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| LMS World ExpoExploración de un paísFood Security | Nombre \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Clase/hora \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Fecha \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Goal:** Create an infographic regarding the Food Security of your country.

Instructions: Read and follow the instructions below to complete the information regarding your country.

**Definition**

Food Security is exists when all people, at all times, have *availability* (physical and sufficient) and *affordability* (economic) to *quality*, (safe and nutritious) food to meet their dietary needs and food preferences for an active and healthy life.

**Issues you will explore**

You will be using the following terms to explore the issues of food security of your country. Affordability - The ability of people to purchase food (comparing price with income)

Availability – How easy it is to produce and access food (agriculture, transportation, markets)

Quality and Safety – How nutritious is the average diet and how safe it the food.

**Web Quest**

**NOTE: Puerto Rico is part of the US, so use the data from the United States to complete this worksheet.**

**For Cuba, see separate worksheet.**

Go to *foodsecurityindex.eiu.com* and do the following:

**GLOBAL SCORES**

1. Click on **Key Findings** and then **Country Rankings** and find out:

 🡪What is your country’s global ranking? \_\_\_\_\_\_\_\_\_\_\_\_\_

 🡪What is your country’s overall score for Affordability? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 🡪What is your country’s overall score for Availability? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 🡪What is your country’s overall score for Quality and Safety? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Click on **Year-on-Year Trends** and find out:

 🡪Has your country’s food security increased or decreased in the past four years?

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. By what percent? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. Click on **Explore Countries** and find and click on your country in the alphabetical list.

 🡪What are the top two strengths for your country in Food Security?

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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 🡪What are two of the challenges for your country in Food Security?

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**SPECIFIC DATA**

1. Click on **Affordability** and then on **food consumption as a share of household income**. Look at the bar graph on the bottom of the white box to the right of the arrow. Look at the number to the right of the bar representing your country. This number is the percentage of income an average household must spend on food.

 🡪What percentage does a household spend on food in your country? \_\_\_\_\_\_\_\_\_\_\_\_\_

 🡪What is the world average a household spends on food? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Click on **Availability** and then click on **Average food supply**.

 🡪How many Kcal/capita/day is available for human consumption? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 🡪What is the world average for Kcal/capita/day is available for human consumption? \_\_\_\_\_

1. Click on **Quality and Safety** and then click on **diet diversification**. Look at the bar graph on the bottom of the white box to the right of the arrow. Look at the number to the right of the bar representing your country. This number is the percentage of diversity of food (fruits, vegetables, starches, protein) available to people.

 🡪 What is the percentage of diversity in food available to your country? \_\_\_\_\_\_\_\_

 🡪 What is the world average of diversity in food availability? \_\_\_\_\_\_\_\_

1. Click on **Quality and Safety** and then click on **percentage of population with access to potable water**. Look at the bar graph on the bottom of the white box to the right of the arrow. Look at the number to the right of the bar representing your country. This number is the percentage of people who have access to potable water.

 🡪What percentage of the population has access to potable water in your country? \_\_\_\_\_\_\_\_

 🡪What world average of access to potable water in your country? \_\_\_\_\_\_\_\_

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| --- | --- |
| LMS World ExpoExploración de un paísFood Security | Nombre \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Clase/hora \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Fecha \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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**Definition**

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**Issues you will explore**

You will be using the following terms to explore the issues of food security of your country.

Affordability - The ability of people to purchase food (comparing price with income)

Availability – How easy it is to produce and access food (agriculture, transportation, markets)

Quality and Safety – How nutritious is the average diet and how safe it the food.

**NOTE:** Information about Cuba is difficult to find as it is a communist country and much of the data for the country is unavailable. We will have to modify your exploration in comparison to other countries.

**GLOBAL SCORES**

You will only be able to get the global ranking for Cuba by getting an average. Do the following:

1. Go to: <http://www.fao.org/hunger/en/#jfmulticontent_c130584-2> and look at the map and write the percentage Cuba falls into for ‘undernourished’ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Write the names of three other countries that fall into the same percentage category as Cuba: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. Now go to *foodsecurityindex.eiu.com* and click on **Key Findings** and then **Country Rankings** and find the rankings for the three countries you wrote in number one.

|  |  |
| --- | --- |
| Country | Ranking |
|  |  |
|  |  |
|  |  |

1. Add the rankings of the three countries and divide by 3 to find the average ranking. This will be your ranking for Cuba. Write it here: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

You will not be able to get overall scores for Availability, Affordability nor Quality BUT, in general, Cuba has high scores because the government controls the food growth, distribution and cost of food. So for Availability, Affordability and Quality, Cuba would score high at approximately 20.

To answer the following questions, you will have to do the rest of the worksheet and come back to these and *based on the information you discover*, write what you think these answers should be.

1. Has your country’s food security increased or decreased in the past four years?

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. By what percent? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. What are the top two strengths for your country in Food Security?

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. What are two of the challenges for your country in Food Security?

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**SPECIFIC DATA**

You first are going to find out general information about the world using the data for the United States as a base.

1. Go to Click on **Affordability** and then on **food consumption as a share of household income**. Look at the bar graph on the bottom of the white box to the right of the arrow. Look at the number to the right of the bar representing your country and look below it for the world average. This number is the percentage of income an average household must spend on food.

 🡪What is the world average a household spends on food? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Now click on **Quality and Safety** and then click on **percentage of population with access to potable water**. Look at the bar graph on the bottom of the white box to the right of the arrow. Look at the number to the right of the bar representing your country and look below it for the world average. This number is the percentage of people who have access to potable water.

 🡪What world average of access to potable water in your country? \_\_\_\_\_\_\_\_

1. Now click on **Quality and Safety** and then click on **diet diversification**. Look at the bar graph on the bottom of the white box to the right of the arrow. Look at the number to the right of the bar representing your country. This number is the percentage of diversity of food (fruits, vegetables, starches, protein) available to people. Look at the number to the right of the bar representing your country and look below it for the world average. This number is the percentage diversity in food.

 🡪 What is the world average of diversity in food availability? \_\_\_\_\_\_\_\_

**Affordability**

Because Cuba rations their food the average household cost in Cuba is vastly different from the rest of the world.

GO to: <https://en.wikipedia.org/wiki/Rationing_in_Cuba> and read the introduction and the Overview and answer: What system does the government guarantee food for all of its citizens? How does it work?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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In the same article, scroll down and look at the chart of rations and answer: What kinds, amounts and cost of food each citizen gets per month? Look below the chart on the website and read about meat. How much meat is available to the average person. Add this to your chart

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| --- | --- | --- |
| Food | Amount | Cost |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  | Total Cost --------------🡪 |  |
| meat |  |  |

Add up what it would cost a month to buy the food rations and answer: What is the total monthly cost for food per person in Cuba? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Availability**

Go to: <https://en.wikipedia.org/wiki/List_of_countries_by_food_energy_intake> and find out the average Kcal intake for a person in Cuba. Write it here: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Go to: <http://chartsbin.com/view/1150> and find Cuba in the chart. Has Cuba’s calorie intake increased of decreased over the years? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Security**

1. Look at the chart you created above for food rationing. Knowing that the average Cuban has easy access to fruits and vegetables in the open market at low prices (these products are not rationed) and looking at the quantity available to each person per month of rationed items: Does an average person get a diverse diet (a variety of fruits, vegetables), starches (rice, potatoes, bread/grain) and proteins (beans, nuts and meat) on a *daily basis*? What do they get enough of? To little of?

|  |  |
| --- | --- |
| Sufficient | Lacking |
|  |  |
|  |  |
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|  |  |
|  |  |

1. Go to: <https://en.wikipedia.org/wiki/Water_supply_and_sanitation_in_Cuba> and read the introduction and the paragraph labeled ‘Access’ and answer this question:
* What percentage of Cuban citizens have access to potable water? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Now go back to the beginning of this worksheet and answer the questions at the bottom of the first page.

**Food Security Infographic**

To create your Infographic

Go to lmspanish.weebly.com/Spanish 1B/World Expo 2017/Food Security Infographic to find the template for your Infographic.

For Cuba, Puerto Rico and Equatorial Guinea see special directions at the bottom of each section.

http://eguinea.opendataforafrica.org/infographics/pcoibxb/global-food-security-index

To make a pie chart

<http://www.rapidtables.com/tools/pie-chart.htm>

Open up ‘rapidtables’ and fill in the boxes as follows. NOTE: when entering words or numbers in the parameter boxes you must put a space between each word or number; therefore each thing you enter can only be one word.

You will be making three graphs: one for ‘Availability’, one for ‘Accessibility’, and one for ‘Quality and Safety’

**Title:** write “Availability (Overall score vs Need for improvement)”

 “Accessibility (Overall score vs Need for improvement)”

 or “Quality and Safety (Overall score vs Need for improvement)”

**Enter data names**: Overall Improvement

**Enter data values**: Enter the score for the category (Availability, Accessibility or Quality and Safety) – add a space – type the answer to “100 minus the score”. Example: If the Availability score is 83, subtract 83 from 100 (100 - 83 = 17). Then write “83 17”

**Select Slice Index**: percentage

Click on the icon for ‘pie chart’ (the icon on the far left)

Your pie chart should look similar to this:



Click on the ‘make a copy’ icon (the fifth icon from the left) and save the copy as a picture to your documents or picture files on your computer. You will then cut and paste them into your infographic.

 Make a pie chart for each ‘Availability’, ‘Accessibility’ and ‘Quality and Safety’.