## SDG 7.1.1: Percentage of population with access to electricity

## Analyze data online

Using the online data analysis system, you can collect frequencies and cross-tabulations and perform comparison of means, correlation matrices and multivariate regression analysis without downloading the data to your computer. You can analyze single samples, multiple samples from the same country, or an entire region. Unlike the data extract system, the online data analysis system does not allow you to create customized datasets.

To access the online analysis system, go to international.ipums.org. On the left side of the home page, click on the Analyze Data Online link. Find the Mexico 2010 dataset under the Single-Sample Datasets. When you click on the link for this dataset, you will be prompted to enter your IPUMS username and password.

## Data Exercise 1: Basic frequencies using the online data analysis system

To start, let's look at the gender distribution in the Mexico 2010 sample. On the left side of the SDA page, click on the plus sign next to the Person - Demographic category. Click on sex. The sex variable appears in the Selected box at the top of the page. Click Copy to: Row. In the Table Options box, untick "Weighted" and tick "Unweighted". Click Run the Table.

1a. How many females are in the Mexico 2010 sample? $\qquad$
1b. How many total cases are in the Mexico 2010 sample? $\qquad$
1c. What is the gender distribution in the Mexico 2010 sample?
Male: $\qquad$
Female: $\qquad$
Now let's look at these figures for Vietnam 2009. From the SDA page, use the back button to return to the sample selection page. Find the Vietnam 2009 sample.

1d. How many females are in the Vietnam 2009 sample? $\qquad$
1e. How many total cases are in the Vietnam 2009 sample? $\qquad$
1f. What is the gender distribution in the Vietnam 2009 sample?
Male: $\qquad$
Female: $\qquad$

## Data Exercise 2: Access to electricity

On the left side of the SDA page, click on the plus sign next to the Household - Utilities category. Click on electric. The electricity variable appears in the Selected box at the top of the page. Click Copy to: Row. Click Run the Table (we want weighted output this time!).

2a. What percent of the population had access to electricity in Mexico 2010? $\qquad$

Return to the SDA page. Let's look only at valid cases (excluding the NIU and Unknown categories). With electric in the Row box, add the following to the Selection Filter(s) box: electric(1-2). Click Run the Table.

2b. What percent of the population had access to electricity in Mexico 2010 when we exclude unknown and NIU? $\qquad$

Do the same for Vietnam 2009. From the SDA page, use the back button to return to the sample selection page. Find the Vietnam 2009 sample.

2c. What percent of the population had access to electricity in Vietnam 2009? $\qquad$

2d. What percent of the population had access to electricity in Vietnam 2009 when we exclude unknown and NIU? $\qquad$

## Data Exercise 3: Access to electricity by urban/rural status

On the left side of the SDA page, click on the plus sign next to the Household - Utilities category. Click on electric. The electricity variable appears in the Selected box at the top of the page. Click Copy to: Row. Return to left side of the SDA page and click on the plus sign next to Household - Geography: Global. Click on urban. The urban variable appears in the Selected box at the top of the page. Click Copy to: Col. Click Run the Table. Add the following to the Selection Filter(s) box to select valid cases: electric (1-2) urban (1-2). Click Run the Table.

3a. What percent of the urban population had access to electricity in Mexico 2010? $\qquad$

3b. What percent of the rural population had access to electricity in Mexico 2010? $\qquad$

Do the same for Vietnam 2009. From the SDA page, use the back button to return to the sample selection page. Find the Vietnam 2009 sample.

3c. What percent of the urban population had access to electricity in Vietnam 2009? $\qquad$
3d. What percent of the rural population had access to electricity in Vietnam 2009? $\qquad$

## Data Exercise Answers

1a How many females are in the Mexico 2010 sample? 6,118,843
1b How many individuals are in the Mexico 2010 sample? 11,938,402
1c What is the gender distribution of the Mexico 2010 sample?
48.7 \% Male
51.3\% Female

1d How many females are in the Vietnam 2009 sample? 7,213,415
1e How many individuals are in the Vietnam 2009 sample? 14,177,590
$1 f$ What is the gender distribution of the Vietnam 2009 sample?
49.5\% Male
50.5\% Female

2a What percent of the population had access to electricity in Mexico 2010? 97.5
2b What percent of the population had access to electricity in Mexico 2010 excluding unknown and NIU? 98.1
2c What percent of the population had access to electricity in Vietnam 2009? 96.7
2d What percent of the population had access to electricity in Vietnam 2009 excluding unknown \& NIU? 96.8

3a What percent of the urban population had access to electricity in Mexico 2010? 99.4
3b What percent of the rural population had access to electricity in Mexico 2010? 93.8
3c What percent of the urban population had access to electricity in Vietnam 2009? 99.7
3d What percent of the rural population had access to electricity in Vietnam 2009? 95.6

