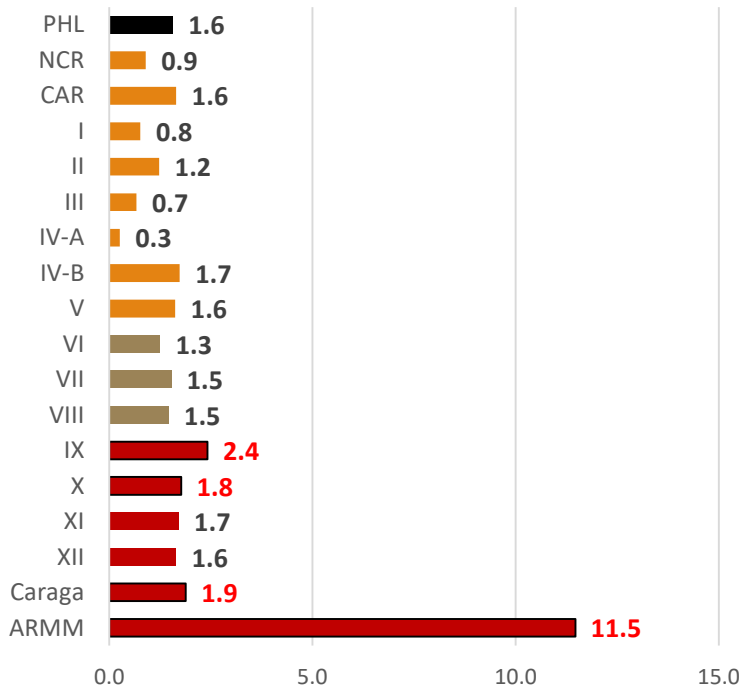


Cohort survival rate in secondary education, 2017

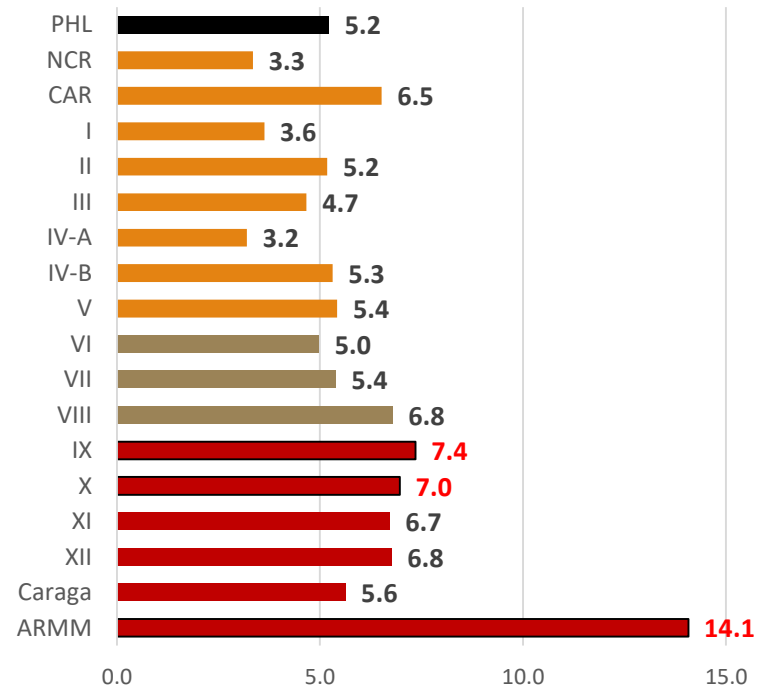


Dropout rates for regions in Mindanao are higher than the national average (highest in ARMM, Regions 9 and 10)

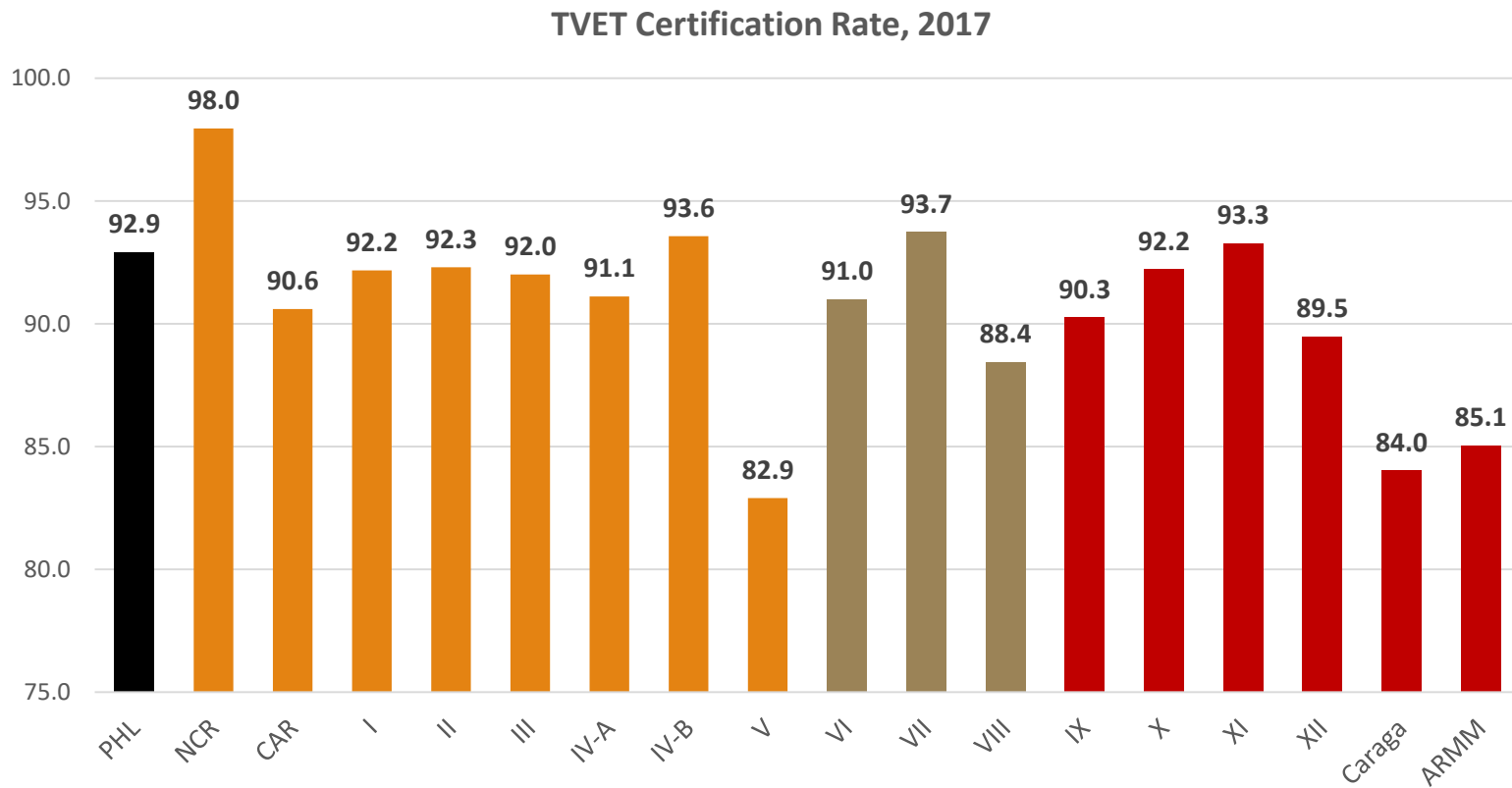
Dropout rate in elementary education, 2017



Dropout rate in secondary education, 2017

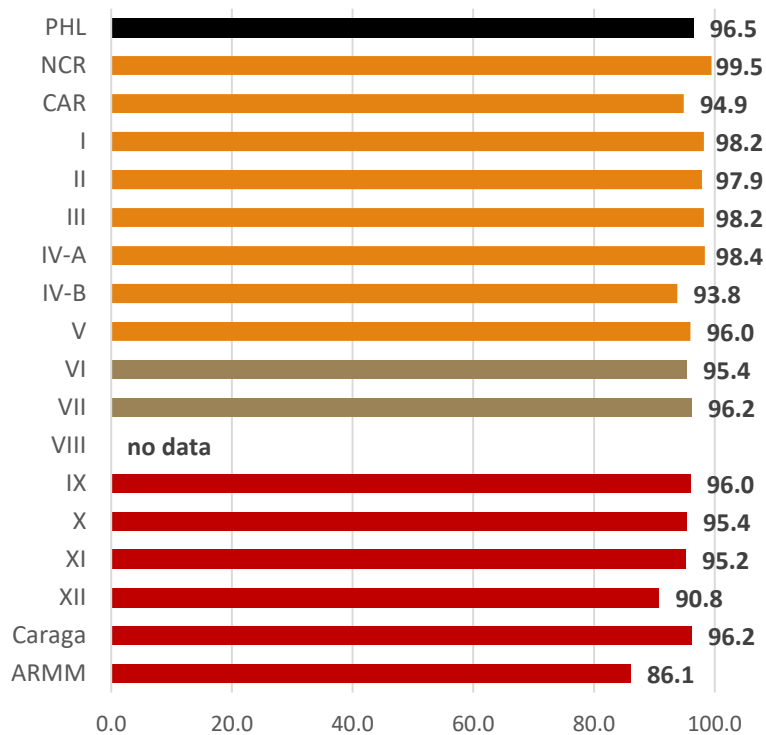


TVET certification rates in regions in Mindanao are lower than the national average (except Region 11)

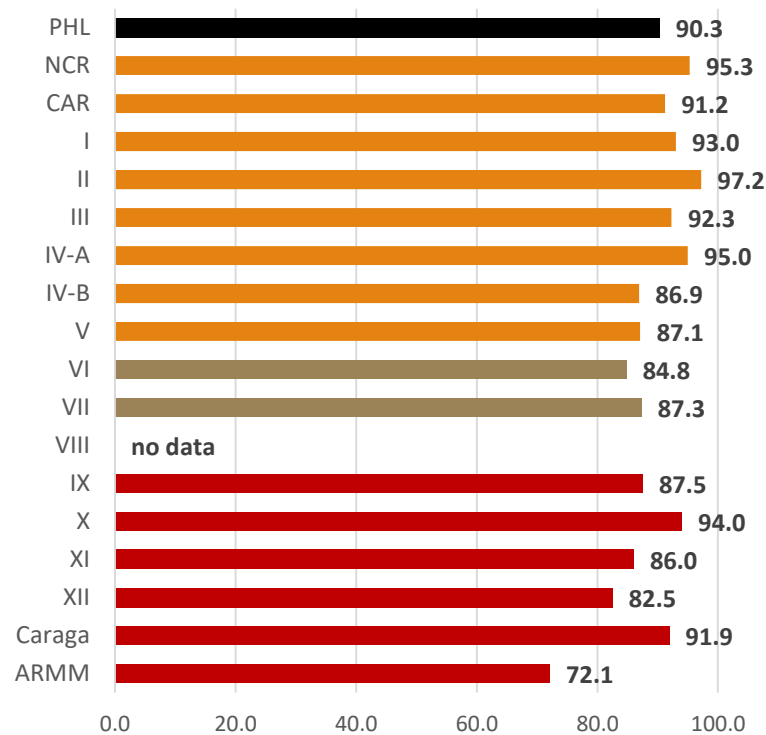


Simple and functional literacy rates in Mindanao are generally lower than the national average

Simple literacy rate, 2013

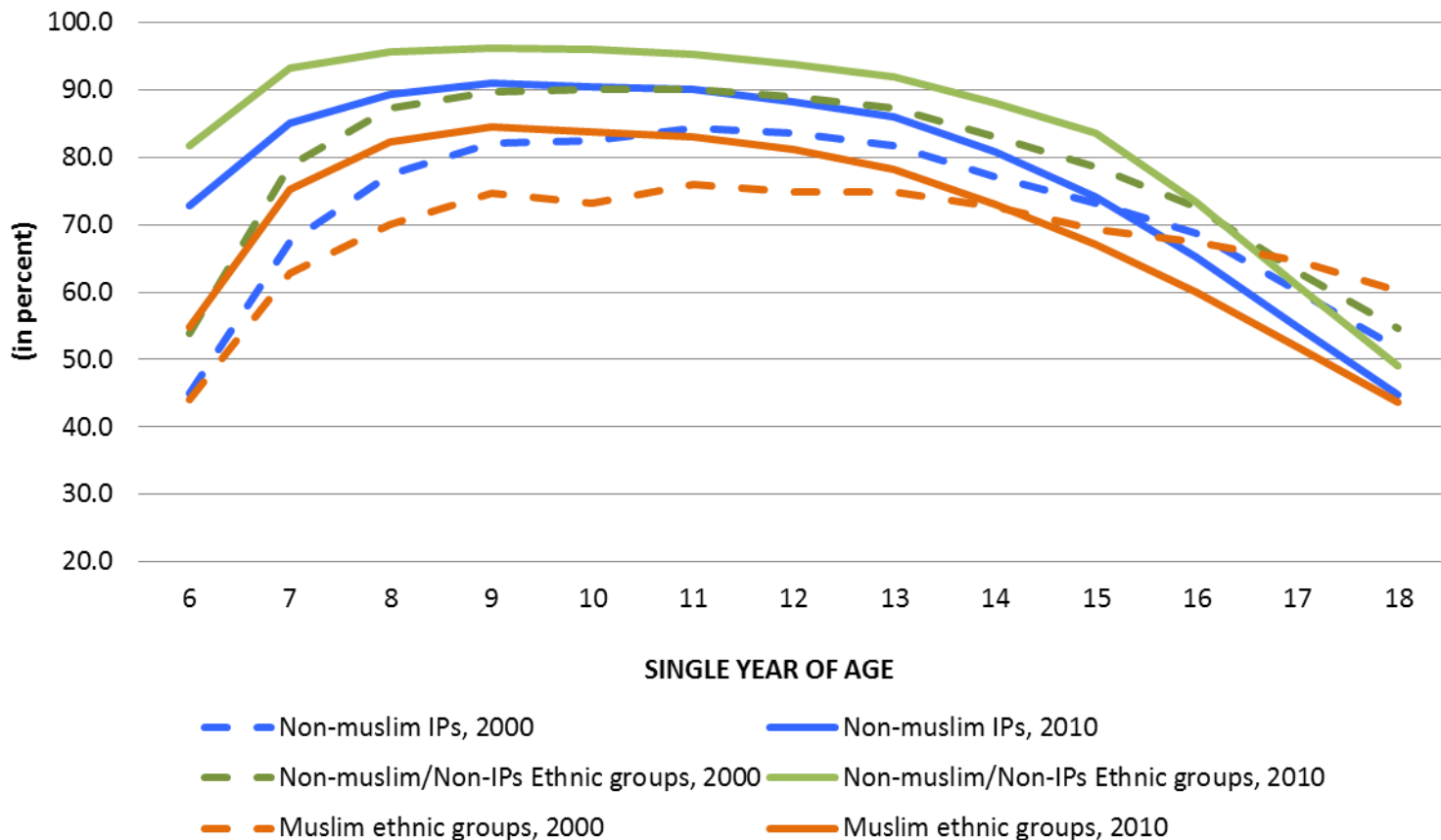


Functional literacy rate, 2013



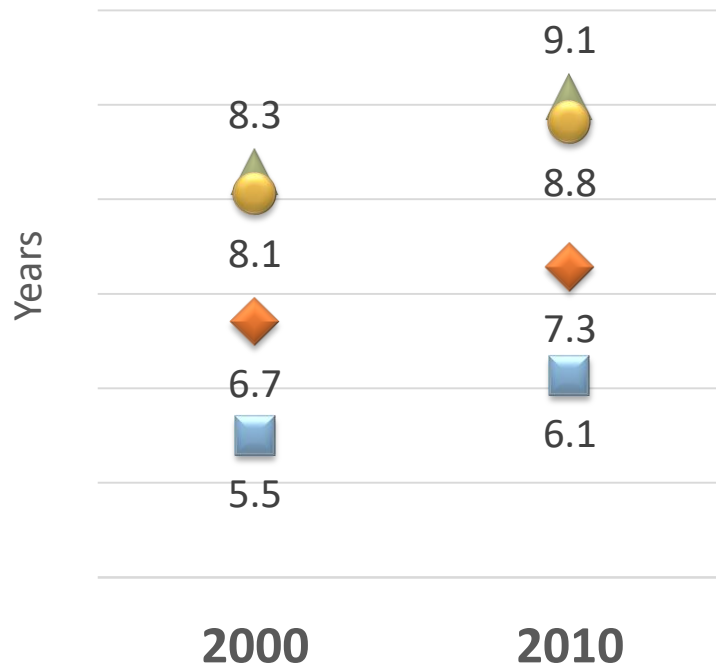
School participation among younger children increased; decreased among older cohort

Proportion of children attending school, by single year of age and by major ethnic group, 2000 & 2010

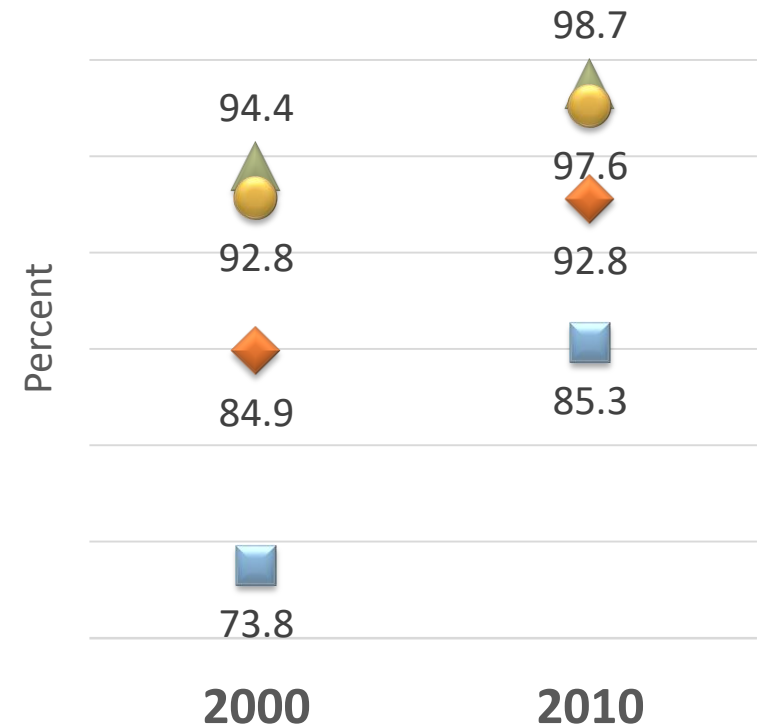


Years of schooling and literacy rate of Filipinos had generally improved

Average years of schooling of population aged 25 and over



Literacy rate of population aged 10 and over



■ Muslim ◆ Non-muslim IPs ▲ Non-muslim/Non-IPs ● All groups

Total inequality for years of schooling and literacy went down from 2000 to 2010 (Philippines)

Inequality component	Years of schooling		Literacy	
	2000	2010	2000	2010
Theil's index				
Within-group	0.1346	0.1101	0.0731	0.0240
Between-group	0.0036	0.0039	0.0014	0.0006
Total	0.1382	0.114 ↓	0.0745	0.0245 ↓
Gini coefficient				
Within-group	0.2100	0.183	0.045	0.0100
Between-group	0.025	0.027	0.016	0.011
Overlap	0.039	0.035	0.011	0.003
Total	0.275	0.244 ↓	0.072	0.024 ↓

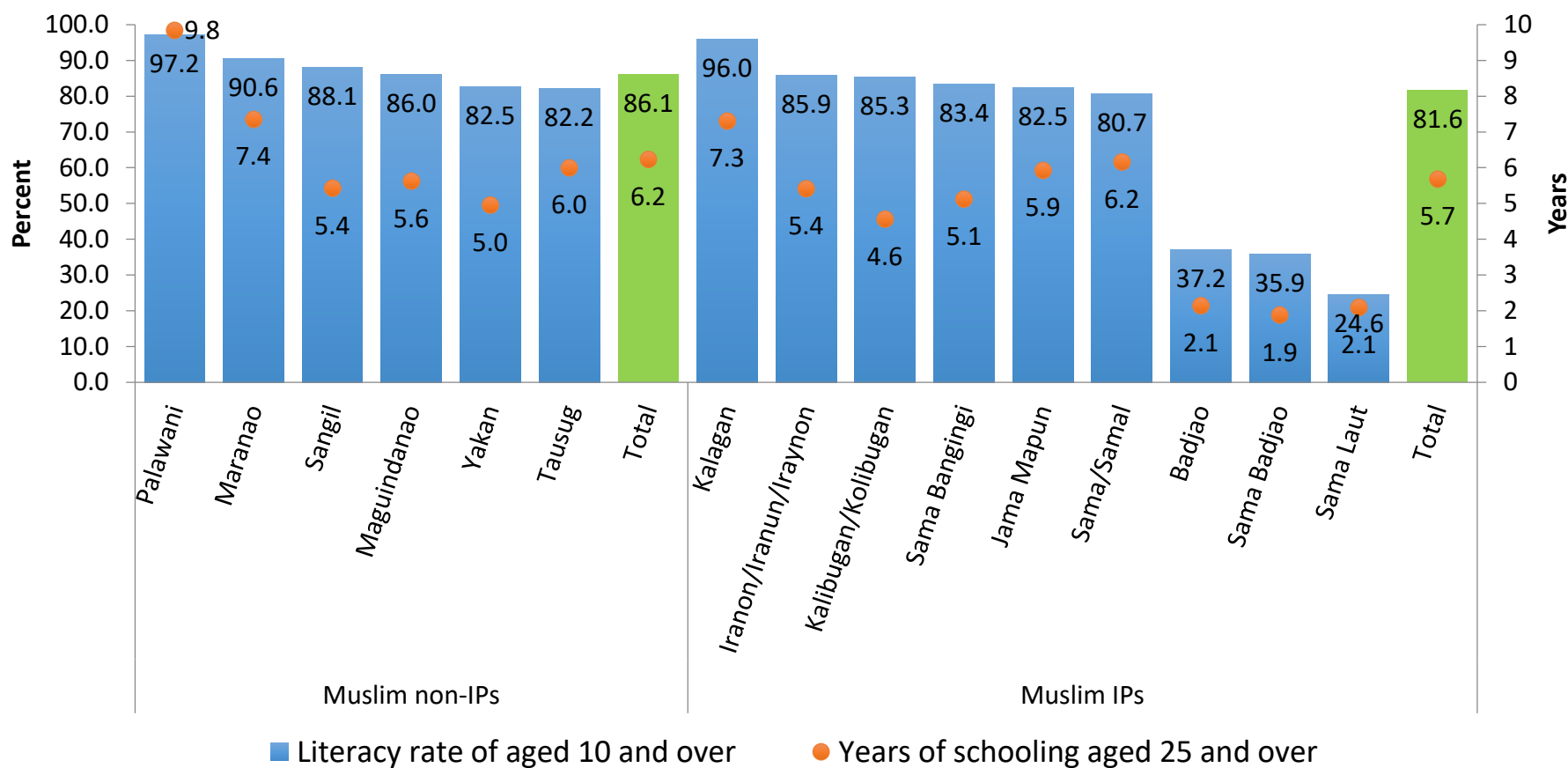
Within-group component had largely contributed to total inequality (Philippines)

Inequality component	Years of schooling		Literacy	
	2000	2010	2000	2010
Theil's index				
Within-group	0.1346	0.1101 ↓	0.0731	0.0240 ↓
Between-group	0.0036	0.0039 ↑	0.0014	0.0006 ↓
Total	0.1382	0.114	0.0745	0.0245
Gini coefficient				
Within-group	0.210	0.183 ↓	0.045	0.010 ↓
Between-group	0.025	0.027 ↑	0.016	0.011 ↓
Overlap	0.039	0.035	0.011	0.003
Total	0.275	0.244	0.072	0.024

Muslim ethnic group had the highest inequality (Philippines)

Year/Ethnic group	Gini Coefficient				Theil's Index			
	Years of schooling		Literacy		Years of schooling		Literacy	
	2000	2010	2000	2010	2000	2010	2000	2010
Muslim	0.4791	0.431	0.262	0.147	0.451	0.362	0.304	0.159
Non-Muslim IPs	0.3559	0.337	0.151	0.072	0.238	0.212	0.164	0.075
Non-Muslim, non-IPs	0.2584	0.226	0.056	0.013	0.119	0.095	0.057	0.013

IP groups like Sama Laut, Sama Badjao and Badjao had low educational outcomes; non-IP groups like Palawani and Maranao had high educational outcomes (Philippines)



There had been equitable distribution of primary education services; a need for a more equitable distribution of secondary education services (Philippines)

Indicator / Major ethnic group	Human opportunity index (HOI)
Primary education (aged 6-11)	
All groups	88.97
Muslim ethnic group	73.46
Non-Muslim IP ethnic group	82.12
Non-Muslim, non-IP ethnic group	91.68
Secondary education (aged 12-18)	
All groups	72.16
Muslim ethnic group	60.56
Non-Muslim IP ethnic group	65.40
Non-Muslim, non-IP ethnic group	73.99

Key findings in Mindanao

Majority of Filipinos in Mindanao are Muslim 22% and Non-Muslim, non-IPs 63%

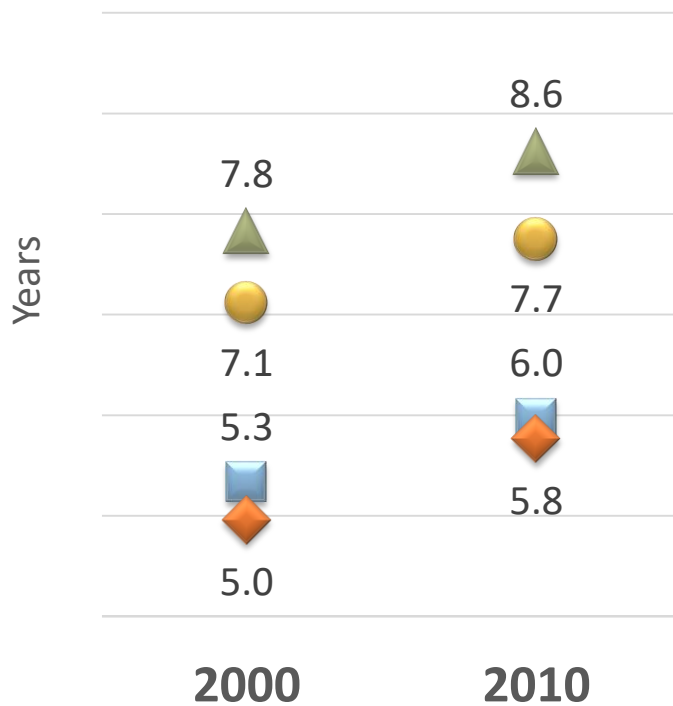
Mindanao population by major ethnic group, 2000 and 2010

Ethnic Group	2000		2010	
	Number	Percent (%)	Number	Percent (%)
Mindanao	16,111,584	100.0	21,455,482	100.0
Muslim	2,905,761	18.04	4,716,222	21.98
Non-Muslim IPs	1,918,522	11.91	3,201,321	14.92
Non-Muslim, non-IPs	11,287,301	70.06	13,537,939	63.10

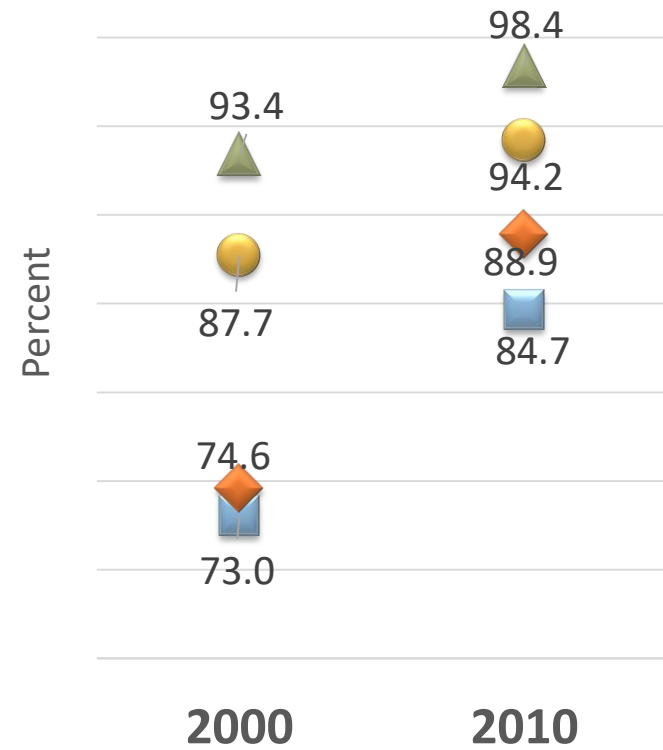
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Years of schooling and literacy rate of Filipinos had generally improved in Mindanao

Average years of schooling of population aged 25 and over



Literacy rate of population aged 10 and over



■ Muslim ◆ Non-muslim IPs ▲ Non-muslim/Non-IPs ● All groups

Total inequality for years of schooling and literacy went down from 2000 to 2010 in Mindanao

Inequality component	Years of schooling		Literacy	
	2000	2010	2000	2010
Theil's index				
Within-group	0.189	0.167	0.125	0.058
Between-group	0.015	0.014	0.005	0.002
Total	0.204	0.181 ↓	0.131	0.060 ↓
Gini coefficient				
Within-group	0.174	0.146	0.045	0.015
Between-group	0.074	0.076	0.046	0.030
Overlap	0.081	0.085	0.031	0.012
Total	0.329	0.307 ↓	0.123	0.057 ↓

Within-group component had largely contributed to total inequality in Mindanao

Inequality component	Years of schooling		Literacy	
	2000	2010	2000	2010
Theil's index				
Within-group	0.1892	0.1667 ↓	0.1253	0.0576 ↓
Between-group	0.0146	0.0142 ↓	0.0054	0.0020 ↓
Total	0.2037	0.1808	0.1306	0.0595
Gini coefficient				
Within-group	0.174	0.146 ↓	0.045	0.015 ↓
Between-group	0.074	0.076 ↑	0.046	0.030 ↓
Overlap	0.081	0.085	0.031	0.012
Total	0.329	0.307	0.123	0.057

Concluding Remarks

- ❑ Disparities in terms of years of schooling and literacy appear to be narrowing between 2000 and 2010, as shown by various inequality measures.
- ❑ The non-Muslim, non-IPs are generally better-off in terms of years of schooling and literacy.
- ❑ Higher within-group inequalities exist. Inequality is highest within the Muslim group.
- ❑ Filipinos had higher access to and more equitable distribution of primary education services, while lower and less equal access in terms of secondary education services.
- ❑ The Philippine government has been exerting efforts to improve access of IP groups to education (e.g., IP Education of the Department of Education; IP component of the Modified Conditional Cash Transfer, or CCT, program of the Department of Social Welfare and Development).



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