



GLOBAL CHALLENGE

THE MISSOURI YOUTH INSTITUTE
MARCH 1-2, 2021

Registration due: FEBRUARY 15, 2021

www.worldfoodprize.org/MISSOURI



hunger fighters®

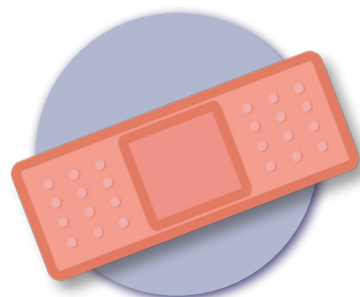
knowledge · innovation · action

We want YOU to solve the world's greatest challenge:

END HUNGER AND POVERTY

No, really. We need to find sustainable solutions to feed our growing population.

IT'S COMPLICATED, BUT WE'RE MAKING PROGRESS. WE CAN END HUNGER AND POVERTY BY FOCUSING ON:



IMPROVING HUMAN HEALTH



INCREASING ACCESS TO EDUCATION AND OPPORTUNITY



PROMOTING ECONOMIC GROWTH



PROTECTING THE ENVIRONMENT

There have already been significant improvements but we still have a long way to go. There is no shortage of solutions. Explore what's working and what isn't, and use your unique perspective, talents and ideas to help solve the world's greatest challenge.



CALLING ALL STUDENTS

We're looking for high school students who:

- Care passionately about the world and want to make it a more just and equitable place for all
- Believe everyone should have access to nutritious food, clean water, education, and a fair income
- Are problem solvers who want to be part of the solution

WHY DOES THIS MATTER?

1 IN 9 PEOPLE DON'T HAVE ENOUGH SAFE AND NUTRITIOUS FOOD



TODAY:



A CHILD DIES FROM HUNGER-RELATED CAUSES EVERY 10 SECONDS



1/3 OF ALL FOOD ON THE PLANET IS WASTED



1 OUT OF 3 SCHOOLS DO NOT HAVE SAFE WATER AND SANITATION

TOMORROW:

- By 2050, there will be at least 9 billion people on the planet
- In the next 40 years, humans will need to produce more food than they have in the previous 10,000 years combined



WHAT IS FOOD SECURITY?

There are three essential components:

QUALITY

Safe, healthy and nutritious food

QUANTITY

Enough food to lead a healthy and active lifestyle

AVAILABILITY

Finances to purchase food near where you live

WHAT IS THE MISSOURI YOUTH INSTITUTE?

The Missouri Youth Institute is a life-changing experience at University of Missouri where high school students engage with local leaders and experts on critical global food security challenges, participate in hands-on science activities, and explore exciting ways to make a difference in Missouri and around the world.

Students research issues they care about, and propose their ideas to solve these grand challenges.

WHY PARTICIPATE?

- Become recognized as a Borlaug Scholar
- Qualify for the Global Youth Institute, paid USDA fellowships, and International Internships

HOW DO I PARTICIPATE?

- Research a global challenge and write a paper about the problem and your proposed solution
- There is no cost, fee or membership required for the program! Your paper is your ticket to attend
- Register and submit your paper by February 15, 2021.
- Participate in the Missouri Youth Institute hosted by the University of Missouri and the World Food Prize Foundation on March 1-2, 2021.

QUESTIONS?

Dr. Kristin Bilyeu
Missouri State Coordinator
(573) 884-2234
Kristin.Bilyeu@usda.gov



WE ARE THE WORLD FOOD PRIZE

Founded by Dr. Norman Borlaug, a Nobel Peace Prize winner who saved over a billion people from famine and starvation. The World Food Prize celebrates individuals who significantly improve global food security.

Like Dr. Borlaug they are game changers who come from a variety of backgrounds; scientists, policy makers, innovators and entrepreneurs. We want to connect you with these incredible leaders and inspire you to make a difference as well.

Ready to change the world?

7 SIMPLE STEPS TO WRITE YOUR PAPER.

1 CHOOSE A COUNTRY

2 RESEARCH A TYPICAL FAMILY

3 SELECT A TOPIC

4 ANALYZE ITS IMPACT ON FOOD SECURITY

5 EXPLORE & PROPOSE SOLUTIONS

6 WRITE YOUR PAPER

7 REGISTER FOR THE YOUTH INSTITUTE!



choose a COUNTRY

Select a country, territory or independent economy to focus your research on

Please note: Choose a country other than the one you live in!

Caribbean

- Anguilla (U.K.)
- Antigua and Barbuda
- Aruba (Netherlands)
- Bahamas
- Barbados
- Bermuda (U.K.)
- Cayman Islands (U.K.)
- Cuba
- Curaçao (Netherlands)
- Dominica
- Dominican Republic
- Grenada
- Guadeloupe (France)
- Haiti
- Jamaica
- Martinique (France)
- Montserrat (U.K.)
- Puerto Rico (U.S.)
- Saint-Barthélemy (France)
- Saint Kitts and Nevis
- Saint Lucia
- Saint Martin (France)
- Saint Vincent and the Grenadines
- Sint Maarten (Netherlands)
- Trinidad and Tobago
- Turks and Caicos Islands (U.K.)
- Virgin Islands (U.K., U.S.)

North America

- Canada
- Mexico
- United States of America

Central America

- Belize
- Costa Rica
- El Salvador
- Guatemala
- Honduras
- Nicaragua
- Panama

South America

- Argentina
- Bolivia
- Brazil
- Chile
- Colombia
- Ecuador
- Falkland Islands (U.K.)
- French Guiana
- Guyana
- Paraguay
- Peru
- Suriname
- Uruguay
- Venezuela

Western Europe

- Austria
- Belgium
- France
- Germany
- Liechtenstein
- Luxembourg
- Monaco
- Netherlands
- Saint Pierre and Miquelon (France)
- Switzerland
- United Kingdom

Northern Africa

- Algeria
- Egypt
- Libya
- Morocco, including Western Sahara
- Sudan
- Tunisia

Western Africa

- Benin
- Burkina Faso
- Cabo Verde
- Cote d'Ivoire
- Ghana
- Guinea
- Guinea-Bissau
- Liberia
- Mali
- Mauritania
- Niger
- Nigeria
- Saint Helena (U.K.)
- Senegal
- Sierra Leone
- The Gambia
- Togo

Middle Africa

- Angola
- Cameroon
- Central African Republic
- Chad
- Democratic Republic of the Congo
- Equatorial Guinea
- Gabon
- Republic of the Congo
- São Tomé and Príncipe

Southern Europe

- Albania
- Andorra
- Bosnia and Herzegovina
- Croatia
- Gibraltar (U.K.)
- Greece
- Kosovo
- Malta
- Montenegro
- North Macedonia
- Portugal
- San Marino
- Serbia
- Slovenia
- Spain
- Vatican City

Northern Europe

- Denmark
- Estonia
- Faroe Islands (Denmark)
- Finland
- Greenland (Denmark)
- Iceland
- Ireland
- Latvia
- Lithuania
- Norway
- Sweden

Eastern Europe

- Belarus
- Bulgaria
- Czechia
- Hungary
- Moldova
- Poland
- Romania
- Russia
- Slovakia
- Ukraine

Eastern Asia

- China
- Hong Kong S.A.R. (China)
- Japan
- Macau S.A.R. (China)
- Mongolia
- North Korea
- South Korea
- Taiwan (China)

Southeastern Asia

- Brunei
- Cambodia
- Indonesia
- Laos
- Malaysia
- Myanmar/Burma
- Philippines
- Singapore
- Thailand
- Timor-Leste
- Vietnam

Oceania

- American Samoa (U.S.)
- Australia
- Cook Islands (New Zealand)
- Fiji
- French Polynesia (France)
- Guam (U.S.)
- Kiribati
- Marshall Islands
- Micronesia
- Nauru
- New Caledonia (France)
- New Zealand
- Niue (New Zealand)
- Northern Mariana Islands (U.S.)
- Palau
- Papua New Guinea
- Pitcairn Islands (U.K.)
- Samoa
- Solomon Islands
- Tokelau (New Zealand)
- Tonga
- Tuvalu
- Vanuatu
- Wallis and Futuna (France)

Western Asia

- Armenia
- Azerbaijan
- Bahrain
- Cyprus
- Georgia
- Iraq
- Israel, West Bank, and Gaza
- Jordan
- Kuwait
- Lebanon
- Oman
- Qatar
- Saudi Arabia
- Syria
- Turkey
- United Arab Emirates
- Yemen

Eastern Africa

- Burundi
- Comoros
- Djibouti
- Eritrea
- Ethiopia
- Kenya
- Madagascar
- Malawi
- Mauritius
- Mayotte (France)
- Mozambique
- Réunion (France)
- Rwanda
- Seychelles
- Somalia
- South Sudan
- Tanzania
- Uganda
- Zambia
- Zimbabwe

Central Asia

- Kazakhstan
- Kyrgyzstan
- Tajikistan
- Turkmenistan
- Uzbekistan

Southern Asia

- Afghanistan
- Bangladesh
- Bhutan
- India
- Iran
- Maldives
- Nepal
- Pakistan
- Sri Lanka

Southern Africa

- Botswana
- Eswatini
- Lesotho
- Namibia
- South Africa

STEP ONE: CHOOSE A COUNTRY

Use the following pages and questions as a guide to help you write an outline as you explore your country and topic. Need ideas? Resources can be found at: worldfoodprize.org/resources



COUNTRY: _____

- What is the country's population? What percentage are urban and rural?

- What type of government and leadership exists?

- How much of the land is currently cultivated? What are the major crops and exports?

- What is the average farm size in your chosen country? For context, what can you compare it to?

- What is the climate and geography?

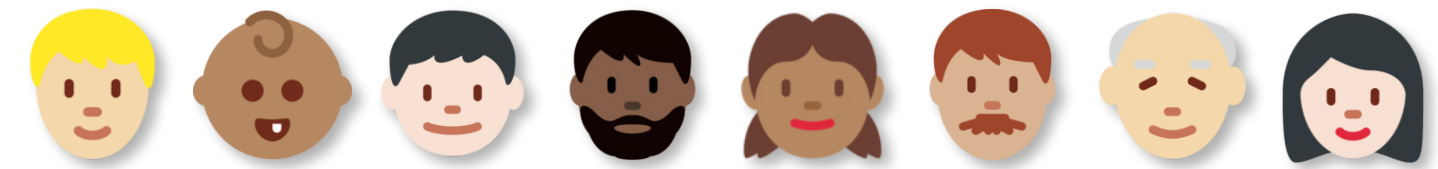
SOURCES

PRO TIP

Choose a country you would like to know more about or maybe one you have never heard of. Or, choose your topic first, then select a country that is relevant to the topic.

STEP TWO: RESEARCH A TYPICAL FAMILY

Describe life for a typical family in your chosen country.



- What is a typical family size? Describe the dwelling in which they live.

- What does a typical family diet consist of?

- Where do families get food and how do they cook it?

- What types of jobs do they have and what is the average wage?

- Do families have access to education and health care? Is it affordable?

- Does the family have access to clean water, toilets, electricity, telephones, roads and local markets?

- What major barriers do typical families face including earning a living and access to nutritious food?

SOURCES




PRO TIP

Wikipedia can be useful for initial searches, but it should never be used as a reference since it is not possible to evaluate the accuracy of the information or the credibility of the author(s) of the article.

STEP THREE: CHOOSE A TOPIC

Select a topic (global challenge) to focus your research on. It is important to select a topic that is relevant to your country.



<h3>PLANTS</h3> <p>Utilizing plants to increase and improve food, nutrition, medicine, fibers, fuels and other products</p> 	<h3>WATER SCARCITY</h3> <p>The lack of available water resources to meet the demands within a region</p> 	<h3>RENEWABLE ENERGY</h3> <p>Energy created from naturally occurring sources such as water, wind, solar and biofuels</p> 
<h3>ANIMAL HEALTH</h3> <p>Protect and improve the health, safety, and quality of livestock, poultry and aquaculture</p> 	<h3>CLIMATE VOLATILITY</h3> <p>Adapt agricultural practices and policies to respond to significant changes in the Earth's climate</p> 	<h3>SUSTAINABLE AGRICULTURE</h3> <p>Best practices to grow food and fiber for long term environmental, economic and social success</p> 
<h3>ANIMAL AGRICULTURE</h3> <p>The care and breeding of livestock, poultry and aquaculture</p> 	<h3>SPOILAGE & WASTE</h3> <p>Food that is lost, spoiled or discarded in production, processing or consumption</p> 	<h3>WATER & SANITATION</h3> <p>Clean drinking water and adequate sewage disposal to improve human hygiene and health</p> 

<h3>DIETARY DISEASES</h3> <p>Disease caused by unhealthy diets and a lack of exercise</p> 	<h3>MALNUTRITION</h3> <p>Deficiencies, excesses, or imbalances in a person's intake of energy, protein and nutrients</p> 	<h3>INFECTIOUS DISEASES</h3> <p>Infections and illnesses that can be spread from one person to another, or between animals and humans</p> 
<h3>POPULATIONS</h3> <p>The characteristics and movements of a population including urbanization, migration and growth</p> 	<h3>CONFLICT</h3> <p>Political, economic, environmental, or social disagreements, violence or armed conflict</p> 	<h3>HUMAN RIGHTS</h3> <p>Rights that all people are equally entitled to regardless of their nationality, sex, race, ethnicity, religion, language, etc</p> 
<h3>EDUCATION</h3> <p>The delivery of knowledge, skills, and information</p> 	<h3>POLICY & GOVERNANCE</h3> <p>The implementation of policies, processes and structures that determine how power is distributed and shared</p> 	<h3>INTERNATIONAL TRADE</h3> <p>The exchange of capital, goods, and services between countries</p> 
<h3>FOREIGN AID</h3> <p>Assistance given by one nation to another for humanitarian relief or development efforts</p> 	<h3>INFRASTRUCTURE</h3> <p>The physical structures and facilities critical for the operation of a society such as roads, bridges, power, etc</p> 	

STEP FOUR: ANALYZE THE IMPACT

How does your topic impact food security?



What is the present status and severity of this topic?

Are trends improving, worsening or staying the same?

What contributes to this trend?

How does this topic affect rural and urban populations?

How does this topic affect women and men differently? The elderly? Children?

How does this topic affect marginalized populations? (minorities, refugees, indigenous, etc.)

How does this topic affect the environment?



SOURCES

STEP FIVE: SOLUTIONS & RECOMMENDATIONS

Finding ideas for solutions can be tough. Start by researching what already exists.

What are 2-3 solutions that address the challenge

• **IN YOUR CHOSEN COUNTRY:** what is currently being done or what has been tried in the past? What worked and what could be improved upon?

• **IN ANOTHER COUNTRY:** what has been done to address similar challenges? Would they be appropriate to implement in your country?

WHAT ARE THE STRENGTHS AND WEAKNESSES FOR EACH OF THESE SOLUTIONS? USE THIS BOX TO OUTLINE THE PROS AND CONS.

SOLUTION	STRENGTH (PROS)	WEAKNESS (CONS)

SOLUTIONS & RECOMMENDATIONS

- Would these solutions meet all the needs of the population in your country?

- What solution would you recommend to solve this challenge? Describe the plan of action.

- Who would manage and lead this project? Examples: The United Nations, World Bank, non-profits, civic organizations, etc.

- How could this project be funded?

- What role do community members, the government, and other organizations play in implementing your plan?

- What policies would need to be in place for the project to be successful?

- What cultural norms or behaviors need to be considered while developing your plan?

- How can this project be sustainable?

SOURCES

PRO TIP

Is the solution simple or complex?
Is it expensive or affordable? These are important questions to ask yourself!

STEP SIX: WRITE & FORMAT YOUR PAPER

Now that you have done your research, it's time to bring it all together.

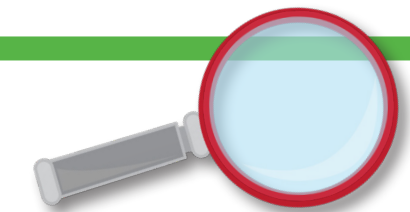


FORMAT REQUIREMENTS

Research papers must be submitted as a Word (.doc or .docx) file and meet the following page format requirements:

- One-inch page margins (top, bottom, left, right)
- Eleven-point font, Times New Roman
- Single-space text, no indentation
- Double space between paragraphs
- Identification in the upper left-hand corner of the first page providing:
 - Student name
 - High school name
 - School city, State/Province, Country
 - Selected country, Topic
 - Essay title (in bold)

- Proofread your paper and edit for sentence structure and proper grammar
- Ask at least three other people to read your paper and give you feedback (consider teachers, mentors, club leaders, friends, and parents)



PLEASE NOTE:

Your paper will be checked for plagiarism.

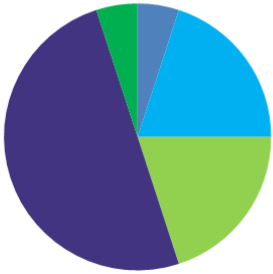
Make sure to take the time to analyze and interpret the articles and information you read, and explain them in your own voice. It's important to always be careful when sharing an idea or concept that is someone else's (even if you explain it in your own words), that you properly credit the original source.

For more information on citations and referencing, visit: worldfoodprize.org/resources

Jackson Smith
Central High School
Blythedale, MO, USA
India, Malnutrition

India: A Holistic Approach for the Rural Population

RECOMMENDED BREAKDOWN



Your paper should be 2-5 pages in length with a word count of 1000-2500 words, excluding the bibliography.

- 5% Introduction
- 20% Country & Family
- 20% Challenge & Impact
- 50% Solutions & Recommendations
- 5% Conclusion



PRO TIP

For great information on how to write a bibliography, check out: Easybib.com, Citationmachine.com or the Purdue Writing Lab at <http://owl.english.purdue.edu/owl>

BIBLIOGRAPHY PAGE

Should include at least five sources with in-text citations using the standards set by the Modern Language Association (MLA) or American Psychological Association (APA). Choose one style and use it consistently

STEP SEVEN: REGISTER & SUBMIT YOUR PAPER

All your hard work has paid off! It's time to submit your registration and final paper at: www.worldfoodprize.org/missouri

If you have any questions, contact the Missouri Coordinator:

Dr. Kristin Bilyeu | (573) 884-2234 | Kristin.Bilyeu@usda.gov