

Republic of the Philippines Philippine Statistics Authority

Cordillara Administrativa Ragion

## **SPECIAL RELEASE**

# 2021 Family Income Inequalities in CAR based on the Gini coefficient measure

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Data on income come from the Family Income and Expenditure Survey (FIES) of the Philippine Statistics Authority conducted every three years. It is a main source of data on family income and expenditure, which include among others, levels of consumption by item of expenditure as well as sources of income in cash and in kind. The results of FIES provide information on the levels of living and disparities in income of Filipino families, as well as their spending patterns.

The Gini coefficient is used to measure the income inequalities among families. It ranges from 0 to 1, with 0 indicating perfect income equality among families, while 1 indicates absolute income inequality. A higher Gini index indicates greater inequality, with high-income individuals receiving much larger percentages of the population's total income. In the same way, an increase in the Gini coefficient indicates higher income disparity among families.

## CAR is among 17 regions with high-income inequality

- The national income disparity as measured by the Gini coefficient was 0.4119 in 2021. This value was lower compared to the 0.4267 Gini coefficient in 2018.
- Among the 17 regions in the country, nine of them including the Cordillera Administrative Region (CAR) registered a higher income inequality of 0.4191 compared to the national figure of 0.4119.
- Other regions with higher income inequality were Region VIII (0.4531), CARAGA (0.4474), Region VII (0.4344), Region VI (0.4283), Region II (0.4201), Region IV-B or MIMAROPA (0.4193), Region XII (0.4181), and Region X (0.4128).
- Region 8 Eastern Visayas recorded the highest Gini concentration ratio in 2021 with 0.4531, while the Bangsamoro Autonomous Region of Muslim Mindanao (BARMM) had the lowest Gini coefficient ratio of 0.2764.







Figure 1. Gini Concentration Ratio by Region: 2018 and 2021<sup>P</sup>

Source: Philippine Statistics Authority, 2018 and 2021 Family Income and Expenditure Survey <sup>P</sup> - Estimates are preliminary and may change

## Kalinga records higher income disparity value among CAR provinces

- In 2021, CAR recorded a Gini coefficient of 0.4191. Only the province of Kalinga recorded a higher income disparity value than the regional figure with a Gini coefficient of 0.4386.
- The provincial income disparity figure has generally decreased in CAR with six out of seven provinces and HUCs in Cordillera incurring a decreased Gini coefficient from 2018 to 2021.
- Baguio City, with a Gini coefficient of 0.3788 in 2021 registered the lowest level of income inequality in the region.



## Figure 2. Gini Concentration Ratio of CAR: 2018 and 2021<sup>P</sup>

Source: Philippine Statistics Authority, 2018 and 2021 Family Income and Expenditure Survey

P - Estimates are preliminary and may change

#### Abra is least in income inequality in 2018

• The province of Abra recorded 0.3949 Gini coefficient in 2018, the best in terms of income equality in the region. In 2021 however, the province had an increase in its Gini coefficient with 0.4037. Still, this was 0.0154 less than the regional figure.



## Figure 3. Gini Concentration Ratio of CAR Compared to Abra: 2018 and 2021<sup>P</sup>

Source: Philippine Statistics Authority, 2018 and 2021 Family Income and Expenditure Survey <sup>P</sup> - Estimates are preliminary and may change

#### Benguet has lower income disparity in CAR

- Benguet, with the exclusion of Baguio City registered an income disparity level of 0.4264 in 2018, while the 2021 Gini coefficient drops by 0.0260 with 0.4004.
- The provincial income disparity is generally lower than the provincial figure in both 2018 and 2021.



Figure 4. Gini Concentration Ratio of CAR Compared to Benguet: 2018 and 2021<sup>P</sup>

Source: Philippine Statistics Authority, 2018 and 2021 Family Income and Expenditure Survey <sup>P</sup> - Estimates are preliminary and may change

## Baguio City has highest income equality in CAR

• Among the seven provinces and HUCs in CAR, Baguio City recorded the highest income equality in the region with 0.3788 Gini coefficient in 2021, while being the second highest in 2018 with 0.3998 only behind Abra.



## Figure 5. Gini Concentration Ratio of CAR Compared to Baguio City: 2018 and 2021<sup>P</sup>

Source: Philippine Statistics Authority, 2018 and 2021 Family Income and Expenditure Survey <sup>P</sup> - Estimates are preliminary and may change

#### Apayao is second best province in income equality in CAR

- The province of Apayao had the second best income equality level in 2021, only behind Baguio City with 0.3813 Gini coefficient.
- Out of the 6 provinces and one HUC in CAR, Apayao had the highest improvement in terms of income disparity with a 0.0378 Gini concentration ratio from 2018 to 2021.



#### Figure 6. Gini Concentration Ratio of CAR Compared to Apayao: 2018 and 2021<sup>P</sup>

Source: Philippine Statistics Authority, 2018 and 2021 Family Income and Expenditure Survey

<sup>&</sup>lt;sup>P</sup> - Estimates are preliminary and may change

#### Ifugao records decrease in income disparity

• Ifugao recorded a Gini coefficient of 0.4205 and 0.4086 in 2018 and 2021, respectively, registering a 0.0119 decrease in Gini coefficient within the two survey periods.



## Figure 7. Gini Concentration Ratio of CAR Compared to Ifugao: 2018 and 2021<sup>P</sup>

Source: Philippine Statistics Authority, 2018 and 2021 Family Income and Expenditure Survey <sup>P</sup> - Estimates are preliminary and may change

## Kalinga records higher income inequality among CAR provinces

• Kalinga was the only province in CAR to record a higher Gini coefficient in both 2018 and 2021 survey periods with 0.4462 and 0.4386 respectively. The province was the highest in the region in terms of income inequality as it is the lone province to have a higher Gini coefficient than the regional figure in 2021.



#### Figure 8. Gini Concentration Ratio of CAR Compared to Kalinga: 2018 and 2021<sup>P</sup>

Source: Philippine Statistics Authority, 2018 and 2021 Family Income and Expenditure Survey <sup>P</sup> - Estimates are preliminary and may change

#### Mountain Province has highest income inequality in 2018

• In 2018, Mountain Province had the highest income inequality out of all the provinces and HUC in CAR with a Gini coefficient of 0.4503, even higher than the regional figure. The income inequality eased to 0.4180 in 2021 recording a 0.0323 decrease from the previous survey year.



#### Figure 9. Gini Concentration Ratio of CAR Compared to Mountain Province: 2018 and 2021<sup>P</sup>

Source: Philippine Statistics Authority, 2018 and 2021 Family Income and Expenditure Survey  $^{\rm P}$  - Estimates are preliminary and may change

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#### **Technical Notes**

**Family** – is a group of persons usually living together and composed of the head and other persons related to the head by blood, marriage or adoption. It includes both the nuclear and extended family.

**Family income** – is the primary income and receipts from other sources received by all family members during the reference period, as participants in any economic activity or as recipients of transfers, pensions, grants, interests, food and non-food items received as gifts by the family.

#### Primary income includes:

- Salaries and wages from employment Commissions, tips, bonuses, family and clothing allowance, transportation and representation allowance and honoraria
- Other forms of compensation and net receipts derived from the operation of family-operated enterprises/activities and the practice of a profession or trade Income from other sources includes: Imputed rental values of owner-occupied dwelling units; Interests Rentals including landowner's share of agricultural products; Pensions, royalties, and dividends from investments; Gifts, support in any form (physical, material and financial) and the value of food and non-food items received as gifts by the family (as well as the imputed value of services rendered free of charge to the family); Cash received out of salaries/wages and other sources of income of a family member who is a contract worker abroad and also cash receipts sent by a family member/relative of the household with a status of residency abroad other than that of a contract worker; Receipts from family sustenance activities, which are not considered as family operated enterprise.

**Gini coefficient** – is a measure of the extent to which the distribution of income/ expenditure among families/individuals deviates from a perfectly equal distribution, with limits 0 for perfect equality and 1 for perfect inequality.

**Gini Concentration ratio** – the ratio of the area between the Lorenz curve and the diagonal (the line of perfect equality) to the area below the diagonal