1. Calculate a measure of total consumption and per capita consumption for each household in the 2002 round. To calculate per capita consumption, note you will have to calculate the number of individuals in each household.

|  |
| --- |
| folio family\_members total\_cons cons\_percapita |
| 0 1000.0 4 3583.969971 895.992493 |
| 1 2000.0 5 8431.530273 1686.306055 |
| 2 3000.0 8 11064.570312 1383.071289 |
| 3 4000.0 5 6576.770020 1315.354004 |
| 4 6000.0 9 3576.100098 397.344455 |
| ... ... ... ... |
| 8047 10756000.0 5 1326.099976 265.219995 |
| 8048 10757000.0 2 745.099976 372.549988 |
| 8049 10758000.0 3 1995.270020 665.090007 |
| 8050 10759000.0 2 1048.729980 524.364990 |
| 8051 9408000.0 3 216.669998 72.223333 |

2. Calculate the set of poverty rates nationwide for the head count and average poverty gap, average poverty gap squared. Assume the poverty line=500 pesos per person. Provide poverty rates based on household consumption per capita.

The household poverty rate is 42.77%

The individual poverty rate is 50.23%

The average poverty gap is 22.68%

The average poverty gap squared is 13.38%

图表, 条形图

描述已自动生成

3. Repeat 2) by area of residence. How does the poverty rate change by rural/urban residence? What can you say about the severity of poverty in rural versus urban areas?

The city household poverty rate is 31.09%

The city individual poverty rate is 37.43%

The rural household poverty rate is 59.62%

The rural individual poverty rate is 67.26%

The average poverty gap in city is 14.45%

The average poverty gap squared in city is 7.70%

The average poverty gap in rural area is 33.64%

The average poverty gap squared in rural area is 20.94%图表, 条形图

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4. Discuss your findings on poverty in Mexico

The severity of poverty in rural and urban areas are different. The poverty rate in urban area is much lower than average poverty rate, while the poverty rate in rural area largely exceeds the average line with the proportion of over 50&, both in household and individual level. Overall, the individual poverty rates are generally higher than household poverty rate, regardless the residents’ living regions. When looking at the average poverty gap and average poverty gap squared, the figure of rural area is over twice bigger than urban area, which indicates that the severity of poverty in rural area is much greater than that in urban area. However, regardless the living regions, the average poverty gap squared is always smaller than average poverty gap, it remains uncertain which data is closer to the real poverty situation in Mexico.