



U.S. House of Representatives

COMMITTEE ON ETHICS

MEMBER/OFFICER POST-TRAVEL DISCLOSURE FORM ☒ Original ☐ Amendment

This form is for disclosing the receipt of travel expenses from a private source for travel taken in connection with a Member or officer's official duties. This form does not eliminate the need to report privately-funded travel on the Member or officer's annual *Financial Disclosure Statement*. In accordance with House Rule 25, clause 5, **you must complete this form and file it with the Clerk of the House, by email at gifttravelreports@mail.house.gov, within 15 days after travel is completed.** Please **do not** file this form with the Committee on Ethics.

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001.

1. Name of Traveler: Diana DeGette
2. a. Name of Accompanying Relative: _____ **OR** None ☒
b. Relationship to Traveler: ☐ Spouse ☐ Child ☐ Other (specify): _____
3. a. Dates: Departure: 4/10/2023 Return: 4/16/2023
b. Dates at Personal Expense, if any: _____ **OR** None ☒
4. Departure City: Denver, CO Destination: Italy Return City: Denver, CO
5. Sponsor(s), Who Paid for the Trip: The Aspen Institute, Inc. (Congressional Program)
6. Describe Meetings and Events Attended (attach additional pages if necessary):
Please see attached agenda.

7. Attached to this form are **each** of the following, *signify that each item is attached by checking the corresponding box*:
 - a. ☒ a completed *Sponsor Post-Travel Disclosure Form*;
 - b. ☒ the *Primary Trip Sponsor Form* completed by the trip sponsor **prior** to the trip, **including all** attachments **and** the *Additional Sponsor Form(s)*;
 - c. ☒ page 2 of the completed *Traveler Form* submitted by the Member or officer; **and**
 - d. ☒ the letter from the Committee on Ethics approving my participation on this trip.
8. a. ☒ I represent that I participated in each of the activities reflected in the attached sponsor's agenda.
Signify statement is true by checking the box.
b. If not, explain:

I certify that the information contained in this form is true, complete, and correct to the best of my knowledge. I have determined that all of the expenses on the attached *Sponsor Post-Travel Disclosure Form* were necessary and that the travel was in connection with my duties as a Member or officer of the U.S. House of Representatives and would not create the appearance that I am using public office for private gain.

Member / Officer Signature: _____

Diana L. DeGette

Date: _____

4-27-23



U.S. House of Representatives

COMMITTEE ON ETHICS

SPONSOR POST-TRAVEL DISCLOSURE FORM

☐ Original ☐ Amendment

This form must be completed by an officer of any organization that served as the primary trip sponsor in providing travel expenses or reimbursement for travel expenses to House Members, officers, or employees under House Rule 25, clause 5. **A completed copy of the form must be provided to each House Member, officer, or employee who participated on the trip within ten days of their return.** You must answer all questions, and check all boxes, on this form for your submission to comply with House rules and the Committee's travel regulations. Failure to comply with this requirement may result in the denial of future requests to sponsor trips and/or subject the current traveler to disciplinary action or a requirement to repay the trip expenses.

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001.

1. Sponsor(s) who paid for the trip: _____

2. Travel Destination(s): _____

3. Date of Departure: _____ Date of Return: _____

4. Name(s) of Traveler(s): _____

Note: You may list more than one traveler on a form only if *all* information is *identical* for each person listed.

5. Actual amount of expenses paid on behalf of, or reimbursed to, each individual named in Question 4:

	Total Transportation Expenses	Total Lodging Expenses	Total Meal Expenses	Total Other Expenses (dollar amount per item and description)
Traveler				
Accompanying Family Member				

6. ☐ All expenses connected to the trip were for actual costs incurred and not a *per diem* or lump sum payment. Signify statement is true by checking box.

I certify that the information contained in this form is true, complete, and correct to the best of my knowledge.

Signature: _____ Date: _____

Name: _____ Title: _____

Organization: _____

☐ I am an officer of the above-named organization. Signify statement is true by checking box.

Address: _____

Email: _____ Telephone: _____

Committee staff may contact the above-named individual if additional information is required.

If you have questions regarding your completion of this form, please contact the Committee on Ethics at 202-225-7103.



U.S. House of Representatives

COMMITTEE ON ETHICS

TRAVELER FORM

1. Name of Traveler: Diana DeGette
2. Sponsor(s) who will be paying or providing in-kind support for the trip:
The Aspen Institute, Inc. (Congressional Program)
3. City and State **OR** Foreign Country of Travel : Italy
4. a. Date of Departure: 4/10/2023 Date of Return: 4/15/2023
b. Yes ☐ No ☒ Will you be extending the trip at your personal expense?
If yes, list dates at personal expense: _____
5. a. Yes ☐ No ☒ Will you be accompanied by a family member at the sponsor's expense? **If yes:**
(1) Name of Accompanying Family Member: _____
(2) Relationship to Traveler: ☐ Spouse ☐ Child ☐ Other (specify): _____
(3) Yes ☐ No ☐ Accompanying Family Member is at least 18 years of age:
6. a. Yes ☐ No ☒ Did the trip sponsor answer "Yes" to Question 8(c) on the *Primary Trip Sponsor Form* (i.e., travel is sponsored by an entity that employs a registered federal lobbyist or a foreign agent)?
b. **If yes**, and you are requesting lodging for two nights, explain why the second night is warranted:
7. Yes ☒ No ☐ *Primary Trip Sponsor Form* is attached, including agenda, invitee list, and any other attachments and Additional Sponsor Forms.

NOTE: The agenda should show the traveler's individual schedule, including departure and arrival times and identify the specific events in which the traveler will be participating.
8. Explain why participation in the trip is connected to the traveler's individual official or representational duties.
Staff should include their job title and how the activities on the itinerary relate to their duties.
I serve as a senior Member of the Committee on Energy and Commerce. The issues to be addressed are relevant to my work on the Committee.
9. **Yes ☐ No ☒ Is the traveler aware of any registered federal lobbyists or foreign agents involved planning, organizing, requesting, or arranging the trip?**
10. For staff travelers, to be completed by your employing Member:

ADVANCED AUTHORIZATION OF EMPLOYEE TRAVEL

I hereby authorize the individual named above, an employee of the U.S. House of Representatives who works under my direct supervision, to accept expenses for the trip described in this request. I have determined that the above-described travel is in connection with my employee's official duties and that acceptance of these expenses will not create the appearance that the employee is using public office for private gain.

Signature of Employing Member

Diana DeGette

Date

3-9-23



U.S. House of Representatives

COMMITTEE ON ETHICS

PRIMARY TRIP SPONSOR FORM

This form should be completed by private entities offering to provide travel or reimbursement for travel to House Members, officers, or employees under House Rule 25, clause 5. A completed copy of the form (and any attachments) should be provided to each invited House Member, officer, or employee, who will then forward it to the Committee together with a *Traveler Form* **at least 30 days before the start date of the trip**. The trip sponsor should **NOT** submit the form directly to the Committee. The Committee website (ethics.house.gov) provides detailed instructions for filling out the form.

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001. Failure to comply with the Committee's Travel Regulations may also lead to the denial of permission to sponsor future trips.

1. Sponsor who will be paying for the trip:
2. ☐ I represent that the trip will not be financed, in whole or in part, by a registered federal lobbyist or foreign agent. *Signify that the statement is true by checking box.*
3. **Check only one.** I represent that:
 - a. ☐ The primary trip sponsor has not accepted from any other source, funds intended directly or indirectly to finance any aspect of the trip: **OR**
 - b. ☐ The trip is arranged without regard to congressional participation and the primary trip sponsor has accepted funds only from entities that will receive a tangible benefit in exchange for those funds: **OR**
 - c. ☐ The primary trip sponsor has accepted funds from other source(s) intended directly or indirectly to finance all or part of this trip and has enclosed disclosure forms from each of those entities.
If "c" is checked, list the names of the additional sponsors:
4. Provide names and titles of **ALL** House Members *and* employees you are inviting. **For each House invitee, provide an explanation of why the individual was invited** (include additional pages if necessary):
5. Yes ☐ No ☐ Is travel being offered to an accompanying family member of the House invitee(s)?
6. Date of departure: _____ Date of return: _____
7. a. City of departure: _____
b. Destination(s): _____
c. City of return: _____
8. **Check only one.** I represent that:
 - a. ☐ The sponsor of the trip is an institution of higher education within the meaning of section 101 of the Higher Education Act of 1965: **OR**
 - b. ☐ The sponsor of the trip does not retain or employ a registered federal lobbyist or foreign agent: **OR**
 - c. ☐ The sponsor employs or retains a registered federal lobbyist or foreign agent, but the trip is for attendance at a one-day event *and* lobbyist / foreign agent involvement in planning, organizing, requesting, or arranging the trip was *de minimis* under the Committee's travel regulations.
9. **Check only one of the following:**
 - a. ☐ I checked 8(a) or (b) above; **OR**
 - b. ☐ I checked 8(c) above but am not offering any lodging; **OR**
 - c. ☐ I checked 8(c) above and am offering lodging and meals for one night; **OR**
 - d. ☐ I checked 8(c) above and am offering lodging and meals for two nights. If you checked this box, explain why the second night of lodging is warranted:



U.S. House of Representatives

COMMITTEE ON ETHICS

10. ☐ Attached is a detailed agenda of the activities House invitees will be participating in during the travel (i.e., an hourly description of planned activities for trip invitees). *Indicate agenda is attached by checking box.*
11. **Check only one of the following:**
- a. ☐ I represent that a registered federal lobbyist or foreign agent will not accompany House Members or employees on any segment of the trip. *Signify that the statement is true by checking box; OR*
- b. ☐ *Not Applicable.* Trip sponsor is a U.S. institution of higher education.
12. For **each** sponsor required to submit a sponsor form, describe the sponsor's interest in the subject matter of the trip **and** its role in organizing and/or conducting the trip:
13. **Answer parts a and b. Answer part c if necessary:**
- a. Mode of travel: Air ☐ Rail ☐ Bus ☐ Car ☐ Other ☐ (specify: _____)
- b. Class of travel: Coach ☐ Business ☐ First ☐ Charter ☐ Other ☐ (specify: _____)
- c. If travel will be first class, or by chartered or private aircraft, explain why such travel is warranted:
14. ☐ I represent that the expenditures related to local area travel during the trip will be unrelated to personal or recreational activities of the invitee(s). *Signify that the statement is true by checking the box.*
15. **Check only one.** I represent that either:
- a. ☐ The trip involves an event that is arranged or organized *without regard* to congressional participation and that meals provided to congressional participants are similar to those provided to or purchased by other event attendees; **OR**
- b. ☐ The trip involves events that are arranged specifically *with regard* to congressional participation.
- If "b" is checked:
- 1) Detail the cost *per day* of meals (approximate cost may be provided):
- 2) Provide the reason for selecting the location of the event or trip:
16. Name, nightly cost, and reasons for selecting each hotel or other lodging facility:
- Hotel Name: _____ City: _____ Cost Per Night: _____
- Reason(s) for Selecting: _____
- Hotel Name: _____ City: _____ Cost Per Night: _____
- Reason(s) for Selecting: _____
- Hotel Name: _____ City: _____ Cost Per Night: _____
- Reason(s) for Selecting: _____
17. ☐ I represent that all expenses connected to the trip will be for actual costs incurred and not a per diem or lump sum payment. *Signify that the statement is true by checking the box.*



U.S. House of Representatives

COMMITTEE ON ETHICS

18. Total Expenses for each Participant:

<input type="checkbox"/> Actual Amounts <input type="checkbox"/> Good Faith Estimates	Total Transportation Expenses per Participant	Total Lodging Expenses per Participant	Total Meal Expenses per Participant
For each Member, Officer, or Employee			
For each Accompanying Family Member			

	Other Expenses (dollar amount per item)	Identify Specific Nature of "Other" Expenses (e.g., taxi, parking, registration fee, etc.)
For each Member, Officer, or Employee		
For each Accompanying Family Member		

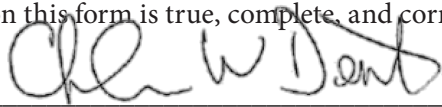
NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001.

19. **Check only one:**

- a. ☐ I certify that I am an officer of the organization listed below; **OR**
b. ☐ *Not Applicable*. Trip sponsor is an individual or a U.S. institution of higher education.

20. I certify by my signature that

- a. I read and understand the Committee's Travel Regulations;
b. I am not a registered federal lobbyist or registered foreign agent; and
c. The information on this form is true, complete, and correct to the best of my knowledge.

Signature:  Date: _____

Name: _____ Title: _____

Organization: _____

Address: _____

Email: _____ Telephone: _____

INSTRUCTIONS

Complete the *Primary Trip Sponsor Form* and submit the agenda, invitation list, any attachments, and any *Additional Trip Sponsor Forms* directly to the Travelers.

Written approval from the Committee on Ethics is required before traveling on this trip. The Committee on Ethics will notify the House invitees directly and will not notify the trip sponsors.

Willful or knowing misrepresentation on this form may be subject to criminal prosecution under 18 U.S.C. § 1001. Signatures must comply with section 104(bb) of the Travel Regulations.

For questions, please contact the Committee on Ethics at:

1015 Longworth House Office Building
Washington, D.C. 20515

ethicscommittee@mail.house.gov | 202-225-7103
More information and forms available at ethics.house.gov



U.S. House of Representatives

COMMITTEE ON ETHICS

ADDITIONAL TRIP SPONSOR FORM

This form should be completed by an organization that provides funds, services, or in-kind assistance to another entity to underwrite, in whole or in part, a trip or an event, meal, or activity that will occur during a trip, or a necessary expense that will be incurred during a trip, with express or implicit knowledge or understanding that one or more House Members or employees may participate in or attend that trip or event, or otherwise may be beneficiaries of the gift or donation.

Provide a copy of your completed form to the primary sponsor of the trip.

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001. Failure to comply with the Committee's Travel Regulations may also lead to the denial of permission to sponsor future trips.

1. Name of Primary Trip Sponsor: Aspen Institute Congressional Program
2. Name of your organization: The Rockefeller Foundation
3. Yes ☒ No ☐ Is your organization designated a § 501(c)(3) charitable organization by the Internal Revenue Service?
4. Yes ☐ No ☒ Does your organization receive funding from any foreign government or multinational organization?
5. **Check one.** I certify that my organization:
 - a. ☒ Has provided a grant, gift, or donation to the above-named Primary Trip Sponsor and conducts an audit or review of its grant, gift, or donation to ensure that the funds are spent in accordance with the terms of its grant, gift, or donation. **OR**
 - b. ☐ Has had a direct role in the organizing, planning, or conducting of a trip to
Destination: Bellagio, Italy on Date: April 10–15, 2023
that is being organized or arranged by the above-named Primary Trip Sponsor. **OR**
 - c. ☐ Has provided in-kind support to the above-named Primary Trip Sponsor (e.g., meeting planning assistance, meeting space and set-up, and paying for expenses related to this trip directly to the service provider).
6. **Check only one:**
 - a. ☒ My organization does not employ or retain a registered federal lobbyist or foreign agent **OR**
 - b. ☐ My organization employs a registered federal lobbyist or foreign agent, but their involvement in planning, organizing, or arranging the trip was *de minimis* under the travel regulations.
7. I certify by my signature that
 - a. I read and understand the Committee's Travel Regulations;
 - b. I am not a registered federal lobbyist or registered foreign agent;
 - c. I am an officer of this organization and am duly authorized to sign this form; and
 - d. The information on this form is true, complete, and correct to the best of my knowledge.

Signature:  Date: 03/23/2023

Name: Erica Guyer Title: Acting General Counsel and Corporate Secretary

Organization: The Rockefeller Foundation

Address: 420 Fifth Avenue, New York NY 10018

Email: eguyer@rockfound.org Telephone: _____

Michael Guest, Mississippi
Chairman
Susan Wild, Pennsylvania
Ranking Member

David P. Joyce, Ohio
John H. Rutherford, Florida
Andrew R. Garbarino, New York
Michelle Fischbach, Minnesota

Veronica Escobar, Texas
Mark DeSaulnier, California
Deborah K. Ross, North Carolina
Glenn F. Ivey, Maryland



ONE HUNDRED EIGHTEENTH CONGRESS

U.S. House of Representatives

COMMITTEE ON ETHICS

Thomas A. Rust
Staff Director and Chief Counsel

Kelle A. Strickland
Counsel to the Chairman

David Arrojo
Counsel to the Ranking Member

1015 Longworth House Office Building
Washington, D.C. 20515-6328
Telephone: (202) 225-7103
Facsimile: (202) 225-7392

April 6, 2023

The Honorable Diana DeGette
U.S. House of Representatives
2111 Rayburn House Office Building
Washington, DC 20515

Dear Colleague:

Pursuant to House Rule 25, clause 5(d)(2), the Committee on Ethics hereby approves your proposed trip to Italy,¹ scheduled for April 10 to 15, 2023, sponsored by the Aspen Institute, Inc., and the Rockefeller Foundation.

You must complete a Member/Officer Post-Travel Disclosure Form and file it, together with a Sponsor Post-Travel Disclosure Form completed by the trip sponsor, with the Clerk of the House within 15 days after your return from travel. As part of that filing, you are also required to attach a copy of this letter and both the Traveler and Primary Trip Sponsor Forms (including attachments) you previously submitted to the Committee in seeking pre-approval for this trip. You must also report all travel expenses totaling more than \$480 from a single source on the "Travel" schedule of your annual Financial Disclosure Statement covering this calendar year. Finally, Travel Regulation § 404(d) also requires you to keep a copy of all request forms and supporting information provided to the Committee for three subsequent Congresses from the date of travel.

Because the trip may involve meetings with foreign government representatives, we note that House Members may accept, under the Foreign Gifts and Decorations Act (FGDA), gifts "of minimal value [currently \$480] tendered as a souvenir or mark of courtesy" by a foreign government. Any tangible gifts valued in excess of minimal value received from a foreign government must, within 60 days of acceptance, be disclosed on a Form for Disclosing Gifts from Foreign Governments and either turned over to the Clerk of the House, or, with the written approval of the Committee, retained for official use.

¹ Please be aware that the Committee's review of the proposed trip does not extend to either the security situation in the destination country or security related to foreign travel in general. We recommend you contact the Office of House Security (OHS) for a safety and security briefing prior to your departure. OHS may be reached at (202) 226-2044 or ohsstaff@mail.house.gov. House travelers should also register for the U.S. State Department's Smart Traveler Enrollment Program at <https://step.state.gov>.

If you have any further questions, please contact the Committee's Office of Advice and Education at extension 5-7103.

Sincerely,

A handwritten signature in blue ink that reads "Michael Guest". The signature is written in a cursive style with a large initial "M".

Michael Guest
Chairman

A handwritten signature in blue ink that reads "Susan Wild". The signature is written in a cursive style with a large initial "S".

Susan Wild
Ranking Member

MG/SW:emw

Aspen Institute Congressional Program

Strategies to Ensure Global Food Security:

U.S. Policies to Sustain Supply, Relief, and Advance Prosperity

April 10-15, 2023 – Bellagio, Italy

AGENDA

MONDAY, APRIL 10:

U.S. participants depart the United States today. *Rep. Diana DeGette departs Denver at 10:07 am on United 1591.*

TUESDAY, APRIL 11:

U.S. participants arrive in Bellagio, Italy by mid-afternoon. *Rep. DeGette arrives in Milan at 9:10 am on United 19 and is transported by van to Bellagio, Italy.*

7 – 9 PM: Working Dinner

Seating is arranged to expose participants to a diverse range of views and provide the opportunity for a meaningful exchange of ideas. Scholars and lawmakers are rotated daily. Discussions will focus on food security in the United States and around the world.

WEDNESDAY, APRIL 12:

8 – 8:55 AM: Breakfast

9 – 9:15 AM: Introduction and Framework of the Conference

This conference is organized into roundtable conversations, a luncheon, and pre-dinner remarks. This segment will highlight how the conference will be conducted, how those with questions will be recognized, and how responses will be timed to allow for as much engagement as possible.

Speaker:

Charlie Dent, *Executive Director, Aspen Institute Congressional Program; Vice President, Aspen Institute*

9:15 – 11 AM: Roundtable Discussion

The World Food Price Crisis

After the height of the COVID-19 pandemic, supply chain issues, inflation, and Putin's ongoing war in Ukraine, a major agricultural exporter, Americans saw the economic effects of these events firsthand with empty grocery store shelves and high food prices. These impacts have shown that while food security remains a humanitarian issue in developing nations, it also can affect world powers, including the United States.

World food price crises are occurring with increasing frequency. We are in the third crisis since 2008, however this is the first to have a significant impact on retail prices in the U.S. and other high-income countries. In low-income countries consumers have suffered severe impact on their food security in all three price spikes.

The current food price crisis is more pronounced and is having a greater impact in all regions of the world. When COVID-19 closed the economy, American consumers quickly shifted from two-thirds of their food expenditures going toward food consumed away-from-home to two-thirds at-home, and supply chains struggled to adjust to that sudden shift. Income transfers from the government sustained consumer purchasing power in the face of losses of employment due to COVID-19. Food processors, particularly animal slaughtering facilities, struggled to sustain production while trying to make the work environment safe enough for employees to continue to come to work.

Animal diseases that caused loss of farm production capacity in several countries have further amplified food price increases. China lost a significant fraction of its pig population (the largest in the world) to a swine disease, and more recently, avian influenza caused the destruction of a substantial fraction of the U.S. laying hen population, causing the price of eggs to explode.

On top of these forces that were already causing food prices to rise came Putin's invasion of Ukraine, followed by sanctions on economic relations with Russia. Both Russia and Ukraine are important agricultural exporters, and Russia is also a significant supplier of fertilizer, an essential agricultural production input to the world market. Both agricultural commodity prices and the cost of agricultural production around the world rose further.

This conference will probe in depth the fundamental forces driving food security at the individual, national and global levels today, and even more importantly, in the future in a world in which all agro-ecosystems are migrating due to climate change.

Speakers:

Christopher Barrett, *Stephen B. & Janice G. Ashley Professor, Dyson School of Applied Economics and Management, and Professor, Brooks School of Public Policy, Cornell University*

Tjada D'Oyen McKenna, *CEO, Mercy Corps*

Paul Polman, *Co-author of "Net Positive"*

11 – 11:15 AM: Break

11:15 AM – 1 PM: Roundtable Discussion

Global Food Security

Global food security is defined as the extent to which the world can produce enough food containing all the essential nutrients (calories, amino acids, vitamins, and minerals) to feed the world's larger population better than today at reasonable cost without damaging the environment. This challenge must be addressed in a holistic manner in which nutrient-dense foods, e.g. fruits and vegetables that have high vitamin and mineral content, are given high priority. Historically, too much focus has been on grain production, which supplies calories, but generally leaves deficiencies in various amino acids, vitamins, and minerals.

In 1798, Thomas Malthus, a British economist known for his theory on population, wrote that food production could not keep up with population growth and that starvation would limit the world's population. With the development of ocean shipping, vast new areas of land were brought into agricultural production in North and South America and Oceania. Engineering research developed machines that enabled every farmer to cultivate far larger areas of land and to manage larger herds of livestock and flocks of poultry. Research on genetics and the control of insects, diseases, and weeds resulted in big increases in production per acre of land and per farm animal. Instead of limiting population as Malthus predicted, global food output has grown faster than consumption, the long-term cost of food has trended downwards, and the world's population is now eight times larger than when Malthus wrote his book. There has always been variability around this trend line, but the three price spikes in the last 15 years suggest they are becoming more frequent.

All agricultural production, regardless of the production system – conventional, organic, or regenerative – begins with the genetic potential embodied in the plant seed or animal egg. Once a plant germinates or an animal is born, how much of that genetic potential is realized depends on adequacy of nutrition for the species' requirements, prevention of diseases that inhibit its growth, and avoidance of competition for nutrients (from weeds in plants and parasites in animals) and for light in the case of plants.

The two basic resources on which plant growth is based are the land, from which crops receive their required nutrients (nitrogen, phosphate, potassium, and some micronutrients), and water. To these must be added the climatic conditions above the land which determine the levels and variability of temperature and precipitation.

There is little more arable land available worldwide (certainly less than 10 percent) that is not presently forested or subject to erosion or desertification. Moreover, loss and degradation of many soils continues. The area of land in food production could be expanded more than this, but only by destruction of forests, with accompanying loss of wildlife habitat, biodiversity, and

carbon sequestration capacity, all unacceptable environmental outcomes. The only environmentally sustainable alternative is to increase productivity on the fertile, non-erodible soils already in crop production. Most of that available cropland is in remote areas of South America and Sub-Saharan Africa, where infrastructure is minimal, and soils are inferior in quality to many already in production.

There is an area of land larger than what is in crop production which does not receive enough rainfall for annual cropping which grows grass that ruminant livestock (cattle, sheep, goats, bison, deer, and camels) can convert into milk and meat, thereby contributing to the world food supply.

Land may not be the most binding constraint on future global food production. Water is likely to be even more limiting. In their irrigation, farmers account for 70 percent of the world's use of fresh water. With the rapid urbanization underway, cities are outbidding farmers for available fresh water. The world's farmers will likely have access to less fresh water in the future than today. To sustain present food production levels, they will have to increase the "crop per drop," the average productivity of the water they use.

Complicating this picture is the reality that the climatic constraints on agriculture are changing. Greater warming is occurring over land than over water, and the greatest increase is at the higher latitudes. The spatial distribution of precipitation is changing, and there is increased frequency of extreme climatic events, e.g. droughts and floods. Farmers need access to seeds that embody greater tolerance to high temperatures and resilience in the face of droughts, flooding and other adverse conditions. Farmers in some geographic locations will find it necessary to change what crops they are growing, and more of world agricultural production will likely need to move through international trade. In addition, farmers are being asked to help mitigate climate change by sequestering more carbon in the soil and reducing greenhouse gas emissions from their production practices.

To the definitions of global and national food security must be added "with minimum loss between the points of production and consumption." All agricultural commodities (and marine products, which also make an important contribution to global nutrition) are perishable. An estimated third of world food production is lost between the points of production and consumption. In low-income countries, where the marketing infrastructure is often deficient, the heaviest losses occur between the farm and retail market, and in high-income countries, the largest losses occur as food waste after retail. Grains which are stored with too high a moisture content spoil, and most fruit and animal products, e.g. milk, meat, and fish, spoil in the absence of refrigerated transport and storage.

This session will review the natural constraints on the world's farmers' ability to produce

enough food in an environmentally benign manner to feed the world's larger population better than today. It will take a holistic approach that recognizes the importance of producing enough of all the essential nutrients to sustain human health.

Speakers:

David Beasley, *Former Executive Director, United Nations World Food Programme*

Máximo Torero Cullen, *Chief Economist, Food and Agricultural Organization of the United Nations*

1 – 2 PM: Working Lunch

Discussion continues between members of Congress and scholars on global food security.

2 – 4 PM: Individual Discussions

Members of Congress and scholars meet individually to discuss topics raised during the conference. Scholars available to meet individually with members are David Beasley, Chris Barrett, Catherine Bertini, Robert Paarlberg, Pamela Ronald, Joseph Glauber, Máximo Torero Cullen, Devon Klatell, Tjada D'Oyen McKenna, Catherine Russell.

7 – 9 PM: Working Dinner

Seating is arranged to expose participants to a diverse range of views and provide the opportunity for a meaningful exchange of ideas. Scholars and lawmakers are rotated daily. Discussions will focus on the world food price crisis and global food security.

THURSDAY, APRIL 13:

8 – 8:55 AM: Breakfast

9 – 11:30 AM: Roundtable Discussion

Crisis of Global Malnutrition

According to the Food and Agriculture Organization (FAO) of the United Nations, “food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life.” Adequate nutrition and absence of disease are the two essential conditions for health.

Both overnutrition and undernutrition cause hundreds of millions of premature deaths worldwide each year. The health problems associated with obesity are widely addressed in the media. Less well reported is the even larger number of deaths every year from starvation from lack of calories and from nutritional deficiency diseases from inadequate intake of all the essential amino acids, vitamins, and minerals, particularly vitamin A, iodine, iron, and zinc.

There are three essential conditions for individual food security:

1. Is there a safe, reliable, and reasonably priced supply of all essential nutrients available from local production or the market year around?
2. Does the household (or individual) have sufficient purchasing power to access a nutritionally balanced diet from home-grown sources or the marketplace?
3. Is a person healthy enough so the nutrients ingested can be absorbed and used by the body? Food intake is less effective at contributing to health if a person is sick or has parasites, just as medicine is less effective if a person is nutritionally compromised. The two essential contributors to health, nutrition, and medicine, are mutually reinforcing.

Very low-income people spend the largest fraction of their income on food. Before COVID-19 struck, an estimated (FAO) 750 million people (10 percent of the world's population) suffered "severe food insecurity," and 690 million went "hungry." According to the FAO's definition, people suffer "hunger" if they lack sufficient purchasing power to access even 1,800 calories per day, not enough to put in a medium level of physical activity. An estimated 75 percent of the extreme poverty in the world is rural, and most are farmers. The majority are female, and half are children. Despite being farmers, most of the extreme poor are net food buyers.

War, natural disasters, and economic crises cause a great deal of hunger in the world, but chronic hunger, which is much more widespread, is due mainly to poverty. Emergency feeding programs, such as the World Food Programme, play an essential role in addressing human crises. However, to "solve" the world's chronic hunger problem (Sustainable Development Goal #2), the world's poverty problem (Sustainable Development Goal #1) must be solved. For the health of the planet, these goals must be attained in a sustainable manner. To do this, the entire food system must be involved.

The world experienced rapid progress in reducing poverty during 1990 to 2017, but an estimated 131 million people worldwide were pushed back into extreme poverty during COVID-19 (Pew). The "new poor" tend to be more urban than rural, living in congested urban settings and working in sectors affected by lockdowns and mobility restriction, and more engaged in informal services or manufacturing, including food processing. Food availability was disrupted in many places, and with the increase in food prices, low-income people have been the most adversely affected by the current food price crisis.

This session will review the response to this crisis and address the longer-term challenge of eliminating global poverty and hunger. To do this, food security will be addressed at the individual, national and global levels.

Speakers:

Catherine Bertini, *Distinguished Fellow, Chicago Council on Global Affairs; Former Executive Director, World Food Programme*

Devon Klatell, *Vice President, Food Initiative, The Rockefeller Foundation*

Catherine Russell, *Executive Director, UNICEF*

11:30 – 11:40 AM: Break

11:40 AM – 1 PM: Roundtable Discussion

International Trade and Food Security

The global price of an agricultural commodity is determined by the balance between the volume supplied to the world market by exporting countries and the volume of that commodity purchased from the world market by all importing countries. Dependent as it is on rainfall and temperature, agriculture is an inherently risky business. International trade in agricultural commodities is the great balancing wheel that moves farm products from surplus production regions to deficit areas at any point in time. In this sense, international trade is an important food security risk management tool for every country.

With climate change shifting all agro-ecosystems and increasing the frequency of extreme climatic events such as droughts and floods, international trade is likely to take on an even greater national risk management role in the future. International trade needs to be kept as open as politically possible if world markets are to play this balancing wheel and risk management function.

In countries whose natural conditions make it possible to competitively produce more of a commodity than domestic consumers buy, the international market provides larger farm income and the opportunity for the farm sector to make a positive contribution to the country's balance of trade. The U.S. exports about a quarter of its agricultural production, contributing significantly to farmers' income and the U.S. balance of trade.

National food security is the potential for self-sufficiency that is both economically efficient and environmentally sustainable within a given country. The food supply is strategically important to every government. Every country needs to have a reliable, safe and nutritious, reasonably priced supply of food available from some combination of domestic production plus imports minus exports. Political realities prevent any government from putting its citizens in a position of being dependent on imports for its entire food supply. Every government must assess the risk-benefit balance between dependence on imports vs. the cost of national self-sufficiency. This is especially relevant in countries whose natural

conditions make production inherently costly (e.g. in desert countries) or they simply lack a sufficient area of arable land. Perceived reliability of supply is critical in an importing country's willingness to depend on the world market for part of its food supply.

The volume of future international trade in food and agricultural products will be determined by the dynamic changes that occur in the demand for food relative to the growth in production potential in each country. The world's population is projected to grow 22 percent from the present eight billion to about 9.8 billion by 2050. Of the 1.8 billion increase in the number of global mouths to be fed, about 950 million are projected to be in Sub-Saharan Africa, about 500 million in South and Central Asia, and about 200 million in North Africa and the Middle East. The population of East Asia is declining.

East and South Asia have twice as much of the world's population compared to its arable land, and virtually all their potentially arable land is already in production. The Middle East and North Africa have land, but they lack enough fresh water. It is hard to construe a scenario in which these three regions can be self-sufficient in food in the future; East Asia and the Middle East and North Africa are already large agricultural importing regions. Sub-Saharan Africa has roughly equal percentages of the world's population and arable land now, but it is the one region whose population is expected to almost double by 2050. A large source of uncertainty about the world's future food supply-demand balance is how successful Sub-Saharan Africa will be in achieving its food production potential, which greatly exceeds present levels. This will determine whether Sub-Saharan Africa in the future is a large food importer—on commercial or concessional terms—or even a net food exporter.

It is important to emphasize that population growth creates need, but not effective demand for more food. Low-income people already spend the bulk of their meager incomes on food. In 2015, before COVID-19, 41 percent of Sub-Saharan Africa's population was in "poverty" (less than \$1.90 (adjusted for differences in purchasing power across countries) per capita per day), as was 12 percent of South Asia's twice as large population.

As their incomes start to rise, low-income people spend most of the first increments to income on food. By about \$2 per day per capita income, most people can access enough calories. As their incomes rise from about \$2 to \$10 per capita per day, most people eat more fruits, vegetables, meat, eggs, dairy products, and edible oils, causing rapid growth in demand for raw agricultural commodities. However, after about \$10 per capita per day, from additional increments in their incomes people tend to buy more processing, services, packaging, variety, and luxury forms, but not more raw agricultural commodities.

To achieve the goal of ending hunger the poverty problem must be solved. However, to the extent we are successful at this, we unleash the most rapid phase of growth in the demand

for raw agricultural commodities. This increases the likelihood that the growing demand for food will outstrip the country's agricultural production capacity (unless it can increase agricultural productivity at least as fast). China's experience in recent decades is a prime example of successful poverty reduction being translated into growth in demand for food at a faster pace than domestic production could grow, resulting in China becoming the world's largest agricultural product importer.

The greatest uncertainty in projecting the future demand for food is how many hundreds of millions of low-income people will successfully escape poverty and, in turn, hunger. The United Nations Sustainable Development Goals have a target of eliminating poverty and hunger by 2030, goals that the world was not on track to attain even before COVID-19 set us back further.

For the world markets for food and agricultural commodities to successfully perform their balancing wheel role, there must be rules-of-the-road for trade that keep the flows of trade as fluid as possible. Until the Uruguay Round Agreement (1/1/1995) that created the World Trade Organization (WTO), there were no internationally accepted rules-of-the-road for agricultural trade.

In the Uruguay Round Agreement, the WTO's member countries agreed that whatever assistance an individual country provides to its agricultural sector should be commodity-neutral, i.e. not to distort the natural comparative advantage of any country by creating artificial incentives to advantage production of any one product more than others. Export subsidies were banned in agricultural commodities, as they had been for manufactured goods since 1979. The member countries agreed to convert all nontariff barriers to agricultural imports (e.g. quotas) to tariffs and reduce them over time. They also agreed to cap and reduce production- and trade-distorting agricultural subsidies.

The fraction of world agricultural production moving through international markets has more than doubled in the years since the Uruguay Round Agreement came into effect, to the significant benefit of American farmers. In recent years, the United States and other countries have backslid on their commitments to freer movement of agricultural products in world trade. Furthermore, the dispute settlement process within the WTO has been rendered ineffective by the unwillingness of the United States to allow new judges to be appointed, a somewhat surprising fact when the U.S. has won more cases than it has lost there.

This session will review the projected growth in international agricultural trade. It will further address the importance of keeping international markets as open as possible so they can play the balancing wheel role that will be needed as consumer demand in certain regions outgrows their agricultural production capacity and as greater variability in climatic

conditions caused greater year-to-year fluctuations in individual countries' food production

Speakers:

Joseph Glauber, *Senior Research Fellow, International Food Policy Research Institute; Former Chief Economist, Department of Agriculture*

Philippa Purser, *Head of Strategy and Global Process, Cargill*

1 – 2 PM: Working Lunch

Discussion continues between members of Congress and scholars on international trade and food security.

2 – 4 PM: Individual Discussions

Members of Congress and scholars meet individually to discuss topics raised during the conference. Scholars available to meet individually with members are Chris Barrett, Catherine Bertini, Robert Paarlberg, Pamela Ronald, Joseph Glauber, Devon Klatell, Tjada D'Oyen McKenna, Catherine Russell, and Rajiv Shah.

7 – 9 PM: Working Dinner

Seating is arranged to expose participants to a diverse range of views and provide the opportunity for a meaningful exchange of ideas. Scholars and lawmakers are rotated daily. Discussion will focus on global malnutrition and international trade and global food security.

FRIDAY, APRIL 14:

8 – 8:55 AM: Breakfast

9 – 11 AM: Roundtable Discussion

Public and Private Investments in Agricultural Research

There are important roles to be played in reducing future food insecurity by investments by both the public and private sectors, as well as by philanthropy. Financial analysis has demonstrated that investments in agricultural research have a high rate of return on investments made by both the public and private sectors.

Public support for agricultural research played a major role in the economic development of American and European agriculture. The resulting technologies were made freely available to all, often pushed out through an extension service which served as a two-way conduit of farmers' problems to researchers and solutions back to farmers.

Historically, public support for agricultural research in the U.S. was much larger than private sector support, however this reversed in the mid-1970s. In recent years there has been a burst of activity in venture capital funds investing in food and agricultural research. Today both the

Rockefeller Foundation and the Bill and Melinda Gates Foundation have major commitments to supporting agricultural research in low-income countries. The Gates Foundation was originally focused on health; however, it came to realize that when people are nutritionally compromised, the payoff to health investments is reduced. This recognition brought the Gates Foundation into also investing their philanthropy in agricultural development.

The private sector also played an important role in research on farm machinery, pesticides, and animal pharmaceuticals. To pay for the research (both successes and failures) and to provide a return to owners or shareholders, the resulting technology is embodied in production inputs that farmers buy. This is possible only when the intellectual property resulting from the research can be protected by patents or other “do not reproduce for sale” rules. In recent decades, with increased ability to patent biological materials, the private sector has come to play a much larger role in developing new agricultural technologies embodied in plant seeds than previously. In all cases the sales arms of the private sector companies play important roles in technology transfer to farmers.

Despite the high rate of return on both public and private investments in agricultural research and technology transfer, public support for it has been falling in the United States, Europe, and other high-income countries (in both domestic research and that financed through their foreign aid). Today the governments of both Brazil and China invest more in agricultural research than the United States.

Public support to domestic agricultural research institutions has dropped in recent decades across the high-income countries; the same has happened in their foreign aid. There are many areas of research in which the private sector will invest less than the socially optimum. These include basic research where the payoff is too uncertain or too far in the future, areas in which it is hard to protect the intellectual property resulting from the research or where no market exists, e.g. conservation and public policy. If the potential market is small, it is often difficult for the private sector to justify the investment cost. This is often the case with “orphan crops,” including many fruits and vegetables.

Agricultural technologies often require very specific local agro-ecological conditions (soil and climate), so additional research is often necessary to adapt a crop to the conditions in a specific region. The tools of agricultural science are highly mobile across countries, but individual varieties or breeds often need additional research to optimize them for other locations than their origins. With all agro-ecosystems migrating away from the Equator and the incidence of extreme climatic events increasing, it is going to take more adaptive research just to sustain present productivity levels.

This brings us to the challenge of meeting the agricultural research needs of food-insecure

countries which have large numbers of impoverished farmers. Those farmers often lack the purchasing power to access improved seeds even if they are available, or lack sufficient collateral to access credit, even where credit institutions exist.

Frequently today the private sector has better research facilities and scientists to address these challenges than the public sector. Many firms are generous with their philanthropy, but the magnitude of the challenges is far greater than the private sector can be expected to solve on its own. Furthermore, many observers argue that there needs to be a balance between public and private sourcing of new technologies.

To meet future global food demand sustainably will require increases in global food system productivity. Where possible, we will need to make presently unusable soils productive, increase the genetic potential of individual crop and animal species and farming systems in the face of climate change, increase the productivity of the water used, reduce competition from weeds in crop production and parasites in animal production, and reduce post-harvest losses, all in an environmentally benign manner.

Fortunately, we are in the golden age of the biological and information sciences. The tools of modern science give us the potential to:

- Improve the nutritional content of staple foods (augment the deficient vitamins, minerals, and protein);
- Increase tolerance to adverse growing conditions (e.g. drought, temperature, wetness; salt);
- Internalize resistance to insects and diseases to reduce pesticide use;
- Slow down quality deterioration in perishables;
- Increase precision in application of fertilizer nutrients and pest control media

There is huge potential in food science research to enhance future food security. The next frontier includes vertical farming (growing plants in high rise buildings using hydroponics and artificial light), plant-based meats and beverages, cell-cultured meats and milk produced in fermentation vessels, and many others. A big question is whether these can be scaled up sufficiently to bring the unit cost of production down sufficiently to be competitive and provide a sufficient return to investors to attract the necessary capital. Many venture capitalists are betting that this is possible.

With projected population growth and broad-based economic growth and urbanization, which tend to change dietary patterns, the world needs to significantly increase food production using less water and little, if any, more land. The current level of investment is less than necessary for this to happen, much less use some agricultural output as raw material for biofuels. For the world to achieve zero hunger and use agricultural products as feedstocks from which to make biofuels will require a significantly larger investment in productivity-enhancing agricultural

research than is occurring at the present.

Anti-technology activists pose one of the greatest threats to global food security today. There is just as great potential for modern biological science to contribute to global food security, particularly in the face of climate change, as to improving human health through medicine, if only it is allowed to be applied.

This session will explore the potential for modern biological and information sciences to contribute to future global food security in a world in which climate is changing and do it in an environmentally benign way.

Speakers:

Pamela Ronald, *Distinguished Professor, Department of Plant Pathology & the Genome Center, University of California, Davis*

Robert Paarlberg, *Associate, Harvard Weatherhead Center; Professor Emeritus of Political Science, Wellesley College*

Erik Fyrveld, *CEO, Syngenta Group*

11 – 11:15 AM: Break

11:15 AM – 1 PM: Roundtable Discussion:

Investments in Rural Development

Emergency feeding programs will always be needed to respond to food insecurity resulting from war, natural disasters, and politically imposed famine, however they will never be the solution to the chronic food insecurity experienced by 10 percent of the world's population. To solve chronic food insecurity, a reliable supply of foods that contain enough energy and essential amino acids, vitamins, and minerals to maintain health must be available from local production or markets year around. Availability is the necessary condition for eliminating hunger, but to eliminate hunger people must have sufficient purchasing power to access the available food. Since the extreme poor spend most of their meager incomes on food, the purchasing power of their income is determined mainly by the price of food.

An estimated 75 percent of the extreme poverty in the world is in rural areas, and most of the poor are farmers. The focus here will be on them.

Poverty is the motivation for a great deal of migration of the rural poor to higher income countries, and billions of dollars of the income they earn there get remitted back to their home countries each year. The large number of these migrants working in the U.S. and Europe, both documented and undocumented, has caused a significant political backlash against immigration. Moreover, few low-income country governments have the budgetary capacity or political motivation to make large income transfers to their low-income farmers.

A much more attractive long-term solution is to increase low-income farmers' income from the marketplace. The agricultural sector in many low-income countries is significantly underperforming relative to its potential. Current crop yields fall short of their agronomic potential consistent with economic efficiency and environmental sustainability. In Sub-Saharan Africa, for example, average crop yields are estimated to be only 25 percent of their agronomic potential using presently available technology.

The first means of reducing farmers' poverty is to increase productivity of the crops they are already growing. Next, farmers can change what they are producing to higher value-per-acre crops, e.g. fruits, vegetables, or nuts, or add livestock, poultry or aquaculture, to their product mix. This can have the additional benefit of improving the farm family's nutrition. Farmers may be forced to change what they are growing if local climatic conditions change sufficiently to render the crops they are now growing non-viable in their locality. In either case, the specificity of knowledge related to each new crop or animal species requires education.

Another way to reduce rural poverty is for farmers to acquire more land or other income-generating assets, such as education, in particular literacy, numeracy, and agronomic and animal husbandry skills and management skills to manage a larger farm. There is a finite limit to how much net income can be generated for a farm family from small holdings. In South Asia, for example, the average farm size is one to two acres, and virtually all the potentially arable land is already in production. There are few things that a small farmer can produce on so little land and generate an above-poverty family income. Indeed, this is the reason that in some regions farmers turn to growing poppies or other raw materials for illegal drugs.

Every country that has successfully reduced poverty in agriculture has created non-farm employment opportunities, both locally and further afield, for one or more members of the farm household. Most small farm households which escape poverty earn most of their family incomes from non-farm sources. This is true all over the world.

The next step is for significant numbers to leave farming completely and become employed in the non-farm sector. In fact, in the normal course of economic development, first the fraction of the workforce engaged in farming declines, and eventually their absolute number declines. When this happens, both those who leave and those who stay behind in farming and can gain access to more land have the potential to earn higher incomes. In very low-income countries the fraction of the workforce engaged in farming is often over 50 percent, while in the highest income countries it is in the very low single digits.

The private sector needs to build the agricultural input and product marketing, storage, and processing infrastructures (including cold chain to reduce post-harvest losses of perishables) which are critical to successful agricultural development. The track record of the public sector in these areas is not positive. The best role for the public sector is to define and enforce the rules-of-the-road for investment and commerce.

Only the private sector can create enough jobs to solve the problem of poverty in low-income countries' rural or urban areas, however government needs to provide a positive investment climate before investments of either local or international capital will be made. There must be reasonable macroeconomic and political stability, rule of law, a minimum of corruption, definition and protection of property rights, and enforcement of contracts.

To advance broad-based rural economic development--both agriculture and the rural non-farm economy-- investments in several rural public goods are needed. Here the public sector's role can be beneficially enhanced via official development assistance (foreign aid) and international development bank lending. Investments in rural infrastructure, education, health, and agricultural research and technology transfer are needed to solve the problem of rural poverty through development of agriculture and the rural non-farm sector. It is noteworthy that in the Uruguay Round trade agreement, every country's public sector investment in agricultural research and technology transfer and in rural infrastructure were accepted as public goods and therefore not restricted.

Historically, the governments of many low-income countries have placed low priority on agricultural and rural development in national budget allocations and in their international borrowing. In fact, until recently all low-income regions of the world extracted more tax revenue from their rural areas (usually through export taxes) than they invested in those areas. The balance of political power resides in their cities, even though their farmers often comprise large fractions of their populations. This has been a major impediment to their agricultural development. Today, Sub-Saharan Africa is the only remaining region where the net transfer of funds is away from rural areas.

While foreign aid and international development bank lending placed high priority on agricultural and rural development in the 1970s following a famine in South Asia, it peaked in the mid-1980s, and then went into precipitous decline. It recovered somewhat following the world food price crisis of 2008-10, only to quickly recede again when international agricultural commodity prices returned to more normal levels. The fraction devoted to agricultural research has fallen more than proportionately. The current food price crisis has once again heightened awareness of food insecurity, however, at present the main driver of increased priority on agricultural development has been climate change.

There are no quick fixes to rural poverty and associated hunger or to the underperformance of agriculture relative to its potential in low-income countries. Immense amounts of capital investment will be needed. The capital investment requirements to provide the essential rural public goods (rural roads, agricultural research and extension, and rural education and health services) vastly exceed the capacity of most low-income country governments. This is where foreign aid, lending by international development banks, and philanthropy such as that of the Rockefeller, Eleanor Crook, and Gates foundations can play a critical role in supplementing low-income countries' own resources.

If there is genuine concern about reducing poverty and hunger in low-income countries, their own governments need to provide a positive investment climate so the private sector can do as much as it can. The governments themselves, as well as foreign aid donors and international development banks, must also make and sustain budgetary commitment to agricultural and rural development. On-again off-again funding accomplishes little.

This session will review the roles that need to be played by the public and private sectors to achieve significant reductions in poverty and hunger in the world. Emphasis will be put on rural areas, where the largest concentrations of poverty and hunger exist. The magnitude of the investments needed by the public, private and philanthropic sectors will be discussed.

Speakers:

Strive Masiyiwa, *Founder and Executive Chairman, Econet Global and Cassava Technologies*

Rajiv Shah, *President, The Rockefeller Foundation*

1 – 2 PM: Working Lunch

Discussion continues between members of Congress and scholars on investments in rural development.

2:30 – 2:45 PM: Key Conference Takeaways

Speaker:

Rapporteur **Robert Thompson**, *Senior Fellow, Global Agricultural Development and Food Security, the Chicago Council on Global Affairs; Former Director of Rural Development, the World Bank*

2:45 – 3:45 PM: Policy Reflections (Members of Congress only)

All attendees can remain in the meeting however, this session is only for Members of Congress to discuss ideas and policies.

This time is set aside for Members of Congress to reflect on what they learned during the conference and discuss their views on implications for U.S. policy.

7 – 9 PM: Working Dinner

Seating is arranged to expose participants to a diverse range of views and provide the opportunity for a meaningful exchange of ideas. Scholars and lawmakers are rotated daily. Discussion will focus on public and private investments in rural development and agricultural research.

SATURDAY, APRIL 15:

8 AM: Participants depart the hotel for the airport to return to the U.S.

Rep. DeGette departs Milan at 11:25 am on United 18 and arrives in Newark airport at 2:25 pm. Because of weather conditions, the flight to the final destination for travelers was cancelled requiring travelers to overnight in a Newark airport area hotel.

SUNDAY, APRIL 16:

Rep. DeGette departs Newark airport at 6 am on United 1098 and arrives in Denver at 8:30 am.

House Appendix
Aspen Institute Congressional Program – Bellagio, Italy – April 10-15, 2023
“Strategies to Ensure Global Food Security” Updated March 10

Question 4: Provide names and titles of all House Members and employees you are inviting. For each House invitee, provide an explanation of why the individual was invited.

These members are invited due to their subject matter interest and expertise in the geopolitical issues to be discussed at the conference.

Rep. Jim Baird; Committee on Agriculture
Rep. Earl Blumenauer; Committee on Ways and Means
Rep. Brendan Boyle; Committee on the Budget
Rep. Ben Cline; Committee on Appropriations
Rep. Diana DeGette; Committee on Energy and Commerce
Rep. Rosa DeLauro; Committee on Appropriations
Rep. Ron Estes; Committee on Ways and Means
Rep. Jenniffer González-Colón; Committee on Natural Resources
Rep. Rick Larsen; Committee on Transportation and Infrastructure
Rep. Jim McGovern; Committee on Agriculture
Rep. John Moolenaar; Committee on Appropriations
Rep. Chellie Pingree; Committee on Agriculture
Rep. Pete Sessions; Committee on Financial Services
Rep. Adam Smith; Committee on Armed Services
Rep. Beth Van Duyne; Committee on Ways and Means

Question 15 (b) 2: If trip involves events that are arranged specifically with regard to congressional participation, provide the reason for selecting the location of the trip.

Italy was selected as the location because the conference is exploring food security and its impact on international political stability, environment and how the world will be fed with less farmable land and more people. Italy allows experts from the Rome-based international food security and United Nation organizations to participate.



Strategies to Ensure Global Food Security:

U.S. Policies to Sustain Supply, Relief and Advance Prosperity

April 10-15, 2023 | Bellagio, Italy

AGENDA

MONDAY, APRIL 10:

U.S. participants depart the U.S. today. *Rep. Diana DeGette departs Denver at 10:07 am on United 1591*

TUESDAY, APRIL 11:

U.S. participants arrive in Bellagio, Italy late afternoon. *Rep. Diana DeGette arrives in Milan at 9:10 am on United 19 and is transported by bus to Bellagio.*

6-7 PM: Pre-Dinner Remarks:

U.S. Role in Global Food Security

Speaker:

Akinwumi Adesina, *President, African Development Bank*

7-9 PM: Working Dinner

Seating is arranged to expose participants to a diverse range of views and provide the opportunity for a meaningful exchange of ideas. Scholars and lawmakers are rotated daily. Discussion will focus on global food security and the U.S. role.

WEDNESDAY, APRIL 12:

8-8:55 AM: Breakfast

9-9:15 AM: Introduction and Framework of the Conference

This conference is organized into roundtable conversations, a luncheon and pre-dinner remarks. This segment will highlight how the conference will be conducted, how those with questions will be recognized, and how responses will be timed to allow for as much engagement as possible.

Speaker:

Charlie Dent, *Executive Director - Aspen Institute Congressional Program*
Vice President, Aspen Institute, Inc.

9-11 AM: Roundtable Discussion***The Looming World Food Price Crisis***

After the height of the COVID-19 pandemic, supply chain issues, inflation, and Putin's ongoing war in Ukraine, a major agricultural exporter, Americans saw the economic effects of these events firsthand with empty grocery store shelves and high food prices. These impacts have shown that while food security remains a humanitarian issue in developing nations, it also can affect world powers, including the United States.

World food price crises are occurring with increasing frequency. We are in the third since 2008, however this is the first to have a significant impact on retail prices in the U.S. and other high-income countries. In low-income countries consumers have suffered severe impact on their food security in all three price spikes.

The current food price crisis is more pronounced and has a greater impact in all regions of the world because it reflects much more than a regional food production shortfall. When COVID-19 closed the economy, American consumers quickly shifted from two-thirds of their food expenditures going to food consumed away-from-home to two-thirds at-home, and supply chains struggled to adjust to that sudden shift. Food processors, particularly animal slaughtering facilities, struggled to sustain production while trying to make the work environment safe enough for employees to continue to come to work.

Animal diseases that caused loss of farm production capacity in several countries have further amplified food price increases. China lost a significant fraction of its pig population (the largest in the world) to a swine disease, and more recently, avian influenza caused the destruction of a substantial fraction of the U.S. laying hen population, causing the price of eggs to explode.

On top of these forces that were already causing food prices to rise came Putin's invasion of Ukraine, followed by sanctions on economic relations with Russia. Both Russia and Ukraine are important agricultural exporters, and Russia is also a significant supplier of fertilizer, an essential agricultural production input, to the world market.

Both agricultural commodity prices and the cost of agricultural production around the world rose further.

This conference will probe in depth the fundamental forces driving food security at the individual, national and global levels today and in the future, in a world in which all agro-ecosystems are migrating due to climate change.

Speakers:

David Beasley, former *Executive Director, World Food Programme*

Chris Barrett, *Director Dyson School of Applied Economics and Management, Cornell University*

David Lane, *President, Annenberg Foundation Trust*

11-11:15 AM: Break

11:15 AM – 1 PM: Roundtable Discussion

Crisis of Global Malnutrition

According to the Food and Agriculture Organization (FAO) of the United Nations, “food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life.” Adequate nutrition and absence of disease are the two essential conditions for health.

Both overnutrition and undernutrition cause hundreds of millions of premature deaths world-wide each year. The health problems associated with obesity are widely addressed in the media. Under reported is the even larger number of deaths every year from starvation from lack of calories and nutritional deficiency diseases from inadequate intake of all the essential amino acids, vitamins and minerals, particularly vitamin A, iodine, iron and zinc.

There are three essential conditions for individual food security:

- Is there a safe, reliable, and reasonably priced supply of all essential nutrients available from local production or the market year around?
- Does the household (or individual) have sufficient purchasing power to access a nutritionally balanced diet from home-grown sources or the marketplace?
- Is a person healthy enough so the nutrients ingested can be absorbed and used by the body?

Very low-income people spend the largest fraction of their income on food. According to the FAO, before COVID-19 struck an estimated 750 million people (10 percent of the world's population) suffered "severe food insecurity," and 690 million went "hungry." According to the FAO's definition, people suffer "hunger" if they lack sufficient purchasing power to access even 1,800 calories per day, not enough to put in a medium level of physical activity. An estimated 75 percent of the extreme poverty in the world is rural, and most are farmers. The majority are female, and half are children.

War, natural disasters, and economic crises cause a great deal of hunger in the world, but chronic hunger, which is much more widespread, is due mainly to poverty. Emergency feeding programs, such as the World Food Programme, play an essential role in addressing human crises, however to "solve" the world's chronic hunger problem (Sustainable Development Goal #2), the world's poverty problem (Sustainable Development Goal #1) should be solved. For the health of the planet, these goals need to be attained in a sustainable manner. To do this, the entire food system must be involved.

This session will review the response to this crisis and address the longer-term challenge of eliminating global poverty and hunger.

Speakers:

Catherine Bertini, *Professor, Maxwell School, Syracuse University; former Executive Director, World Food Programme*

Tjada D'Oyen McKenna, *CEO, Mercy Corps*

1-2 PM: Working Lunch

Discussion continues between members of Congress and scholars on global malnutrition.

2-4 pm: Individual Discussions

Members of Congress and scholars meet individually to discuss topics raised during the conference. Scholars available to meet individually with members are David Beasley, Chris Barrett, David Lane, Catherine Bertini, and Tjada D'Oyen McKenna.

7-9 PM: Working Dinner

Seating is arranged to expose participants to a diverse range of views and provide the opportunity for a meaningful exchange of ideas. Scholars and lawmakers are rotated daily. Discussions will focus on the world food crisis and global malnutrition.

THURSDAY, APRIL 13:

8-8:55 AM: Breakfast

9 -11 AM: Roundtable Discussion:

International Trade and Food Security

The global price of an agricultural commodity is determined by the balance between the volume supplied to the world market by exporting countries and the volume of that commodity purchased from the world market by all importing countries. With its dependency on weather and climatic conditions (rainfall and temperature), agriculture is an inherently risky business. International trade in agricultural commodities is the great balancing wheel that moves farm products from surplus production regions to deficit areas at any point in time. In this sense, international trade is an important food security risk management tool for every country.

With climate change shifting all agro-ecosystems and increasing the frequency of extreme climatic events such as droughts and floods, international trade is likely to take on an even greater national risk management role in the future. International trade needs to be kept as open as politically possible if world markets are to play this balancing wheel and risk management function.

In countries whose natural conditions make it possible to competitively produce more of a commodity than domestic consumers buy - the international market provides larger farm income and the opportunity for the farm sector to make a positive contribution to the country's balance of trade. The U.S. exports about a quarter of its agricultural production, contributing significantly to farmers' income and the U.S. balance of trade.

National food security is the potential for self-sufficiency that is both economically efficient and environmentally sustainable within a given country. The food supply is strategically important to every government. Every country needs to have a reliable, safe and nutritious, reasonably priced supply of food available from some combination of domestic production plus imports minus exports. Political realities prevent any government from putting its citizens in a position of being dependent on imports for its entire food supply.

The volume of future international trade in food and agricultural products will be determined by the dynamic changes that occur in the demand for food relative to the growth in production potential in each country. The world's population is projected to

grow 22 percent from the present eight billion to about 9.8 billion by 2050. Of this, 1.8 billion increase in the number of global mouths to be fed, about 950 million are projected to be in Sub-Saharan Africa, about 500 million in South and Central Asia, and about 200 million in North Africa and the Middle East. The population of East Asia is declining.

East and South Asia have twice as much of the world's population, and virtually all their potentially arable land is already in production. The Middle East and North Africa have land, but they lack enough fresh water. It is hard to construe a scenario in which these three regions can be self-sufficient in food in the future; East Asia and the Middle East and North Africa are already large agricultural importing regions. Sub-Saharan Africa has roughly equal percentages of the world's population and arable land now, but it is the one region whose population is expected to almost double by 2050. A large source of uncertainty about the world's future food supply-demand balance is how successful Sub-Saharan Africa is in achieving its food production potential, which greatly exceeds present levels.

For the world markets for food and agricultural commodities to successfully fulfill their potential balancing wheel role, there should be rules-of-the-road for trade that keep the flows of trade as fluid as possible. Until the Uruguay Round Agreement in 1995 that created the World Trade Organization (WTO), there were no internationally accepted rules-of-the-road for agricultural trade. The fraction of world agricultural production moving through international markets has more than doubled in the years since the Uruguay Round Agreement came into effect, to the significant benefit of American farmers. In recent years, the United States and other countries have backslid on their commitments to freer movement of agricultural products in world trade.

This session will review the projected growth in international agricultural trade. It will further address the importance of keeping international markets as open as possible so they can play the balancing wheel role that will be needed as consumer demand in certain regions outgrows their agricultural production capacity and as greater variability in climatic conditions causes greater year-to-year fluctuations in individual countries' food production.

Speakers:

Maximo Torero, *Chief Economist, FAO*

Joseph Glauber, *Senior Fellow, International Food Policy Research Institute*

11-11:15 AM: Break

11:15 - 1 PM: Roundtable Discussion:
Global Food Security

Global food security is the extent to which the world can produce enough food containing all of the essential nutrients (calories, amino acids, vitamins and minerals) to feed the world's larger population better than today at reasonable cost without damaging the environment. This challenge must be addressed in a holistic manner in which nutrient-dense foods, e.g. fruits and vegetables that have high vitamin and mineral content, are given high priority. Historically, too much focus has been on grain production which supplies calories, but generally leaves deficiencies in various amino acids, vitamins, and minerals.

All agricultural production, regardless of the production system, conventional, organic, or regenerative, begins with the genetic potential embodied in the plant seed or animal egg. Once a plant germinates or an animal is born, how much of that genetic potential is realized depends on adequacy of nutrition for the species' requirements, prevention of diseases that inhibit its growth, and avoidance of competition for nutrients (from weeds in plants and parasites in animals) and for light in the case of plants.

The two basic resources on which plant growth is based are the land, from which crops receive their required nutrients (nitrogen, phosphate, potassium, and some micronutrients) and water. To these must be added the climatic conditions above the land which determine the levels and variability of temperature and precipitation.

There is little more arable land available worldwide (certainly less than 10 percent) that is not presently forested or subject to erosion or desertification. Loss and degradation of many soils continues. The area of land in food production could be expanded more than this, but only by destruction of forests, with accompanying loss of wildlife habitat, biodiversity, and carbon sequestration capacity, all unacceptable environmental outcomes. The only environmentally sustainable alternative is to increase productivity on the fertile, non-erodible soils already in crop production. Most of that available cropland is in remote areas of South America and Sub-Saharan Africa, where infrastructure is minimal, and soils are inferior in quality to many already in production.

There is an area of land larger than what is in crop production which does not receive enough rainfall for annual cropping.

Land may not be the most binding constraint on future global food production. Water is likely to be even more limiting. In their irrigation farmers account for 70 percent of the world's use of fresh water. With the rapid urbanization underway, cities are outbidding farmers for available fresh water. The world's farmers will likely have access to less fresh water in the future than today. To sustain present food production levels, they will have to increase the "crop per drop," the average productivity of the water they use.

This session will review the natural constraints on the world's farmers' ability to produce enough food in an environmentally benign manner to feed the world's larger population better than today. It will take a holistic approach that recognizes the importance of producing enough of all the essential nutrients to sustain human health.

Speakers:

Robert Thompson, *Former Director, Rural Development, World Bank; Former Assistant Secretary for Economics, USDA*

Maximo Torero, *Chief Economist, Food and Agricultural Organization of the United Nations*

1-2 PM: Working Lunch

Discussion continues between members of Congress and scholars on global food security.

2-4 pm: Individual Discussions

Members of Congress and scholars meet individually to discuss topics raised during the conference. Scholars available to meet individually with members are Maximo Torero, Joseph Glauber, Robert Thompson, Pamela Ronald, and Agnes Kalibata.

7-9 PM: Working Dinner

Seating is arranged to expose participants to a diverse range of views and provide the opportunity for a meaningful exchange of ideas. Scholars and lawmakers are rotated daily. Discussions will focus on U.S. international trade and global food security.

FRIDAY, APRIL 14:

8-8:55 AM: Breakfast

9-11 AM: Roundtable Discussion:

Public and Private Investments in Agricultural Research

There are important roles to be played in reducing future food insecurity by investments by both the public and private sectors, as well as by philanthropy. Economic analysis has demonstrated that investments in agricultural research have a high financial rate of return in both the public and private sectors.

Public support for agricultural research played a major role in the economic development of American and European agriculture. The resulting technologies were made freely available to all, often pushed out through an extension service which served as a two-way conduit of farmers' problems to researchers and solutions back to farmers.

The private sector also played an important role in research on farm machinery, pesticides, and animal pharmaceuticals. To pay for the research (both successes and failures) and to provide a return to owners or shareholders, the resulting technology is embodied in something farmers buy. This is possible only when the intellectual property resulting from the research can be protected by patents or other "do not reproduce for sale" rules. In recent decades, with increased ability to patent biological materials, the private sector has come to play a much larger role in developing new agricultural technologies embodied in plant seeds than previously. In all cases the sales arms of the private sector companies play important roles in technology transfer to farmers.

Despite the high rate of return on both public and private investments in agricultural research and technology transfer, public support for it has been falling in the United States, Europe and other high-income countries (in both domestic research and that financed through their foreign aid). Today the governments of both Brazil and China invest more in agricultural research than the United States. Public support to domestic agricultural research institutions has dropped in recent decades across the high-income countries; the same has happened in their foreign aid.

Agricultural technologies often require very specific local agro-ecological conditions (soil and climate), so additional research is often necessary to adapt a crop to the conditions in a specific region. The tools of agricultural science are highly mobile across countries, but individual varieties or breeds often need additional research to optimize them for other locations than their origins. With all agro-ecosystems migrating away from the Equator and the incidence of extreme climatic conditions increasing, it is going to take more adaptive research just to sustain present productivity levels.

This brings us to the challenge of meeting the agricultural research needs of food-insecure countries which have large numbers of impoverished farmers. Those farmers often lack the purchasing power to access improved seeds even if they are

available, or lack sufficient collateral to access credit, even where credit institutions exist.

To meet future global food demand sustainably will require increases in global food system productivity. Where possible, we will need to make presently unusable soils productive, increase the genetic potential of individual crop and animal species in the face of climate change, increase the productivity of the water used, reduce competition from weeds in crop production and parasites in animal production, and reduce post-harvest losses, all in an environmentally benign manner.

Fortunately, we are in the golden age of the biological and information sciences. The tools of modern science give us the potential to:

- Improve the nutritional content of staple foods (augment the deficient vitamins, minerals, and protein)
- Increase tolerance to adverse growing conditions (e.g. drought, temperature, wetness; salt)
- Internalize resistance to insects and diseases to reduce pesticide use
- Slow down quality deterioration in perishables
- Increase precision in application of fertilizer nutrients and pest control media.

There is huge potential in food science research to enhance future food security. The next frontier includes vertical farming (growing plants in high rise buildings using hydroponics and artificial light), plant-based meats and beverages, cell-cultured meats and milk produced in largest fermentation vessels, and many others. A big question is whether these can be scaled up sufficiently to bring the unit cost of production down sufficiently to be competitive and provide a sufficient return to investors to attract the necessary capital. Many venture capitalists are betting that this is possible.

This session will explore the potential for modern biological and information sciences to contribute to future global food security in an environmentally benign way in a world with changing climate.

Speakers:

Pamela Ronald, *Professor of Plant Pathology, University of California, Davis*
Agnes Kalibata, *President, Alliance for a Green Revolution in Africa; Former Minister of Agriculture, Rwanda*

11-11:15 AM: Break

11:15 AM-1 PM: Roundtable Discussion:
Investments and Rural Development

Emergency feeding programs will be needed to respond to food insecurity resulting from war, natural disasters and politically imposed famine; however, they will not solve the chronic food insecurity experienced by 10 percent of the world's population. To solve chronic food insecurity, a reliable supply of foods that contain enough energy and essential amino acids, vitamins, and minerals to maintain health should be available from local production or markets. Availability is the necessary condition for eliminating hunger, but to eliminate hunger people should have sufficient purchasing power to access the available food. Since the extreme poor spend most of their meager incomes on food, the purchasing power of their income is determined mainly by the price of food.

An estimated 75 percent of the extreme poverty in the world is in rural areas, and most of the poor are farmers.

Poverty is the motivation for a great deal of migration of the rural poor to higher income countries, and billions of dollars of the income they earn there get remitted back to their home countries each year. The large number of these migrants working in the U.S. and Europe, both documented and undocumented, has caused a significant political backlash against immigration. Moreover, few low-income country governments have the budgetary capacity or political motivation to make large income transfers to their low-income farmers.

A much more attractive long-term solution is to increase low-income farmers' income from the marketplace. The agricultural sector in many low-income countries is significantly underperforming relative to its potential. Current crop yields fall short of their agronomic potential consistent with economic efficiency and environmental sustainability. In Sub-Saharan Africa, for example, average crop yields are estimated to be only 25 percent of their agronomic potential using presently available technology.

The first means of reducing farmers' poverty is to increase productivity of the crops they are already growing. Next, farmers can change what they are producing to higher value-per-acre crops, e.g. fruits, vegetables, or nuts, or add livestock, poultry or aquaculture, to their product mix. Another way is for farmers to acquire more land or other income-generating assets, such as education, in particular literacy, numeracy, and agronomic and animal husbandry skills and management skills to manage a larger farm. The next step is for significant numbers to leave farming completely and become employed in the non-farm sector. When this happens, both those who leave and those

who stay behind in farming and can gain access to more land have the potential to earn higher incomes. In very low-income countries the fraction of the workforce engaged in farming is often over 50 percent, while in the highest income countries it is in the very low single digits.

The private sector needs to build the agricultural input and product marketing, storage, and processing infrastructures (including cold chain to reduce post-harvest losses of perishables) which are critical to successful agricultural development. The track record of the public sector in these areas is not positive. The best role for the public sector is to define and enforce the rules-of-the-road for investment and commerce.

There are no quick fixes to rural poverty and associated hunger or to the underperformance of agriculture relative to its potential in low-income countries. Immense amounts of capital investment will be needed. The capital investment requirements to provide the essential rural public goods (rural roads, agricultural research and extension, and rural education and health services) vastly exceed the capacity of most low-income governments. This is where foreign aid, lending by international development banks, and philanthropy can play a critical role in supplementing low-income countries' own resources.

This session will review the roles that need to be played by the public and private sectors to achieve significant reductions in poverty and hunger in the world. Particular emphasis will be put on rural areas, where the largest concentrations of poverty and hunger exist. The magnitude of the investments needed by the public, private and philanthropic sectors will be discussed.

Speakers:

Rajiv Shah, *President, the Rockefeller Foundation*

Robert Paarlberg, *Professor Emeritus of Political Science, Wellesley College*

1-2 PM: Working Lunch

Discussion continues between members of Congress and scholars on investments and rural development.

2:30-3:15 AM: Roundtable Discussion:

Key Conference Takeaways with the Rapporteur

Policy Reflections (Members of Congress only)

All attendees can remain in the meeting room however this session is for discussion for only Members of Congress to talk about ideas and policies.

7-9 PM: Working Dinner

Seating is arranged to expose participants to a diverse range of views and provide the opportunity for a meaningful exchange of ideas. Scholars and lawmakers are rotated daily. Discussion will focus on public and private investments in rural development and agricultural research.

SATURDAY, April 15:**8:15 AM: Participants depart for the airport to return to the U.S.**

Rep. Diana DeGette departs Milan at 11:25 am on United 18 and arrives in Denver at 7:39 pm on United 1127.



**CONGRESSIONAL
PROGRAM**
aspen institute

The Honorable Diana DeGette

**U.S. House of Representatives
Washington, DC 20515-0306**

Dear Representative DeGette,

I would like to invite you and Lino to participate in a bipartisan, bicameral congressional conference on ***Strategies to Ensure Global Food Security in Bellagio, Italy, April 10-15, 2023***. Participants would depart the U.S. on Monday, April 10 and return to the U.S. the evening of Saturday, April 15. We have limited space, so this invite does not guarantee a seat at the conference table. If you would like to participate, please get back to us **by Tuesday, January 31, 2023**.

After the height of the COVID-19 pandemic, supply chain issues, inflation, and Putin's ongoing war in Ukraine, a major agricultural exporter, Americans saw the economic effects of these events firsthand with empty grocery stores and high food prices. These impacts have shown that while food security remains a humanitarian issue in developing nations, it also can affect world powers, including the United States. We will have scholars and experts lead our discussions on confronting food security challenges that the United States and the world face today while also addressing the role our country plays as a world leader.

Attendance is by invitation only, no outside observers, no lobbyists, no congressional staff, and no media. All conference sessions are off-the-record. No foreign governments or special interest funds are accepted to fund the Aspen Institute Congressional Program. As required by the House and Senate ethics rules, we will provide congressional participants with ethics private sponsor forms completed and signed.

Travel expenses, including airfare, meals and lodging will be paid for by the Aspen Institute; no expenses for entertainment or recreation are paid for in compliance with ethics rules.

The Congressional Program is part of the Aspen Institute, Inc. a nonprofit organization founded in 1950. The Congressional Program is celebrating its 40th year this year and was created to promote leadership on public policy by bringing together legislators from both political parties with internationally renowned scholars for high level discussions and analysis. Since our program's inception, more than 485 members of Congress have participated in the 151 domestic and international conferences.

We hope you can join us for this important conference.

Sincerely,

Charlie Dent

Charles W. Dent
Former Member, U.S. Congress (PA-15th, 2005-2018)
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