

NOTICE OF FUNDING OPPORTUNITY

FY2023 Cochran Fellowship Program

Application Submission Deadline: August 25, 2023

Summary

The U.S. Department of Agriculture, Foreign Agricultural Service (FAS), Fellowship Programs, announces this funding opportunity to support the Cochran Fellowship Program (CFP) by issuing new awards. This opportunity is available to State cooperative institutions or other colleges and universities in the United States, as defined at 7 USC 3103. This program is intended to support applied research, extension, and education collaborations between U.S. researchers and their foreign counterparts from selected emerging market economies.

A. Program Description

BACKGROUND

Since 1984, the U.S. Congress has made funds available to the Cochran Fellowship Program for training agriculturalists from middle-income countries, emerging markets, and emerging democracies. Training opportunities are for senior and mid-level specialists and administrators working in agricultural trade and policy, agribusiness development, management, animal, plant, and food sciences, extension services, agricultural marketing, and many other areas. Individuals selected for Cochran trainings come from both the public and private sectors. All training occurs in the United States. Training programs are designed and organized in conjunction with U.S. universities, USDA and other government agencies, agribusinesses, and consultants. The Cochran Fellowship Program is part of the United States Department of Agriculture's Foreign Agricultural Service. Since its start in 1984, the Cochran Fellowship Program has provided U.S.-based training for over 19,250 international participants from 127 countries worldwide.

SCOPE AND LEARNING OBJECTIVES

Please see appendix for full SOWs and learning objectives.

- Adoption of Biotechnology and Science-Based Agricultural Policy for Burundi, Democratic Republic of Congo, Kenya, Malawi, Republic of Congo, Tanzania and Uganda
- Community Based Aquaculture Development for Senegal
- Women in Agriculture: Entrepreneurship for Food Processing, Packaging and Value Chain for India
- Peoples Republic of China – Feed Ingredients for Aquaculture and Animal Husbandry
- Peoples Republic of China – Food Service Chief Training Program
- Climate Smart Agriculture for Vietnam
- Effective Implementation of Climate Smart Agricultural Technology for Thailand
- Biotechnology Adoption and Biosafety for Guatemala, El Salvador, and Honduras
- Biotechnology: Policies, Management, and Public Outreach for Argentina and Paraguay
- Climate-Smart Agricultural Practices and Extension for Dominica, Grenada, St. Lucia, St. Vincent and the Grenadines, and Guyana
- Post-Harvest and Storage Handling of U.S. Grains for Dominican Republic

- Partnerships for Climate-Smart Commodities Initiative for Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, and Peru
- Hotel Foodservice Industry Trends & Best Practices for Mexico, Monterrey
- Stock Inventory Management for Peru and Ecuador
- U.S. Tree Nuts as Food Ingredients for Brazil
- Hotel Foodservice Industry Trends & Best Practices for Mexico
- Introduction to U.S. Gastronomy and Food Ingredients for Colombia
- Promotion & Marketing of U.S. Seafood for Ghana, Cote d'Ivoire, Togo
- U.S. Private Label Management for People's Republic of China
- Utilization of American Softwood for Vietnam
- U.S. Sweets and Snacks for Bangladesh
- Marketing and Grading of U.S. Hardwood for Pakistan
- Overview of U.S. East Coast Seafood and New Species for People's Republic of China
- Promotion of U.S. Tree Nuts for Turkey
- Building Resilience through Climate-Smart Agriculture for Bosnia and Herzegovina
- Overview of Animal Health and Disease Management for Bosnia and Herzegovina
- Climate Smart Agriculture and Food Systems Innovation for Serbia
- Women in Agriculture Entrepreneurship and Food Production for Serbia
- Overview of Climate-Smart Agricultural for Turkey

The Cochran Fellowship Program intends to support the design and delivery of a training program of 1-2 consecutive weeks duration, to take place in either calendar year 2023 or 2024 depending on availability of all parties, for 12 Fellows from multiple countries. More than one such program may be supported.

The host institution shall propose the place(s) of performance in their Technical Proposal.

Funding Opportunity Number

USDA-FAS-10962-0700-10.-23-0008

Assistance Listing Number

10.962 Cochran Fellowship Program

Authorizing Legislation

National Agricultural Research, Extension, and Teaching Policy Act of 1977, PL 95-113, as amended, 7 USC §§ 3291 and 3319a

B. Federal Award Information

Total Available Federal Funding:	Up to \$4,350,000 total, up to \$150,000 per award
Anticipated Number of Awards:	up to 29
Cost Share/Match Requirement:	None/Not Required

Projected Period of Performance Start: October 1, 2023

Projected Period of Performance End: January 31, 2025

Extensions to this program are permitted, subject to approval.

Type of Assistance Instrument:

USDA/FAS anticipates that a Cost-Reimbursable Agreement will be funded pursuant to this funding opportunity.

This type of agreement allows for a collaborative relationship between USDA/FAS, the selected recipient, and other collaborating partners. The scope and depth of this collaboration may vary throughout performance, depending on the needs of the activity and the desires of the participants.

Additional Awards

USDA/FAS reserves the right to make additional awards under this solicitation, consistent with Agency policy and guidance, if additional funding becomes available after the original selections are made. Any additional selections for awards will be made no later than 6 months after the original selection decisions.

C. Eligibility Information

Eligible Applicants:

State cooperative institutions or other colleges and universities in the United States, as defined at 7 USC 3103

All applicants must have an active registration in the U.S. Government System for Award Management (www.sam.gov) before the application submission deadline of the announcement; applicants with inactive, expired, pending, or excluded listings will be deemed ineligible. Exceptions, waivers, or extensions will not be considered. Please contact the program officer(s) listed in Section G, Federal Awarding Agency Contact, if you have questions about this requirement.

Cost Share/Match Requirement: None/Not Required

Ineligible activities: If an application is submitted that includes any ineligible tasks or activities, that portion of the application will be ineligible for funding and may, depending on the extent to which it affects the application, render the entire application ineligible for funding.

D. Application and Submission Information

This announcement contains all information necessary to apply to this funding opportunity.

Submission Dates and Times

Application Submission Deadline: August 25, 2023 at 11:59pm EDT (UTC -04:00)
Applications received after this time will not be accepted. Applicants are advised to make their submissions 1-2 days before this deadline in case of computer problems.

Anticipated Funding Selection Date: September 8, 2023

Anticipated Award Date: October 1, 2023

Content and Form of Application Submission

A complete application package must include:

- Standard Form SF-424, Application for Federal Assistance, showing the Unique Entity Identifier, and signed by the applicant.
- Standard Form SF-424A, Budget Information for Non-Construction Programs, showing the budget categorization. Applicants are advised to consult 2 CFR 200 Subpart E for guidance on proper categorization of cost items. An improper categorization will not itself be grounds for a determination of ineligibility but may delay approval and/or adversely impact the application's scoring.
- A detailed budget and narrative, in which cost items are quantified and described in sufficient detail to enable USDA/FAS to independently determine that the proposed costs are reasonable and allowable for the project and consistent with applicable regulations.
- A detailed project narrative or plan of operation
 - Indicate the name of the institution applying to host the fellows;
 - Indicate which SOW (see Appendix) the institution is applying to host;
 - Indicate the proposed place(s) of performance;
 - Provide an approach to achieve the objectives listed in each section, including topics to be covered, possible field visits and other activities;
 - A description of how the award, including the logistical elements, will be administered and the role of the university faculty and support staff;
 - A summary of relevant institutional capabilities for hosting international fellows in the applicable topic;
 - A brief description of the expertise and international experience of the recipient in the group's field of interest and various countries;
 - An overview of the trainer's qualifications in international training and/or adult education, understanding of the cultural context and needs of the trainees, and knowledge of relevant agricultural, market, and/or trade conditions within the Fellows' country(ies) or a similar location. Including steps that will be taken for cultural relevancy for Fellows of varying backgrounds and religions, for instance dietary restrictions.
 - If necessary, other appropriate collaborating scientists should be identified to meet any of the objectives which the primary trainer cannot address.
 - The skills or knowledge expected to be acquired by the fellows at the end of the program;
 - Means of flexibility to account for potential program changes and the ability to respond to unforeseen circumstances; this should include information on how unforeseen problems that can arise will be addressed.
 - A quality assurance plan.

- Application following designated format:
 - Clearly outline all aspects of the program plan – what is planned, how this will be conducted, and the anticipated results;
 - Be written in English and free of excessive grammatical and spelling errors;
 - Be written using Times New Roman, 12-point font; tables and graphs may have a smaller font as appropriate, all other text font and size should be consistent throughout the application;
 - Be typed on standard 8.5” x 11” sized pages with 1-inch margins;
 - Be paginated with each page consecutively numbered;
 - Cite source information and/or provide an explanation of the analysis undertaken;
 - Be submitted in PDF.
- Standard Form SF-LLL, Disclosure of Lobbying Activities, if applicable to the applicant

While these guidelines establish the minimum type size requirements, applicants are advised that readability is of paramount importance and should take precedence in selection of an appropriate font for use in the application.

Applicants may submit more than one application from the provided SOWs (see Appendix).

Unique entity identifier and System for Award Management (SAM)

Each applicant is required to:

- (i) Have an active registration in SAM before submitting its application;
- (ii) Have assented to the federal assistance certifications in the SAM platform;
- (iii) Provide a valid Unique Entity Identifier (UEI) in its application; and
- (iv) Continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a federal awarding agency.

SAM.gov registration requires several weeks to process and cannot be expedited; prospective applicants should therefore ensure that registrations are submitted timely.

SAM.gov Registration Instructions

Organizations applying to this funding opportunity must have an active SAM.gov registration. If you have never done business with the Federal Government, you will need to register your organization in SAM.gov. If you do not have a SAM.gov account, then you will create an account using login.gov¹ to complete your SAM.gov registration. SAM.gov registration is FREE. The process for entity registrations includes obtaining Unique Entity ID (UEI), a 12-character alphanumeric ID assigned an entity by SAM.gov, and requires assertions, representations and certifications, and other information about your organization. Please review the [Entity Registration Checklist](#) for details on this process.

¹ Login.gov a secure sign in service used by the public to sign into Federal Agency systems including SAM.gov and Grants.gov. For help with login.gov accounts you should visit [http://login.gov/help](https://login.gov/help).

Entities outside the United States (defined at 2 CFR 200.1 as “[foreign organizations](#)” and “[foreign public entities](#)”) must obtain a NATO Commercial and Government Entity (NCAGE) Code prior to SAM.gov registration. An NCAGE is required for all foreign entities prior to registering in SAM.gov. You can complete the registration once you enter the NCAGE. You can submit your request for an NCAGE Code by going to the NATO Support Activity (NSPA) NCAGE Request Tool at [CAGE/NCAGE Code Request](#) which contains detailed instructions.

If you have done business with the Federal Government previously, you can check your entity status using your government issued UEI to determine if your registration is active. SAM.gov requires you renew your registration every 365 days to keep it active.

Please note that SAM.gov registration is different than obtaining a UEI only. Obtaining an UEI only validates your organization’s legal business name and address. Please review the [Frequently Asked Question](#) on the difference for additional details.

Organizations should ensure that their SAM.gov registration includes a current e-Business (EBiz) point of contact name and email address. The EBiz point of contact is critical for Grants.gov Registration and system functionality.

Contact the [Federal Service Desk](#) for help with your SAM.gov account, to resolve technical issues or chat with a help desk agent: (866) 606-8220. The Federal Service desk hours of operation are Monday – Friday 8am – 8pm ET.

Intergovernmental Review

Not applicable.

Funding Restrictions

Generally, funds may not be used in any manner that is prohibited by applicable regulations, including 2 CFR Part 200 and 2 CFR Part 400. Awards issued pursuant to this notice of funding opportunity may only be used for the purpose set forth in the award, consistent with the statutory authority for the award. Capital expenses, such as the purchase of equipment, not entirely attributable to this award, must be pro-rated.

For example, agreement funds and other support may not be used for matching contributions for other federal grants or cooperative agreements, lobbying, or intervention in federal regulatory or adjudicatory proceedings. Federal employees are prohibited from acting as an agent of the applicant in any capacity (paid or unpaid) on any proposal submitted under this program. Also, federal funds may not be used to sue the Federal Government or any other government entity.

Compensation for personal services: Employees, consultants, or other personnel, including those of subrecipients, and regardless of the method of engagement, may not exceed the pro-rata equivalent of GS-15 on the General Schedule (for 2023, \$152,771 per year, \$585.33 per day, or \$73.17 per hour). Non-monetizable fringe benefits, such as health insurance coverage, are not included to this ceiling.

Indirect Costs: In general, costs incurred for a common or joint purpose benefitting more than one cost objective but not readily assignable to specific awards, without effort disproportionate to the results achieved, are considered indirect costs. These may include facilities not specific to individual projects, enterprise-wide services such as IT, and enterprise management. For cost-reimbursable agreements, indirect costs may not exceed 10% of direct costs, as stipulated at 7 USC 3319a.

Other Submission Information

Applications should be submitted through the ezFedGrants system at <https://grants.fms.usda.gov/>

Applicants who require assistance with any USDA-managed computer system should reach out to the program officer(s) listed in Section G, Federal Awarding Agency Contact, at least 5 business days in advance of the application submission deadline. Applicants should provide as much detail as possible to facilitate resolution of the issue.

HOST INSTITUTION SHOULD PROVIDE:

- Ground transportation in applicable cities; except Washington, D.C.
- The Fellows' travel and subsistence expenses (domestic airfare and per diem allowance)
- Secure and guarantee Fellows' lodging during the entire program

E. Application Review Information

Review and Selection Process

In all cases, the agency will conduct an initial responsiveness review of all applications submitted to determine:

- 1) the application was submitted on time as specified in this announcement (See Section D. Application and Submission Information);
- 2) the applicant is eligible (see Section C. Eligibility Information);
- 3) all the required forms and documents are submitted no later than the Application Submission Deadline specified in Section D. Application and Submission Information, Content and Form of Application Submission.

If an applicant is determined to be ineligible or an application is determined to be incomplete, the agency will notify the applicant prior to commencing with evaluation of applications, usually within 5 business days of the Application Submission Deadline. An applicant that feels such a determination is made in error may request reconsideration, highlighting evidence supporting their claim, by email to the program officer(s) listed in Section G, Federal Awarding Agency Contact, within 3 business days of notification.

The agency will convene a review panel, which may include both federal and non-federal reviewers, to review the eligible applications against the evaluation criteria described below. The reviewers will ensure that the applicant is capable of delivering the programs/activities as described in the announcement based on the applicant's project narrative and assign a score and provide summary comments based on the evaluation criteria identified below. The review panel will make a recommendation list to the selecting official, who is not a member of the panel.

The selecting official may select applications out of rank order in consideration of strategic program priorities, such as geographical distribution, incorporation of minority-serving institutions, or congressional directive. Selection determinations are final and cannot be appealed.

Prior to selection, the agency may contact the highest-ranking applicants to seek clarification and to negotiate technical and programmatic aspects of the application. If an application includes a subaward, FAS may request to speak with all parties included in the application to ensure sufficient planning and coordination has taken place prior to making an award.

Evaluation Criteria

Applicants will be evaluated on the extent and quality to which they demonstrate that they have the capabilities, staff, resources, and equipment to successfully perform the project as described in the following factors. Scoring will also be based on the level of detail and how clearly the applicant's capacities to address these factors are outlined in the proposal.

Technical Expertise (30 points)

Applications will be evaluated on the extent and quality to which they demonstrate they have the technical background as well as experience and knowledge of relevant agricultural conditions within the Fellows' country(ies).

Experience (10 points)

Applications will be evaluated on the extent and quality to which they demonstrate experience in implementing international trainings and adult education programming.

Training Plan (30 points)

Applications will be evaluated on the extent and quality to which the training program plan fulfill specific training objectives and is relevant to the Fellows' backgrounds as identified in Section A, including appropriate site visits and meetings.

Quality Assurance Plan (10 points)

Applications will be evaluated on the extent and quality to which they provide a quality assurance plan to ensure that quality of the training is being maintained throughout the duration of the program and demonstrates the flexibility to sustain training quality when there are unforeseen circumstances or requested changes to the training plan.

Budget (15 points)

Applications will be evaluated on the reasonableness, cost-effectiveness, and adequacy of the proposed budget to accomplish the project. The budget will be evaluated on cost savings, where available, and the inclusion of a budget narrative for each line item.

Overall Quality (5 points)

Applications will be evaluated on comprehensiveness, completeness, and correct spelling and grammar.

Integrity in Performance

Prior to making a Federal award, the Federal awarding agency is required by [31 USC 3321](#) and [41 USC 2313](#) to review information available through any OMB-designated repositories of government-wide eligibility qualification or financial integrity information. Therefore, application evaluation criteria may include the following risk-based considerations of the applicant: (1) financial stability; (2) quality of management systems and ability to meet management standards; (3) history of performance in managing federal award; (4) reports and findings from audits; and (5) ability to effectively implement statutory, regulatory, or other requirements.

F. Federal Award Administration Information

Federal Award Notices

Successful applicants will be notified of the status of their application/award by email. This notification is not authorization to proceed, and such notification should be construed as provisional.

Administrative and National Policy Requirements

All successful applicants for all grant and cooperative agreements are required to comply with the applicable General Administrative Terms and Conditions, which can be found at https://www.fas.usda.gov/grants/general_terms_and_conditions/default.asp

The applicant is presumed to have read, understood, and accepted these terms when accepting a USDA/FAS award. Applicants with questions about the applicable terms should contact the program officer(s) listed in Section G, Federal Awarding Agency Contact.

The applicable Terms and Conditions will be for the last year specified at that URL.

Before accepting an award, the applicant should carefully read the award package for instructions on administering the award and the terms and conditions associated with responsibilities under Federal Awards. Recipients must accept all conditions in this NOFO as well as any Special Terms and Conditions in the Notice of Award to receive an award under this program.

Applicants must ensure that they have the necessary processes and systems in place to comply with the subaward and executive total compensation reporting requirements established at [2 CFR 170](#), unless they qualify for an exception from the requirements, should they be selected for funding.

Government Furnished Items

USDA FAS will provide Fellows with:

- J-1 compliant Emergency Medical Insurance
- DS-2019/J-1 visa support for Fellows and related SEVIS requirements

Post-Award Performance Expectations

- Provide digital copies of the training highlights to each Fellow and the Cochran Fellowship Program.

- Ensure that each Fellow completes the Cochran Training Program Evaluation (which will be provided).
- Development of an Action Plan by each Fellow. The Action Plan identifies goals and outlines specific steps or activities which each Fellow will perform upon return to home country. An Action Plan generally includes steps, milestones, measures of progress, responsibilities, assignments, and a timeline. The recipient shall provide a copy of each Fellow's Action Plan to the Cochran Fellowship Program.
- A brief final report (format at the discretion of the applicant).
- A pre-training questionnaire to determine Fellows' baseline knowledge of the learning objectives. (Template and examples shall be provided upon request)
- A post-training questionnaire to determine the knowledge gained in each of the learning objectives. (Template and examples shall be provided upon request)
- Analysis of the pre- and post-training questionnaire.
- Deliverables are due two weeks after the completion of each training.
- All transportation within the United States, from the point of arrival to the point of departure.
 - The recipient is not responsible for international airfare of participants.
 - Please include baggage fees for any domestic flights.
- Lodging accommodation, in single occupancy, for all participants.
- Implementors should offer appropriate cross-cultural activities for the purpose of sharing language, culture, or history in accordance with J-1 Visa requirements.
- Please note all meetings with Federal Government offices or officials must be initiated by the Fellowship Programs team.

Reporting

Financial Reports, using form SF-425, Federal Financial Report (FFR), must be submitted semi-annually, within 30 days of the end of the reporting period. A final financial report must be submitted within 120 days of the end date of the agreement.

Performance Progress Reports must be submitted semi-annually, within 30 days of the end of the reporting period. A final performance progress report must be submitted within 120 days of the end date of the agreement. The recipient may use any appropriate format for performance progress reports, provided the report includes:

- a) a comparison of actual accomplishments for the period;
- b) The reasons why established goals were not met, if appropriate; and
- c) Additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.

Recipients are encouraged to include photographs and other supplemental material in performance progress reports. For awards in which the total lifetime value exceeds \$500,000, additional reporting may be required as described in [Appendix XII to 2 CFR 200](#).

Monitoring

USDA/FAS through its authorized representatives, has the right, at all reasonable times, to make site visits to review project accomplishments and management control systems and to provide

such technical assistance as may be required. During site visits, USDA/FAS will review recipients' files related to the program.

As part of any monitoring and program evaluation activities, grant recipients must permit USDA/FAS, upon reasonable notice, to review assistance agreement-related records and to interview the organization's staff and clients regarding the program, and to respond in a timely and accurate manner to FAS requests for information relating to the program.

Closeout

Within 120 days after the end of the period of performance, or after an amendment has been issued to close out a grant, whichever comes first, recipients must submit a final FFR and final progress report detailing all accomplishments and a qualitative summary of the impact of those accomplishments throughout the period of performance. After final reports have been reviewed and approved by the agency, and any residual amount due to the recipient or due to be returned to the agency, the award is subject to closeout. Acceptance of final reports by the agency constitutes a closeout of the award with no further notice or obligation to either party. This acceptance will indicate the period of performance has expired, and any remaining funds will be deobligated. Records must be retained for a minimum of three years after the final reports are submitted.

G. Federal Awarding Agency Contact

For all inquiries, contact:

Desiree Lawrence

Desiree.Lawrence@usda.gov

202-690-0947

Hours of Operation: 8:00 AM to 4:30 PM ET

Inquiries will be returned within 24 working hours (3 business days). All questions must be received no later than 16 working hours (2 business days) prior to application submission deadline (See Section D). The agency contact listed will confirm receipt of applications upon request.

*Please identify the opportunity to which you are applying in your email correspondence by including the name of the program in the email subject line and any additional details as necessary.

H. Other Information

Budget Revisions

Transfers of funds between direct cost categories in the approved budget when such cumulative transfers among those direct cost categories exceed ten percent of the total budget approved in this Award require written approval from the agency. The total budget amount may not be increased without a bilaterally executed amendment to the award.

Post-award program income

In the event program income becomes available to the recipient post-award, it is the recipient's responsibility to notify the USDA/FAS Program Manager to explain how that development occurred, as part of their request for guidance and/or approval. If approval is granted, an award modification will be issued with an explanatory note in the remarks section of the face page concerning guidance and/or options pertaining to the recipient's approved recipient's approved request. All instances of program income shall be listed in the progress and financial reports.

Appendix:

**Cochran Fellowship Program
Adoption of Biotechnology and Science-Based Agricultural Policy
for Burundi, Democratic Republic of the Congo, Kenya, Malawi, Republic of the Congo,
Tanzania, and Uganda**

SCOPE OF WORK

The Cochran Fellowship Program's Africa and the Middle East Region is requesting the design and delivery of a training program for twelve Fellows from Burundi, Democratic Republic of the Congo, Kenya, Malawi, Republic of the Congo, Tanzania, and Uganda. The Fellows are biotech stakeholders who will advocate for science-based agricultural policy and to push back against wide-spread misinformation.

Biotechnology is a key component in resolving challenges such as food security and climate change and restrictions on biotechnology affecting regional counties. These represent some of the most important barriers to U.S. agricultural exports in the region. This program should provide an overview of biotechnology to assist Fellows in agricultural policy within Eastern Africa.

Fellows should learn how to engage with the public, government officials, farmers, and food processors to improve the understanding of biotechnology agricultural issues among Burundian, Congolese, Kenyan, Malawian, Tanzanian, and Ugandan policymakers and the general public. The training should include visits to: Washington, D.C. area to meet with the U.S. agencies that regulate genetically engineered (GE) products (FDA, EPA, and USDA); local/state agencies (implementing role of local government agencies); at least one major biotechnology company; farms cultivating GE crops especially showing farmers' adoption of technology in collaboration with environmental stewardship; livestock farms feeding GE feeds (such as poultry and dairy); GE field trials; research facilities (private, public); and a university.

The objective of the program is to help East African government officials develop a science-based and transparent approach to GE regulation and the effective use of biotech risk communication. The goal of this training program is to increase the Fellows' capacity for agricultural research, extension, and participation in international trade; and to promote a science-based approach to GE policy development and introduce new technologies to enhance trade linkages between the United States and Burundi, Democratic Republic of the Congo, Kenya, Malawi, Republic of the Congo, Tanzania, and Uganda.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge regarding agricultural biotechnology in the following areas:

- Risk communication in agricultural biotechnology:
 - Communication tools: how to deliver effective messages

- U.S. consumers' perceptions of biotech products
- Safety communication in mass media to the public/consumers
- How agricultural associations handle negative consumer perceptions and false information on food and agriculture
- How does the USG convey science and risk information effectively to consumers?
- U.S. and global policies for biotech regulation (biotech review/approval approaches/procedures):
 - Organizational structure of U.S. federal and local government agencies regulating/implementing biotech (FDA, EPA, USDA/APHIS, state agencies)
 - Current legislations and policies
 - Recent policy developments, including decision on how gene edited products will be regulated
 - Approval procedures by U.S., what is approach in EU, and other countries
 - Risk management/risk assessment for food and feed: Food safety, environmental, and plant pest
 - How non-governmental organizations work in cooperation with U.S. government agencies, including how they provide input on regulations
 - How the U.S. government manages communication on biotech products and scientific issues
 - The import/export controls/inspections
 - How to conduct official import controls of GE products (traceability)
- Biotech production, supply and demand:
 - Biotech cultivation situation in the United States and globally
 - Global consumption, export and import statistics of GE products
 - The reasons for farmers cultivating and using GE products Economics of biotech production (cost/benefit)
 - Environmental benefits of GE crop production currently and opportunities for new plant breeding techniques to help with challenges in agriculture (drought, pests, diseases, climate change, etc.)
 - Economic impact on consumers (cost/benefit)
- Research and development:
 - Progress in GE product development
 - How do technology companies develop GE crops and how do they collect the data used for the dossiers?
 - Scientific information/evidence that GE products are not causing cancer or any other health problems for humans and animals in feeding systems

Cochran Fellowship Program Community Based Aquaculture Development for Senegal

SCOPE OF WORK

The Cochran Fellowship Program's Africa & Middle East Team is requesting the design and delivery of a training program on Community Driven Aquaculture Development for eight Fellows from Senegal.

The aquaculture sector in Senegal is facing a growing demand for high quality fish and seafood products, but is hampered by overfishing, illegal and underreported fishing leading to depleted fish stocks.

The program should provide an in-depth overview of basic climate adaptation tools and technologies that are feasible to adopt in a low-resource environment and youth and women empowerment in the aquacultural sector. Fellows should receive an understanding of sustainable fish farming, using renewable and efficient fish feed, and receive an understanding of ways to increase food security and international trade. The training program should include fish farming technology, nutrition and feeding, processing, and food safety, and visits to/with feed processing plant, fish farm, producers, and aquaculture research institutions.

The objective of this program is to help drive income generating activities in aquacultural communities in Senegal focusing on climate adaptation practices for low-resource and low-income countries. The goal of this program is to increase the Fellows' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- Climate Adaption Tools and Practices
- Income Generating Activities for rural community aquaculture development
- Proper resource management of aquacultural resources
- Understanding U.S. aquaculture systems and fish farms
 - Fish production and processing
 - Entire fish production and processing chain (tilapia, silverside fish, shellfish)
 - Aquaculture regions in the United States (tropical and sweet water aquaculture)
- Understanding U.S. aquaculture food safety and sampling
 - Water management
 - Oxidation control
 - Recirculation system
- Understanding fish feeding, nutrition, and feeding methods in the United States
 - Fish feeding, nutrition, alternative feeds (high performance feed, protein balance, live and micro diets, microencapsulated feed, soybean, wheat, vegetable seeds, vitamins)
 - Formulation

- Physiology of digestion and excretion, metabolism patterns
- Understanding the business and management of aquaculture
 - Administration and money
 - Logistics (refrigeration)
 - Fish marketing and profitability techniques

Cochran Fellowship Program on Women in Agriculture: Entrepreneurship for Food Processing, Packaging and Value Chain for India

SCOPE OF WORK

The Cochran Fellowship Program is requesting the design and implementation of global training programs for up to ten (10) Fellows from India on the topic of Women in Agriculture: Entrepreneurship.

This training program should provide an in-depth introduction to young women entrepreneurs on value added processing technologies; to include post-harvest technology, product development, sensory evaluation techniques, food packaging, processing and nutritional quality, functional foods, nutraceuticals, and value-added entrepreneurship. The program should increase knowledge of U.S. food ingredients and processing systems that will enhance agricultural sustainability and food security, drive local prosperity and business growth by promoting women's social and economic empowerment in both countries. Fellows are anticipated to come from both government and private sector organizations.

The objective of this program is to help agribusiness owners and managers increase their understanding of the importance of women entrepreneurship in agriculture to expand markets and generate greater income. The goal of this training program is to increase the Fellows' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The training provider will ensure that Fellows increase their knowledge of the topics below:

- U.S. supply chain management and transport of perishable foods
- U.S. cold chain infrastructure and products such as refrigerators and coolers
- Regulatory and inspection framework for U.S. exports
- U.S. seafood, meat, and fruit exports' food safety and supply chains
- The U.S. post-harvest handling and food distribution systems
- Provide an overview of the U.S. food system from farm all the way to retail distribution.
- Incorporate food safety and regulatory policies to ensure that the food locally produced and imported is safe and complies with U.S. law and regulations
- Train fresh produce importers and retail owners/managers on fresh produce procurement and postharvest technologies

- Include a trade show like Produce Marketing Association (PMA) or International Food Technology (IFT) Trade Show
- Visit sites to see the proper handling /storage/merchandising of fresh produce
- Visit to production sights, wholesalers and retail markets
- Official meetings with U.S. regulatory agencies (USDA APHIS and FSIS, FDA)

Cochran Fellowship Program for the Peoples Republic of China – Feed Ingredients for Aquaculture and Animal Husbandry

SCOPE OF WORK

The Cochran Fellowship Program is requesting the design and delivery of a training program on Feed Ingredient for Aquaculture and Animal Husbandry for up to ten (10) Fellows from the Peoples Republic of China.

This training program should train Fellows in the best feed practices and insights into using U.S. feed ingredients to increase productivity and profitability. Participants should learn more about the environmental and economic benefits of including sustainably sourced, climate-smart commodities in their operations. The training program should also include fish farming technology, nutrition and feeding, processing, and food safety, and visits to/with feed processing plant, fish farm, producers, and aquaculture research institutions. The goal of this training program is to increase the Fellows' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer will ensure that the Fellows increase their knowledge in the following areas:

1. Understanding fish feeding, nutrition, and feeding methods in the United States
 - a. Fish feeding, nutrition, alternative feeds (high performance feed, protein balance, soybean, wheat, vegetable seeds)
 - b. Formulation
2. Understanding U.S. aquaculture systems and fish farms
 - a. Fish production and processing
 - b. Entire fish production and processing chain
3. Understanding U.S. aquaculture food safety and sampling
 - a. Water management
 - b. Oxidation control
 - c. Recirculation system

Cochran Fellowship Program for Peoples Republic of China – Food Service Chief Training Program

SCOPE OF WORK

The Cochran Fellowship Program is requesting the design and delivery of a U.S. hotels, restaurants, and institutional (HRI) Chief training program for up to ten (10) Fellows from the Peoples Republic of China.

This training program should educate Chinese HRI professionals, chefs, and culinary school operators on current U.S. food service trends, including ingredients and techniques. Participants should meet with U.S. food industry professionals and their suppliers to learn more about the quality, sustainability, and versatility of U.S. food products such as seafood, meat/poultry, and baking ingredients. The objective of the program is to expose Fellows to the U.S. restaurant, hotel, and food industry professionals so they can learn about the latest U.S. culinary trends and benefits of using U.S. ingredients, allowing them to serve as "ambassadors" for U.S. products. The goal of this training program is to increase the Fellows' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer will ensure that the Fellows increase their knowledge in the following areas:

- Understanding of U.S. restaurant and hotel food and beverage operations/purchasing as well as supply-chain and inventory management
- Financial management: cost controls, food pricing, profit planning, and budgeting
- Food preparation and kitchen management, design, and layout
- Event and conference planning and catering
- Customer relations
- Product quality and use
- Human resource management and service staff development
- Merchandising strategies and promotions
- New technologies including management tools and software
- Inventory management and purchasing strategies
- Sanitation, food safety and waste control

Cochran Fellowship Program Climate Smart Agriculture for Vietnam

SCOPE OF WORK

The Cochran Fellowship Program's Asia Team is requesting the design and delivery of a training program on Climate Smart Agriculture for 10 Fellows from Vietnam. The Fellows are representatives from the Vietnamese Ministry of Agriculture and Rural Development and technical researchers.

Vietnam has as its goal to achieve net-zero emissions by 2050, but lacks the knowledge, capacity and technology to reach this goal.

The program should provide an in-dept overview of the agricultural climate issues and priorities for technical cooperation and assistances such as adapting practices for climate smart agriculture, clean energy practices, and climate centered information systems to help monitor data and figures.

The objective of this program is for the participants to learn best practices of climate smart agriculture in the United States, which will help strengthen the relationship between the United States and Vietnam and increase participants' knowledge of U.S. agricultural commodities. It will also strengthen Vietnam's participation in global climate initiatives such as AM4C and SPG. The goal of this training program is to increase the Fellows' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- Mitigation/Adaption of Clean Energy Practices
- Circular Farms
- Advanced Technologies in Agricultural Production
- Climate Information Systems
- U.S. Climate Agricultural Practices and Commodities

Effective Implementation of Climate Smart Agricultural Technology for Thailand

SCOPE OF WORK

The Cochran Fellowship Program's Asia Team is requesting the design and delivery of a training program on Effective Implementation of Climate Smart Agricultural Technology for eight Fellows from Thailand. The Fellows are representatives from the Thai Ministry of Agriculture and Cooperatives and private stakeholders.

Thai officials from the Ministry of Agriculture and Cooperatives and private stakeholders have expressed a need to learn more about applying climate smart agricultural technology on Thai farms and their use in production of agricultural commodities.

The program should provide an in-depth overview of climate smart technologies and practices made available to U.S. farmers.

The objective of this program is to promote public awareness of the impact of climate change on agricultural production, accelerate the adaption of climate smart technologies and practices by Thai farmers, and encourage partnerships between the public and private sectors in promoting climate smart technologies. The goal of this training program is to increase the Fellows' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- Climate Smart Technologies and Practices
- Public-Private Partnerships
- Utilization of Climate Hubs
- Marketing of Climate Change and its impacts on Agricultural Production

Cochran Fellowship Program on Biotechnology Adoption and Biosafety for Guatemala, El Salvador, and Honduras

SCOPE OF WORK

The Cochran Fellowship Program is requesting the design and delivery of a training program for 12 Fellows from Guatemala, El Salvador, and Honduras that will include government regulators, academics, and biosafety committee members.

The program will provide Fellows with an overview of public and private developments in biotechnology, the biotechnology approval process, biosafety considerations, and data portability. In particular, the program will clarify how gene editing is regulated compared with other biotechnologies. Fellows should receive hands on training on science-based risk analysis.

The training will include visits to biotechnology companies and meetings with U.S. government regulatory and research agencies, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the Animal and Plant Health Inspection Service (APHIS), and the Agricultural Research Service (ARS). [NOTE: all meeting requests with U.S. Regulatory Agencies will be coordinated by the Cochran Fellowship Program].

The objective of this program is to provide capacity building for regulators and biosafety committee members in Guatemala, Honduras, and El Salvador, seeking a harmonized regulatory approach towards biotechnology adoption. The goal of this program is to increase these countries' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The training will ensure that the Fellows develop competencies in the following areas:

- Overview of modern biotechnology
 - Newest genetic engineering techniques and applications – i.e.: genome editing, use on insects and other animals.
 - Laws that govern biotechnology and biosafety in the United States and other countries.
- Biotechnology policies and regulatory framework in a national and global context
 - Learning how to set up protocols for regulatory framework.
 - Understanding day to day responsibilities of legal guidelines.
 - International policies and standards – CODEX, Cartagena Protocol on Biosafety, Intellectual Property Rights
 - Gene editing policies and regulation
- Risk management of biotechnology
 - Methodologies for risk assessment and risk management for biotech products in food, feed, and the environment.
- Biotechnology communication
 - Communication skills and strategies for promoting biotech products to the public, to enhance consumer acceptance.

- Methods for organizing consensus among industry, government, and NGO stakeholders for acceptance of biotechnology.
- Effective use of modern modes of communication to disperse information to industry, government, stakeholders, and the public.
- Collaborating with academia to disseminate biotechnology concepts to students and the public.

Cochran Fellowship Program on Biotechnology: Policies, Management, and Public Outreach for Argentina and Paraguay

SCOPE OF WORK

The Cochran Fellowship Program is requesting the design and delivery of a training program for 8 Fellows from Argentina and Paraguay that will include government regulators.

The program will provide Fellows with an overview of biotechnology research policies, management, and public communication. The training will include visits to biotechnology companies and meetings with U.S. government regulatory and research agencies, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the Animal and Plant Health Inspection Service (APHIS), and the Agricultural Research Service (ARS). [NOTE: all meeting requests with U.S. Regulatory Agencies will be coordinated by the Cochran Fellowship Program]. The objective of this program is to enhance the Fellows knowledge of biotechnology and provide an understanding of U.S. science-based approach to regulation. The goal is to increase these countries' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The training will ensure that the Fellows develop competencies in the following areas:

- Overview of modern biotechnology
 - Newest genetic engineering techniques and applications – i.e.: genome editing, use on insects and other animals.
 - Laws that govern biotechnology and biosafety in the United States and other countries.
- Biotechnology policies and regulatory framework in a national and global context
 - Learning how to set up protocols for regulatory framework.
 - Understanding day to day responsibilities of legal guidelines.
 - International policies and standards – CODEX, Cartagena Protocol on Biosafety
 - Intellectual Property Rights
 - Gene editing regulation
- Risk management of biotechnology
 - Current risk assessment approaches for environmental, food and feed safety.
 - Role of regulatory agencies in the development of national policy.
 - Regulation of DNA-free genome editing products.
 - Pathway to commercialization and policy frameworks conducive to innovation.
 - Intellectual property considerations.
- Biotechnology communication and public outreach
 - Communication skills and strategies for promoting biotech products to the public, to enhance consumer acceptance.
 - Methods for organizing consensus among industry, government, and NGO stakeholders for acceptance of biotechnology.

- Effective use of modern modes of communication to disperse information to industry, government, stakeholders, and the public.

Cochran Fellowship Program on Climate-Smart Agricultural Practices and Extension for Dominica, Grenada, St. Lucia, St. Vincent and the Grenadines, and Guyana

SCOPE OF WORK

The Cochran Fellowship Program's Latin America and Caribbean Region is requesting the design and delivery of a training program for up to ten (10) Fellows from Dominica, Grenada, Saint Lucia, Saint Vincent and the Grenadines, and Guyana that will include government officials and representatives from institutions conducting climate research.

This program will provide training on climate-smart agricultural practices appropriate for tropical climates, USDA Climate Hubs, and agricultural extension networks. The program should include a visit to at least one of the USDA climate hubs, ideally the USDA Caribbean Climate Hub in Puerto Rico. Fellows should be given an overview of how knowledge on climate-smart agricultural practices is shared through the U.S. extension system at land-grant institutions. The objective of the program is to support the long-term sustainability of the Caribbean and Guyana's agricultural system. The goal is to increase these countries' capacity for research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer will ensure that the Fellows develop competencies in the following areas:

- Climate-smart agricultural practices for tropical climates, such as:
 - Integrated soil management
 - Crop diversification strategies
 - Water conservation
- USDA Climate hubs
 - Collaboration and roles of various USDA agencies
 - Timely dissemination of research and tools to agricultural producers
- U.S. agricultural extension system
 - Role of land-grant institutions
 - Extension networks

Post-Harvest and Storage Handling of U.S. Grains for Dominican Republic

SCOPE OF WORK

The Cochran Fellowship Program's Latin America and Caribbean Team is requesting the design and delivery of a training program on Post-Harvest and Storage Handling of U.S. Grains for eight (8) Fellows from the Dominican Republic, which will include grain importers and managers in charge grain storage and handling.

The program should provide Fellows with a complete overview of U.S. grain handling and storage practices and equipment for the mitigation of mycotoxins and other contaminants. With a focus on corn, topics should include grain production, handling, and storage; techniques for grain crop improvement; best practices in technologies, equipment, and facilities for grain handling and storage; inspection, classification and grading of grain quality, and grain quality control systems; commercial grain trading and shipping practices; and risk management related to mycotoxins and other contaminants for science-based food safety systems. The training program should include meetings with the Animal and Plant Inspection Service (APHIS), the Food and Drug Administration (FDA), Food Safety Inspection Service (FSIS), and the Federal Grain Inspection Service (FGIS) as well as visits to U.S. farms, grain production facilities, and to a grain elevator.

The objective of this training activity is to train Fellows on best practices for grain handling and storage to reduce mycotoxins and other contaminants. The goal is to increase the Dominican Republic's capacity for research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer will ensure that the Fellows increase their knowledge in the following areas:

- U.S. production of grains with a focus on corn
- U.S. grain purchasing
 - Sales and purchasing of raw materials
 - U.S. export system, how it functions and the benefits
- Best practices in grain processing, storage, and handling
 - Grain drying
 - Grain grading, inspection, classification, and quality management
 - Standards and operations of grain movement, logistics, and transportation
- Innovative technologies and equipment for grain production and handling
- Risk management; prevention of disease and pest mitigation
- U.S. standards and risk management of mycotoxins and mitigation techniques

Partnerships for Climate-Smart Commodities Initiative for Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, and Peru

The Cochran Fellowship Program requests the design and implementation of a training program on climate smart agriculture for government officials and private sector leaders from Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, and Peru.

SCOPE OF WORK

The Cochran Fellowship Program is requesting the design and implementation of a regional training on USDA's Partnerships for the Climate Smart Commodities Initiative for government officials and industry private sector leaders from Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, and Peru. The proposed training program aims to educate regional leaders on various projects in the USDA Climate Smart Commodities Initiative and how these practices can be used to develop agricultural markets that reward climate-smart practices.

The training program will provide opportunities for Fellows to better understand policy instruments the United States deploys to support and compensate farmers for employing climate-smart approaches to agriculture. This will include, but is not limited to, carbon credit models and payments for ecosystem services. The program should also include a component to underscore the importance of collaboration with private sector entities and industry partners by highlighting participants in the USDA Climate Smart Commodities Initiative across a variety of agricultural products grown in the Western Hemisphere. Examples of partners may include the USA Rice Federation, U.S. Rice Producers Association, the U.S. Meat Export Federation, the U.S. Dairy Export Council, and the National Pork Board. The program will utilize on-farm visits and technical exchanges/workshops to demonstrate how public-private partnerships can develop markets that reward and incentivize sustainable agricultural production practices (i.e., cover cropping, water management/irrigation, reforestation/traceability).

The objective of the program is to educate participants to implement climate-smart practices in their respective countries. Fellows will leave the training with a better understanding of the types of public-private partnership models that reward climate-smart practices in the agricultural sector and that are rewarded in the global trading system. The goal is to increase these countries' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The training provider will ensure that Fellows develop competencies in the following areas:

- USDA's approach to encouraging sustainable agricultural production including the Partnerships for Climate-Smart Commodities Initiative
- U.S. policy instruments that compensate farmers for climate-smart approaches to agriculture, for example:
 - Carbon credit models

- Payments for ecosystem services
 - Certification models
 - Market incentives for forest preservation
 - Conservation incentive contracts
 - Green rebates
- Climate-smart approaches to agricultural production that are being developed and deployed in the United States, for example:
 - Cover cropping
 - Soil health management
 - Traceability of livestock
 - Agroforestry models
 - Reducing methane emissions
 - Carbon capture
 - Biotechnology
 - Water management
 - On-farm energy conservation
- Models that ensure climate-smart practices are valued in the global trading system

Hotel Foodservice Industry Trends & Best Practices for Mexico, Monterrey

SCOPE OF WORK

The Cochran Fellowship Program's Latin America and Caribbean Team is requesting the design and delivery of a training program on Hotel Foodservice Industry Trends & Best Practices for twenty (20) Fellows from Northern Mexico, with a focus on establishments from Los Cabos and other resort destinations in the Baja California and Sonora states in particular. This program will target high-end hotel owners, managers, and operations staff who work in the food and beverage sector. The majority of fellows will be food and beverage "managers" and chefs from large, luxury resort hotels, most of which handle U.S. food products and ingredients.

The training should educate Fellows on the operation and management of U.S. high-end hotel-based restaurants as well as emerging culinary trends in the hotel, restaurant, and institutional (HRI) sector. Fellows should be exposed to various styles of U.S. cuisine and be provided with an in-depth understanding of high-quality U.S. food products, ingredients, and cooking and management techniques. The training program should include an overview of U.S. foodservice industry procurement and supply chains as well as visits to restaurants. The training program should also provide opportunities for Fellows to meet with U.S. suppliers of specialized food products, ingredients, restaurant equipment, and associated consumer goods. Central to this training program will be attendance at a USDA-sponsored trade show, possibly the Winter Fancy Foods on January 21-23, 2024, in Las Vegas, the International Foodservice & Restaurant Show on March 3-5, 2024, in New York City, the SIAL Americas on March 19-21, 2024, in Las Vegas or the National Restaurant Association Show on May 18-21, 2024, in Chicago.

The objective of the program is to increase capacity among food and beverage managers of luxury resorts in Northern Mexico to manage and operate businesses in the HRI sector that maximize high-end food and beverage sales which may result in stronger trade linkages with the United States, participation in international trade, and to increase U.S. exports of HRI related consumer goods. The goal of this program is to increase these countries' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer will ensure that the Fellows increase their knowledge in the following areas:

- Understanding of U.S. restaurant and hotel food and beverage operations/purchasing as well as supply-chain and inventory management
- Understanding and addressing supply chain disruptions
- Understanding of U.S. cuisine, popular trends, and innovation in high-end dining
- Understanding the quality of U.S. food products, ingredients, cooking techniques and associated consumer goods
- Merchandising strategies and promotions in the hotel and restaurant industry
- Inventory management and purchasing strategies

- Sanitation, food safety and waste control
- Menu design and development
- Financial management: cost controls, food pricing, profit planning, and budgeting

Stock Inventory Management for Peru and Ecuador

SCOPE OF WORK

The Cochran Fellowship Program's Latin America and Caribbean Team is requesting the design and delivery of a training program on Stock Inventory Management with a focus on meat for eight (8) Fellows from the Peru and Ecuador.

The objective of this training is to support Peruvian and Ecuadorian meat importers in developing efficient inventory systems to ensure consistent U.S. meat supply in their markets. The training should therefore target private sector meat importers.

The training should educate the fellows on agricultural market information systems including in-depth knowledge of techniques for collecting and analyzing meat, livestock, and market news; principles of multiple inventory management methods to accurately forecast demand; and assist in the development of efficient purchasing programs to balance the risks of inventory gluts or shortages made by externalities. The training should provide fellows with an in-depth look at the United States' agricultural market information system for meats as well an overview of topics including inspection; international grades, cuts, and standards; transportation systems; and quality meat marketing and promotion programs. In addition to building strong and accurate inventory management systems, the training should emphasize the procedures used by USDA to assure that the nation's meat supply is safe, wholesome and properly labeled.

Meetings should be organized with the National Agricultural Inspection Service, Agricultural Marketing Service, Food Safety Inspection Service, Food and Drug Administration, and with U.S. meat and meat products exporters and representatives of the U.S. Meat Export Federation. Possible site visits to farms and/or ranches, meat packing plants, slaughterhouses, and import and export locations are expected. If possible, a relevant meat tradeshow or conference should be included in the program.

The objective of this training is to train Fellows on best practices for the inventory management of meat to ensure consistent supply of quality U.S. meat to Peru and Ecuador. The goal of this program is to increase these countries' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer will ensure that the Fellows increase their knowledge in the following areas:

- Overview of U.S. meat products
- Understanding of U.S. agricultural market information systems
 - Techniques for collecting and analyzing meat and livestock data
 - Analyzing market news
- Principles of multiple inventory management
- Forecasting supply and demand
- U.S. inspection procedures

- Meat grading, cuts, and standards
- Marketing and promotion of U.S. meat
- U.S. meat certification and export procedures

Cochran Fellowship Program
U.S. Tree Nuts as Food Ingredients for Brazil

SCOPE OF WORK

The Cochran Fellowship Program's Trade Shows & Certificates team requests the design and delivery of a training program on U.S. Tree Nuts as Food Ingredients for up to eight Fellows from Brazil.

This training program should provide Fellows with an in-depth understanding of the U.S. tree nut industry. This program should raise their awareness of the wide array of available products in these sectors, as well as their potential use as food ingredients in baked goods and snack foods. Training providers should work with USDA to coordinate activities with the Almond Board of California and other related cooperators which are actively participating in the tree nut and dried fruit industries. The program should include site visits and tours of processing facilities, farms, orchards, and meetings with suppliers experienced in the export of tree nuts. FAS envisions that this program will include attendance at an industry trade show, such as the California Food Expo or the Grape, Nut and Tree Fruit Expo in California. The training program should provide the Brazilian industry representatives with an in-depth understanding of how almonds, walnuts and pistachios are grown, processed, and utilized in the U.S. The participants should study the latest food ingredient trends, new technologies, automatic production, machinery, nutrition, and packaging. Fellows should learn about the quality management practices employed by the U.S. tree nut and dried fruit industries. The program should also familiarize Fellows with U.S. tree nut and dried fruit export associations.

The program's objective is to generate more interest among Brazilian industry representatives to source tree nuts from the United States. The goal of this program is to increase Brazil's capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

Training providers will ensure that Fellows increase their knowledge in the topics below:

- U.S. varieties of tree nuts, especially almonds, walnuts, and pistachios
- Marketing of U.S. tree nuts and other food ingredients such as dried fruits
- U.S. grading standards and packaging for tree nuts
- Health and nutrition benefits
- Export trading mechanisms
- Uses of tree nuts in the baked goods and snack food sectors
- New technologies and best practices for processing tree nuts
- International food safety including implementation of standards and quality control

Cochran Fellowship Program

Hotel Foodservice Industry Trends & Best Practices for Mexico

SCOPE OF WORK

The Cochran Fellowship Program's Trade Shows & Certificates Team is requesting the design and delivery of a training program on Hotel Foodservice Industry Trends & Best Practices for eight Fellows in the hotel and restaurant operations sector from Mexico.

This training program should educate Fellows on the operation and management of U.S. hotels, restaurants, and institutional (HRI) sector development. FAS envisions that this program will include attendance at a widely attended food technologies trade show to be proposed by the applicant; an example of such is the Americas Food and Beverage Show and Conference September 19-20, 2024, in Miami, FL. The program should focus on private sector managers in the HRI sector concentrating on U.S. industry best-practices and U.S. origin products. The growing tourism sector in both Mexico City and Guadalajara, is leading to an increased demand for high value imported foods.

The objective of the program is to expose Fellows to restaurant, hotel, and food industry consumer goods/products to increase Mexico City and Guadalajara's capacity to manage and operate businesses in the HRI sector that maximize food and beverage sales. The goal of this program is to increase Mexico's capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer will ensure that the Fellows increase their knowledge in the following areas:

- Understanding of U.S. restaurant and hotel food and beverage operations/purchasing as well as supply-chain and inventory management
- Financial management: cost controls, food pricing, profit planning, and budgeting
- Food preparation and kitchen management
- U.S. restaurant industry approaches and emerging trends
- Event and conference planning and catering
- Customer relations
- Product quality and use of U.S. restaurant associated consumer goods
- Human resource management and service staff development
- Merchandising strategies and promotions in the hotel and restaurant industry
- Inventory management and purchasing strategies
- Sanitation, food safety and waste control
- Menu design and development

Cochran Fellowship Program

Introduction to U.S. Gastronomy and Food Ingredients for Colombia

SCOPE OF WORK

The Cochran Fellowship Program's Trade Shows & Certificates Team is requesting the design and delivery of a training program on Introduction to U.S. Gastronomy and Food Ingredients for eight Fellows from Colombia.

The training program should educate prominent food industry influencers on culinary trends and innovations in U.S. gastronomy and food ingredients so they may be able to form U.S. partnerships and influence food trends in Colombia through various media outlets.

The training program should include interactive classroom discussions, demonstrations, tasting sessions, site visits, and meetings with U.S. companies who are willing and ready to export their food products and ingredients to Colombia. Fellows should be exposed to a variety of U.S. cuisines, showcasing America's diversity and innovation within the gastronomy sector, and be provided with an in-depth understanding of U.S. food products, ingredients, and cooking techniques through site visits to both casual and up-scale restaurants, bakeries, culinary institutions, retail food markets, and farms. Fellows should learn the chemical composition of food and food ingredients; their physical, biological, and biochemical properties through an in-depth study of the social, artistic, and technical components of cooking. Training should take place in two or three strategic locations across the U.S. (e.g., New York City, Chicago, Los Angeles, Miami, etc.). As prominent food industry representatives with significant social media followings, fellows should also be educated on effective marketing and promotion strategies for U.S. food products, ingredients, and cuisine.

FAS envisions that this program will include attendance at a widely attended food technologies trade show to be proposed by the applicant; an example of such a show is the National Restaurant Association Trade Show in Chicago, IL – May 18-21, 2024. Attendance at this show should provide opportunities for fellows to meet with various U.S. companies, chefs, and influencers. The objective of this training program is to educate prominent food industry influencers on U.S. gastronomy and food ingredients so they may be able to positively impact food trends in Colombia, and to increase the market share of U.S. food products and ingredients abroad. The goal of this program is to increase the Fellows' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer will ensure that the Fellows increase their knowledge in the following areas:

- Understanding U.S. gastronomy
 - Popular trends and emerging innovations in U.S. cuisine (new food products, flavors, and ingredients)

- Fusion cuisine
 - Street foods and comfort foods
 - Healthy, gluten-free, and organic food products and cuisine
 - Beer, wine, and spirits pairings
- Employment of appropriate cooking methods, plating, and saucing principles
- Menu development
- Culinary engineering and chemistry (cuisine replication, and recipe development)
- Understanding food ingredients used in the following products:
 - Non-alcoholic beverages (carbonated and noncarbonated)
 - Condiments, spices, and seasonings
 - Baked goods
 - Processed meat, poultry, and fish products
 - Edible oils
 - Dairy products
 - Snack foods
 - Ice cream and frozen desserts
- Understanding U.S. food, marketing, and consumer behavior
 - Understanding the intersection of food, media, and culture in the U.S.
 - Tools and concepts of marketing and brand management for U.S. food products, ingredients, and cuisine through various media outlets (social media, television, print, etc.)
 - Marketing through key stages of the food-to-table supply chain (from raw ingredients and processing equipment in early production stages, through immersive culinary experiences targeted to distinct consumer segments)
 - 4 P's (Product, Promotion, Place, and Price)
 - Designing and marketing and promotional activities and events for U.S. food products, ingredients, and cuisine
- Site visits
 - FAS envisions that this program will include attendance at a widely attended food technologies trade show to be proposed by the applicant; an example of such a show is the National Restaurant Association Trade Show in Chicago, Illinois May 18-21, 2024.
 - Casual and up-scale restaurants, bakeries, culinary institutions, retail food markets, and farms.
 - Meetings with U.S. chefs, restaurant owners, and food influencers for potential partnership opportunities, along with companies selling U.S. food products and ingredients.

Cochran Fellowship Program
Promotion & Marketing of U.S. Seafood for Ghana, Cote d'Ivoire, Togo

SCOPE OF WORK

The Cochran Fellowship Program's Trade Shows & Certificates Team is requesting the design and delivery of a training program on commodities marketing U.S. Seafood for 15 Fellows from Ghana, Cote d'Ivoire, and Togo.

Seafood is an important commodity for the whole of West Africa as it is the preferred source of protein for consumers. However, with fish stocks in the Gulf of Guinea collapsing, seafood is becoming a lot harder to purchase. The program should provide an in-depth overview of the U.S. seafood industry including visits to seafood producers, seafood shows, along with an overview on quality control management, traceability, and the logistics of transporting seafood to West Africa.

The objective of this program is to help promote quality control standards, innovative products not currently in the west Africa market, logistics for transporting seafood to West Africa, and ultimately increasing the amount of U.S. seafood entering West Africa. The goal of this program is to increase the Fellows' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- Overview of the U.S. Seafood Market
 - a) Value chain (including farmed and wild fish), from catching, fishing, processing, and packaging to delivery
 - b) Varieties of U.S. seafood: salt and freshwater fish (including salmon and halibut), lobsters, crabs, shrimp, crawfish, scallops, and clams.
- Marketing of U.S. seafood in stores and restaurants
 - a) Trends for new seafood products
 - b) Seafood marketing strategies
- Overview of the Seafood Quality Control Standards
- Seafood Transportation Logistics from Alaska to West Africa
- Alaskan Seafood Industries
- Certification process of U.S. seafood products
- Exporting procedures for U.S. seafood products to learn how seafood is cleared and made ready for export
- Handling, processing, packaging, and grading techniques for U.S. seafood products
- Harvesting operations and how to follow environmentally, legally, and sustainably soundfishing methods

Cochran Fellowship Program
U.S. Private Label Management for People's Republic of China

SCOPE OF WORK

The Cochran Fellowship Program's Trade Shows & Certificates Team requests the design and delivery of a training program on U.S. Private Label Management for up to ten Fellows from People's Republic of China (PRC). Fellows will be representatives of private sector companies in PRC.

PRC has a growing private label sector for its convenience stores and e-commerce companies. This training program should provide Fellows with an in-depth understanding of the variety and quality of U.S. dried and fresh fruits and fruit products, and tree nuts. This program should raise their awareness of the wide array of available products in these sectors, as well as their potential uses in the baked goods and snack foods sectors. Training providers should work with USDA to coordinate activities with the Almond Board of California and other related cooperators which are actively participating in the tree nut and dried fruit industries. The program should include site visits and tours of processing facilities, farms, orchards, and meetings with suppliers experienced in the export of tree nuts and dried fruits. This program will include attendance at an industry trade show, such as the California Food Expo or the Grape, Nut and Tree Fruit Expo in California. The training program should provide PRC industry representatives with an in-depth understanding of the broader ecosystem through meetings with bakery ingredient processors, traders, and managers of high-profile bakeries and confectionaries. The participants should study the latest bakery ingredient trends, new technologies, automatic production, machinery, nutrition, and packaging. Fellows should learn about the quality management practices employed by the U.S. tree nut and dried fruit industries. The program should also familiarize Fellows with U.S. tree nut and dried fruit export associations.

The program's objective is to generate more interest among PRC industry representatives to source tree nuts and dried fruits from the United States and increase the sales in the PRC market. The goal of this program is to increase the Fellows' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

Training providers will ensure that Fellows increase their knowledge in the topics below:

- U.S. varieties of tree nuts, especially almonds and pecans
- U.S.-produced bakery ingredients, especially dried fruits
- Marketing of U.S. tree nuts and bakery ingredients such as dried fruits
- U.S. grading standards and packaging for dried fruits and tree nuts
- Uses of tree nuts and dried fruit in the baked goods and snack food sectors

- New technologies and best practices for processing tree nuts and dried fruits
- New developments and trends in baked goods, snack foods, and confectionary sectors

Cochran Fellowship Program

Utilization of American Softwood for Vietnam

SCOPE OF WORK

The Cochran Fellowship Program's Trade Shows & Certificates Team is requesting the design and delivery of a training program on utilizing American softwood products for eight Fellows from Vietnam.

Softwood is extensively used in Vietnam for construction, interior design, and furniture. The construction and infrastructure development of Vietnam will continue to drive the demand for Softwood. The increased American exports of softwood and declining imports of Australian and South American softwood products reflect an increased interest in American softwood products. The program should provide an in-depth understanding of the U.S. softwood products industry, from grading and treating of wood, to sawmill operations and export regulations.

The objective of this program is to increase the fellows' knowledge of cultivation and grading of softwood products, their uses and applications, and ultimately increase the U.S. exports to Vietnam. The goal of this program is to increase the Fellows' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- Overview of U.S. softwoods used for construction and wood construction design
 - Softwood uses and applications
 - Wood framing systems
 - Low- and high-income wood construction techniques and design.
 - Uses and characteristics of engineered woods for construction.
- Overview of U.S. building codes and standards for wood housing construction:
 - Technical science-based approaches used to develop U.S. building codes
 - Laboratory procedures for anatomical identification and quality control of wood during the production process.
- Softwood Export Regulations
 - U.S. codes and standards
 - U.S. National Code & Standard System related to wood products and timber structures and the code for prefabricated timber buildings
 - U.S. standard for preservative-treated timber standard
 - Uses and market trends of U.S. wood products by the furniture, construction, and interior design industries
- Wood exhibitions or showcases featuring U.S. wood products
 - Marketing information on the lifecycle of U.S. wood products

Cochran Fellowship Program
U.S. Sweets and Snacks for Bangladesh

SCOPE OF WORK

The Cochran Fellowship Program's Trade Shows & Certificates Team is requesting the design and delivery of a training program for eight Fellows from Bangladesh.

The program should provide Fellows with an in-depth understanding of the U.S. confectionery, bakery and food ingredients and new innovations, trends, and techniques within the industry. This program should raise their awareness of the wide array of available products in these sectors, as well as their potential use as food ingredients in baked goods and snack foods. Training providers should work with USDA to coordinate activities with the National Confectioners Association and other related cooperators which are actively participating in the sweets and snacks industries. The program should include site visits and tours of processing facilities and meetings with suppliers experienced in the export of snacks and sweets. FAS envisions that this program will include attendance at an industry trade show such as the *Sweets & Snacks Expo in Indianapolis, IN May 13-16, 2024*. This training should help Fellows become more knowledgeable about U.S. confectionery, bakery, and food ingredients. The objective of this program is to showcase diverse U.S. products, specifically sweets and snacks, and to educate Bangladeshi importers on how to work directly with U.S. companies. The goal of this program is to increase these countries' capacity for agricultural research, extension, and participation in international trade.

The institution selected to host this program may modify their proposed workplan to account for specific interests of the Fellows.

LEARNING OBJECTIVES

The trainer will ensure Fellows increase their knowledge in the following areas:

- Understanding food ingredients used in the following products:
 - a. Non-alcoholic beverages (carbonated and noncarbonated)
 - b. Baked goods
 - c. Snack foods
 - d. Ice cream and frozen desserts
- Understanding U.S. food, marketing, and consumer behavior
- Innovations and new techniques/uses of baking ingredients to increase consumption.
- U.S. ingredient companies and suppliers that export to Asia.
- Processing, packaging, and grading of sweets & snacks.
- Good manufacturing practices, food safety, and quality assurance measures at processing facilities and outlets.

Cochran Fellowship Program

Marketing and Grading of U.S. Hardwood for Pakistan

SCOPE OF WORK

The Cochran Fellowship Program's Trade Shows & Certificates Team is requesting the design and delivery of a training program on marketing, grading and applications for U.S. Hardwoods products eight Fellows from Pakistan.

Due to the shift from local wood products to higher quality imports, the Pakistani wood market has been seeing high rates of growth, driven by consumers' demand for higher quality import wood products. Growing awareness of availability of higher quality U.S. hardwood products is a significant factor in driving U.S. hardwood exports in Pakistan.

The program should provide an in-depth overview of the U.S. Hardwood industry including sawmill visits, learning about forestry practices in the hardwood producing areas of the United States, visiting tradeshow, and other applications of hardwood products.

The objective of this program is to increase consumers' knowledge of species, grades, quality control and sustainability, ultimately increasing U.S. hardwood species into Pakistan at a growth rate of 10-20 percent/annum for the next five years. The goal of this program is to increase Fellows' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- Visits to Sawmills & in Hardwood Producing Areas of the United States to learn about Forestry Practices
- Applications of Hardwood Products
- Species and Grades of U.S. Hardwood
- Quality Control & Sustainability
- Structural Applications and Interior Aesthetics

Cochran Fellowship Program

Overview of U.S. East Coast Seafood and New Species for People's Republic of China

SCOPE OF WORK

The Cochran Fellowship Program's Trade Shows Team is requesting the design and delivery of a training program on the Overview of U.S. East Coast Seafood and New Species for ten Fellows from the People's Republic of China (PRC). The Fellows are representatives of the PRC seafood industry.

The training program should educate Chinese importers and processors on the quality and variety of U.S. seafood products available for export to PRC. As demand for high-quality seafood grows in PRC, the world's largest fish and seafood consumer, importers and processors are more inclined to supply a greater variety of high-value fish products to their respective consumer markets. The training program should expose Chinese seafood industry representatives to the various types and qualities of U.S. seafood available for export to the Chinese market along with U.S. seafood export certification procedures. This training program should educate Fellows on applications of various seafood products to meet the needs of the Chinese retail and food processing markets, new frozen food trends, innovations in the seafood industry, and American consumer behaviors. The training program should focus on site/facility visits and meetings with U.S. representatives of the frozen food industry and seafood exporters interested in exporting to China. Central to the program is attendance at the Seafood Expo of North America, March 10-12, 2024, in Boston, MA.

The objective of the training program is to increase exports of U.S. seafood PRC. The goal of this training program is to increase the Fellows' capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- Product knowledge of U.S. seafood
 - Frozen shellfish products, Chilled and frozen fish
- Touring East Coasts
 - Site visits to Alaskan seafood harvest facilities to learn about, seafood processing facilities (processors and shore plants),
 - Visits to local seafood restaurants to learn U.S. serving methods, consumer preferences, seafood handling
- Handling, processing, packaging, and grading techniques for U.S. seafood products
- Harvesting operations and how to follow environmentally, legally, and sustainably sound fishing methods; Certification process of U.S. seafood products
- Exporting procedures for U.S. seafood products to learn how seafood is cleared and made ready to export
- Quality assurance and food safety practices in U.S. seafood processing facilities
- Best practices and quality management for transporting fresh and frozen seafood (coldchain)

Cochran Fellowship Program Promotion of U.S. Tree Nuts for Turkey

SCOPE OF WORK

The Cochran Fellowship Program's Trade Shows & Certificates Team is requesting the design and delivery of a training program on U.S. Tree Nuts for 10 Fellows from Turkey.

Turkish society consumes a high quantity of nuts as snacks and as part of traditional desserts and confectionaries. Because of this high consumption rate, domestic production cannot keep up with demand. Turkey remains the second largest market for U.S. walnuts, and the 5th largest for U.S. almonds. However, there is increasing competition to U.S. walnut and almond exports to Turkey from China and Chile. The program should provide an in-depth overview of the U.S. tree nut industry including growing, production, processing and quality control, highlighting the quality of Californian tree nuts and why they should be preferred over competitors.

The objective of this program is to increase confidence among Turkish importers surrounding the quality of Californian tree nuts in the face of increased competition, enhance existing and build future connections and ultimately grow exports of U.S. tree nuts to Turkey. The goal of this program is to increase the Fellow's capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- Overview of U.S. Tree Nuts
 - a) U.S. nut grading standards
 - b) Health and nutrition benefits
 - c) Export trading mechanisms
- Marketing & Resale
 - a) Tree Nut Industry in California
 - b) Production & Processing of U.S. Tree Nuts
 - c) International food safety including implementation of standards and quality control

Cochran Fellowship Program
Building Resilience through Climate-Smart Agriculture for Bosnia and Herzegovina

SCOPE OF WORK

The Cochran Fellowship Program is requesting the design and delivery of a training program on building resilience to climate change for eight (8) Fellows from the Bosnia and Herzegovina (BiH). The Fellows are representatives from BiH Ministry of Foreign Trade and Economic Relations (the Sector for Agriculture, Forestry and Rural Development and the Sector for Water Resources, Tourism, and Environmental Protection) the entity-level and canton-level Ministries of Agriculture including their Water Management and Forestry Sector, Rural Development and Extension Sector, Agriculture and Food Sector, as well as academia and agri-businesses.

Droughts, floods, and hailstorms have been hitting BiH's agriculture over the last 10 years intermittently. Agricultural losses significantly affect the farmers' welfare and boost food insecurity. Agriculture officials should develop programs to support sustainable agriculture and build resilience to climate change.

The training program should train Fellows about climate-smart modeling and how to use the models for decision making and information dissemination. In addition, the Fellows should learn about different databases and how to manage and best utilize them. The training program should include training on extension services and how the United States utilizes the extension service to reach a variety of producers and citizens in an area. The Fellows should acquire knowledge on new technologies in climate-smart agriculture and the coexistence of these with older styles and models. The Fellows should learn how the United States handles the use of protective land areas while still utilizing the lands in the best manner. The training should include a visit to one of the climate hubs at a U.S. university and/or operated by a government agency. The objective of this program is to assist BiH agricultural officials in the development of programs and policies to increase productivity using climate-smart agriculture to create resiliency and improve food security. The goal of this program is to increase the Fellow's capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- Current U.S mandates regarding climate change
 - U.S. plans to mitigate and adapt policies on climate change
 - U.S. led and international climate change initiatives
 - Understanding public policies on land use, land use change, conservation and reservation of natural resources including the Conservation Reserve Program
- Climate Risk Management:
 - Climate risk management and how to work around droughts, wildfires, and flooding
 - The effects of climate change on livestock, cropland, and forests
 - How adaptation is planned to reduce impacts and allow resilience
- Climate-smart Agriculture (CSA):

- Climate-smart Agriculture (CSA) Modeling
 - Extension and Climate-smart Agriculture
 - How does the U.S. promote climate-smart agriculture
- Economic Impacts and Funding Mechanisms:
 - Public and private funding (financing) mechanisms for climate change programs
 - Understanding of economic impacts of climate change
- Information Technology and Database Management:
 - Database management
 - Information sharing
- Stakeholders and Partnerships:
 - Role of stakeholders outside of the government such as NGOs, state, and local governments
 - Understanding how the U.S. is partnering with other countries to cooperate on climate change issues.
- Technologies for Greenhouse Gas Mitigation:
 - Agriculture and forest technologies (land restoration)
 - Understanding the available technologies for greenhouse gas mitigation (biomass and renewable energy, advanced biofuels, bio jet fuels, etc.)
- U.S. Model and Carbon Markets:
 - U.S. model including multi-use public protected land areas
 - Understanding the functioning of carbon markets, cap and trade, and voluntary markets

Cochran Fellowship Program

Overview of Animal Health and Disease Management for Bosnia and Herzegovina

SCOPE OF WORK

The Cochran Fellowship Program is requesting the design and delivery of a training program on animal health and disease management for eight (8) Fellows from the Bosnia and Herzegovina (BiH). The Fellows are representatives from BiH State Veterinary Agency, the Entity Ministries of Agriculture including the Water Management and Forestry Sector, Rural Development and Extension Sector, Veterinary Sector, and Agriculture and Food Sector as well as academia and industry.

Lack of animal disease management in BiH has negatively affected its capacity to trade with other countries in animal products. In order to gain access to foreign markets (especially for red meats) BiH must improve the implementation of its veterinary policy on the control, prevention and eradication of communicable animal diseases and enhance monitoring, surveillance, and contingency planning for important diseases (such as brucellosis, classical swine fever, and rabies). The country needs to improve its system of managing animal disease notification and disseminating outbreak information. BiH should increase the number of accredited laboratory methods for diagnosing animal diseases. It should also set up an operational central animal identification and registration systems for cattle and other ruminates.

The program should provide a complete and in-depth overview of animal health in the U.S. including various animal diseases, preparation and implementation of control plans, laboratory diagnostics, and contingency planning. The program should include visits with various government and industry leaders to address topics on animal disease management, the role of private and government veterinarians, tours of university and state veterinary diagnostic laboratories, emerging disease issues and emergency response, epidemiology, and an overview of important livestock diseases in the United States. The training should promote greater understanding of U.S. veterinary measures and the reduction of sanitary barriers to U.S. meat exports. This goal of this program is to improve BiH's animal diseases control plan and build BiH's capacity to trade in animal products and improve future collaboration between the U.S. and BiH veterinary officials. The goal of this program is to increase the Fellow's capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- Animal Disease Prevention and Control:
 - Contingency plans in the case of outbreaks of dangerous infectious diseases
 - Prevention programs and how they are implemented
 - Programs and controls that include the detection, containment, and eradication of animal diseases and zoonosis
 - Programs to track parasitic diseases and control measures that should be implemented
- Animal Health Monitoring and Inspection:

- Inspections of farms; tracking the conditions of animal health and welfare
 - The implementation of animal identification procedures: how to monitor the process
 - Visits to farms to observe the proper conditions for animal health and welfare
- Animal Health Information and Communication:
 - Databases to track diseases including occurrences, locations, and the status of the animal
 - Disseminating animal health information to the farms and processors of animals
 - The role of APHIS in animal health; how do they interact with farmers and processors
 - Visits to meat processing facilities to observe sanitation practices and risk assessment procedures

Cochran Fellowship Program

Climate Smart Agriculture and Food Systems Innovation for Serbia

SCOPE OF WORK

The Cochran Fellowship Program is requesting the design and delivery of a training program on climate-smart agriculture and food systems innovation for eight (8) Fellows from Serbia. The Fellows are representatives of the Serbian government, farmers, business, and civil society.

Droughts, floods, and hailstorms have been hitting Serbia's agriculture over the last 10 years intermittently. Agricultural losses significantly affect the farmers' welfare and boost food insecurity. Agriculture officials should develop programs to support sustainable agriculture and build resilience to climate change.

The program should focus on training Fellows on climate-smart agriculture and food systems innovation as tools to support climate smart best practices at the individual and institutional level. The training program should include training on extension services and how the United States utilizes them to reach a variety of producers and citizens in an area. The Fellows should acquire knowledge on new technologies in climate-smart agriculture and the coexistence of these with older styles and models. The Fellows should learn how the United States handles the use of protective land areas while still utilizing the lands in the best manner. The training should include a visit to one of the climate hubs at a U.S. university and/or operated by a government agency. The objective of this program is to assist Serbia agricultural officials in the development of programs and policies to increase productivity using climate-smart agriculture to create resiliency and improve food security. The goal of this program is to increase the Fellow's capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- Current U.S mandates regarding climate change
 - U.S. plans to mitigate and adapt policies on climate change
 - U.S. led and international climate change initiatives
 - Understanding public policies on land use, land use change, conservation and reservation of natural resources including the Conservation Reserve Program
- Climate Risk Management:
 - Climate risk management and how to work around droughts, wildfires, and flooding
 - How adaptation is planned to reduce impacts and allow resilience
 - The effects of climate change on livestock, cropland, and forests
- Climate-smart Agriculture (CSA):
 - Climate-smart Agriculture (CSA) Modeling
 - Extension and Climate-smart Agriculture
 - How does the U.S. promote climate-smart agriculture
- Economic Impacts and Funding Mechanisms:
 - Public and private funding (financing) mechanisms for climate change programs

- Understanding of economic impacts of climate change
- Information Technology and Database Management:
 - Database management
 - Information sharing
- Stakeholders and Partnerships:
 - Role of stakeholders outside of the government such as NGOs, state and local governments
 - Understanding how the U.S. is partnering with other countries to cooperate on climate change issues.
- Technologies for Greenhouse Gas Mitigation:
 - Agriculture and forest technologies (land restoration)
 - Understanding the available technologies for greenhouse gas mitigation (biomass and renewable energy, advanced biofuels, bio jet fuels, etc.)
- U.S. Model and Carbon Markets:
 - U.S. model including multi-use public protected land areas
 - Understanding the functioning of carbon markets, cap and trade, and voluntary markets

Cochran Fellowship Program

Women in Agriculture Entrepreneurship and Food Production for Serbia

SCOPE OF WORK

The Cochran Fellowship Program is requesting the design and delivery of a training program on women in agriculture for eight (8) Fellows from Serbia. The Fellows are representatives from the Serbian the Ministry of Agriculture, academia, and agri-business entrepreneurs.

In Serbia, women agricultural entrepreneurs face considerable challenges in obtaining vital information regarding market opportunities, technology advancements, and financing opportunities. Research conducted in the country reveals a notable potential for the development of women in agriculture. However, these aspiring entrepreneurs face substantial barriers when it comes to business development, primarily due to prevailing social norms and their responsibilities in family care activities. Although women entrepreneurs possess valuable experience in agricultural jobs, the current business environment lacks the necessary encouragement and support to foster growth in women-owned enterprises.

This training program should provide in-depth introduction to women entrepreneurs in agriculture focusing on access and management of financing, product development, production management, food packaging and marketing, processing and nutritional quality, and value-added entrepreneurship. The program should increase knowledge of U.S. entrepreneurship in agriculture and processing systems that will enhance agricultural sustainability and food security, drive local prosperity and business growth by promoting women's social and economic empowerment. The objective of this program is to create a supportive and encouraging environment for entrepreneurship in Serbia for women-owned enterprises and provide guidance for business development. The goal of this program is to increase the Fellow's capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- Include a trade show like Produce Marketing Association (PMA) or International Food Technology (IFT) Trade Show.
- Incorporate food safety and regulatory policies to ensure that the food locally produced and imported is safe and complies with U.S. law and regulations.
- Provide an overview of the U.S. food system from farm all the way to retail distribution.
- Regulatory and inspection framework for U.S. exports
- Sources of financing for agricultural businesses
- The U.S. post-harvest handling and food distribution systems.
- Train fresh produce importers and retail owners/managers on fresh produce procurement and postharvest technologies.
- U.S. cold chain infrastructure and products such as refrigerators and coolers
- U.S. seafood, meat, and fruit exports' food safety and supply chains
- U.S. supply chain management and transport of perishable foods

- Understanding of U.S. Regulatory Agencies (APHIS, FSIS, FDA)
- Visit sites to see the proper handling /storage/merchandising of fresh produce
- Visit to production sights, wholesalers, and retail markets

Cochran Fellowship Program Overview of Climate-Smart Agricultural for Turkey

SCOPE OF WORK

The Cochran Fellowship Program is requesting the design and delivery of a training program on climate-smart agriculture for eight (8) Fellows from Turkey. The Fellows are representatives from the Turkish government including the Ministry of Agriculture and Forestry, the Ministry of Environment, Urbanization and Climate Change, academia, and industry.

Due to its geographical location, Turkey is among the countries most affected by climate change. Rainfall and temperature patterns are growing more irregular. Models forecast dramatic changes in agricultural production, which has already started to affect food security directly and indirectly. To combat the negative effects of climate change, short-, medium-, and long-term measures need to be taken, and action plans realized. Within this scope, Turkey has recently begun the exploration of climate-smart agriculture (CSA) from a government policy priority perspective. Educating farmers about CSA, disseminating the usage of technology and methods to increase adoption are the main goal of government's policy action plans. With limited resources, a slight increase in the demand of CSA applications by farmers has been observed in recent years.

A Cochran program on climate-smart agriculture has the potential to influence key leaders and decision makers and inspire further bilateral and multilateral cooperation, which is key as Turkey is a regional leader and the 7th largest agricultural producer globally. CSA techniques are also an opportunity to revisit adaptations to help mitigate the effects of climate change on agriculture, like using genetically engineered seeds and new varieties with higher drought and pest tolerance. Turkey is already a leader in renewable energy adoption. Similarly, opportunities are ripe for bilateral cooperation and applications of CSA techniques, especially in incentivizing CSA adoption through government programs and more proactive private sector investment in the arena.

The program should train the Fellows on improving efficiency and productivity using CSA. It should prioritize the adoption of CSA techniques to support farmers, policy makers and the scientific community. The program should focus on optimizing resource usage, promoting efficient food production, facilitating supply chain connectivity, and aiding the implementation, monitoring, and reporting of climate-smart policies. Participants will learn how U.S. farmers leverage these technologies despite limited resources, understand the benefits for farmers, and grasp the significance of climate-smart technologies in achieving climate change targets. Additionally, the program should explore the impact of these technologies on agricultural policies for government agencies and identify investment opportunities in the private sector. To provide a comprehensive understanding, the program should include visits to government agencies responsible for data production and policy-making, observe farmers or farmers union(s) utilizing these technologies, and engage with tech companies involved in the research, development and sale of such technologies. The goal of this program is to increase the Fellow's capacity for agricultural research, extension, and participation in international trade.

LEARNING OBJECTIVES

The trainer should ensure that the Fellows increase their knowledge in the following areas:

- **Climate-Smart Agriculture:**
 - Climate-smart agriculture and its importance
 - The benefits of climate-smart technologies for farmers
 - How climate-smart agriculture contributes to global climate change targets
- **Climate-Smart Policy Implementation:**
 - Insights into the implementation, monitoring, and reporting of climate-smart policies
 - The role of policy makers in promoting climate-smart agriculture
 - Tools and frameworks for effective policy implementation
- **Current U.S mandates regarding climate change**
 - U.S. plans to mitigate and adapt policies on climate change
 - U.S. led and international climate change initiatives
 - Understanding the economic impacts of climate change
 - Visit U.S. climate hub
- **Efficiency and Productivity Enhancement:**
 - Methods for optimizing resource usage in farming
 - Climate-smart Agriculture (CSA) Modeling
 - Strategies for improving efficiency and productivity in agricultural practices
 - Techniques to produce more with limited resources
- **Impact on Agricultural Policies:**
 - How these technologies shape government agencies' decision-making
 - The influence of climate-smart technologies on agricultural policies
 - The relationship between agricultural policies and technology adoption
- **Private Sector Investment Opportunities:**
 - Identify investment prospects in the field of climate-smart agriculture
 - Innovative technologies and solutions developed by tech companies
 - The potential returns and impact of investing in climate-smart technologies
- **Supply Chain Connectivity:**
 - Technologies that facilitate connectivity and enhance supply chain efficiency
 - The importance of efficient supply chain management in agriculture
 - The role of connectivity throughout the agricultural supply chain