

**The Department of Agriculture (USDA) – Foreign Agricultural Service (FAS)
Office of Capacity Building and Development**

Notice of Funding Opportunity (NOFO)

Cochran Fellowship Program for Eastern Europe and Eurasia Region

A. Program Description

Program Overview, Objectives, and Priorities

The Cochran Fellowship Program's Eastern Europe and Eurasia Team is requesting the design and delivery of six distinct training programs on the following topics;

- a) Georgia: Fruit Value Chain Development and Marketing
- b) Moldova: High Value Horticultural Crop Development and Trade
- c) Tajikistan: Orchard Management
- d) Turkmenistan: Agriculture in Arid Environments
- e) Ukraine: Dairy Processing Ingredients
- f) Uzbekistan: Water-Saving Technologies

Additional specific information and requirements of each training program are provided in the Appendix.

Items provided by the Cochran Fellowship Program

Visa

- USDA/FAS will provide a DS-2019 to each Fellow to request and obtain a J-1 visa. Please note that all Fellows must obtain a J-1 visa to participate in this exchange program. This is a Department of State requirement for all exchange program participants and is strictly enforced.

Training Fees

- USDA/FAS will provide funding to cover cost associated with the curriculum development, implementation and execution of each training program.

Emergency Health Insurance

- Emergency medical health insurance coverage as required for all J1 visa holders (22 CFR 62.14). This medical insurance will be provided to each Fellow for the duration of training program. The host institution will alert USDA/FAS staff if any health/medical conditions arise during the Fellowship.

Meeting Coordination with USDA

- Meetings with all federal government agencies must be coordinated directly with the regional Cochran Fellowship Program team, no exceptions. Principal assigned to this activity must work directly with Cochran staff to secure meetings

and visits (eg. ports and facilities) with Federal agencies. This includes meetings at Washington, DC headquarters and all locations nationwide.

More specific details of program objectives, priorities, and performance metrics are provided in the Appendix.

Issued By

Foreign Agricultural Service, Office of Capacity Building & Development, Trade & Scientific Exchanges Division, Cochran Fellowship Program

Catalog of Federal Domestic Assistance (CFDA) Number and Title

10.962

Cochran Fellowship Program – International Training – Foreign Participant

Notice of Funding Opportunity Title

Cochran Fellowship Program

NOFO Number

USDA-FAS-10962-0700-10.-18-0008

Authorizing Authority for Program

The legislative authority for the Cochran Fellowship Program is provided in Section 1543 of the Agriculture Development and Trade Act of 1990 (7 U.S. Code 3293) as amended in 1996 and supported by the National Agricultural Research, Extension, and Teaching Policy Act of 1977, as amended.

Appropriation Authority for Program

Consolidated Appropriations Act, 2017 (PL 115-31)

Program Type

New

B. Federal Award Information

Award Amounts, Important Dates, and Extensions

Available Funding for the NOFO:	Total proposed costs for each program should not exceed \$75,000 with the exception of Georgia (\$53,000) and Ukraine (\$64,000).
Projected number of Awards:	6
Number of Project Budget Periods:	1

Projected First Budget Period:	02/26/2018 – 09/30/2018
Period of Performance:	8 months
Projected Period of Performance Start Date(s):	Subject to the availability of funding
Projected Period of Performance End Date(s):	09/30/2018

Extensions are allowable, please see Section H. Additional Information to see how to requests one should the need arise.

Pre-Award costs: Not Allowable

Cost Share or Match requirements: A cost match or a cost share is not required.

Funding Instrument

USDA will enter into a cost reimbursable agreement under 7 USC 3319a with selected universities. Program staff will maintain involvement in the administration of the Cochran Fellowship Program.

C. Eligibility Information

Eligible Applicants

Proposals may be received from U.S. State Cooperative Institutions or other colleges and universities and minority serving institutions (MSIs).

A single Principal Investigator (PI) may not host two groups of Fellows simultaneously. The PI must hold a position at an eligible U.S. institution.

Eligibility Criteria

All applicants must have an active registration in the SAM database at www.sam.gov – pending or expired registrants are not eligible. This requirement must be met by the closing date of the announcement and will not be waived. Please contact the program officer listed if you have questions about this requirement.

In addition to obtaining a DUNS number and registering in SAM, you must also obtain Level 2 eAuthentication to apply for this funding opportunity in ezFedGrants (eFG). You must submit an online form requesting access. Normally you will receive an email within 24 hours of your submission, if your request is approved. After this occurs, you will need to schedule an appointment with an LRA. Once you meet with the LRA, your Level 2 eAuthentication should be granted within 2 to 3 days after that meeting. See Section D of this NOFO for detailed information.

Other Submission Requirements and Information

Institutions may submit proposals to host more than one group of Cochran Fellows. Institutions interested in hosting one or more groups should submit a proposal following the guidelines below:

- Complete SF-424 Application for Federal Assistance;
- Indicate the name of the institution applying to host the group(s);
- Indicate the country(ies) and training topic of the group;
- Provide a tentative training plan based on the group’s training interests, including topics to be covered, possible field visits and other activities;
- Please include a narrative description of the proposed training, how it will be administered and the role of the university faculty and support staff;
- Provide a summary of relevant institutional capabilities for hosting international Fellows in the proposed field;
- Briefly describe the expertise and international experience of the trainer in the group’s field of interest and country(ies) or world region;
- Demonstrate understanding of cultural context and needs of the trainees
- Identify the expected skills or knowledge to be acquired by the Fellows at the end of the program;
- Briefly demonstrate flexibility in training plan to account for potential program changes and the ability to respond to unforeseen circumstances;
- Include a quality assurance plan. This should include information on how unforeseen problems that can arise will be addressed;
- Complete a budget using Standard Form 424A, Budget Information Non Construction Programs, along with a detailed budget worksheet using the budget worksheet on page11 and a detailed budget narrative (NOTE: A budget narrative must be provided). All line items should be described in sufficient detail that would enable FAS to determine that the costs are reasonable and allowable for the project per federal regulations; and
- Include all components of the proposal in a single PDF document.

Maintenance of Effort (MOE)

MOE is not allowable.

D. Application and Submission Information

Key Dates and Times

Application Start Date:	02/26/2018
Application Submission Deadline:	03/26/2018 at 11:59PM EST
Anticipated Funding Selection Date:	Approximately 3-4 weeks after selection, subject to the availability of funding

Anticipated Award Date:

Approximately 3-4 weeks after selection, subject to the availability of funding

Address to Request Application Package

This NOFO represents the full application information.

Applications will be processed through the ezFedGrants portal at <https://grants.fms.usda.gov> – prospective applicants are encouraged to register for this portal. Applicants that are unable to access the ezFedGrants portal should contact the program manager for alternative submission instructions. Note that if selected, registration is a requirement of performance.

Content and Form of Application Submission

Institutions may submit proposals to host more than one group of Cochran Fellows. Institutions interested in hosting one or more groups should submit a proposal following the guidelines below:

- Complete SF-424 Application for Federal Assistance;
- Indicate the name of the institution applying to host the group(s);
- Indicate the country(ies) and training topic of the group;
- Provide a tentative training plan based on the group's training interests, including topics to be covered, possible field visits and other activities;
- Please include a narrative description of the proposed training, how it will be administered and the role of the university faculty and support staff;
- Provide a summary of relevant institutional capabilities for hosting international Fellows in the proposed field;
- Briefly describe the expertise and international experience of the trainer in the group's field of interest and country(ies) or world region;
- Demonstrate understanding of cultural context and needs of the trainees
- Identify the expected skills or knowledge to be acquired by the Fellows at the end of the program;
- Briefly demonstrate flexibility in training plan to account for potential program changes and the ability to respond to unforeseen circumstances;
- Include a quality assurance plan. This should include information on how unforeseen problems that can arise will be addressed;
- Complete a budget using Standard Form 424A, Budget Information Non Construction Programs, along with a detailed budget worksheet using the budget worksheet on page 11 and a detailed budget narrative (NOTE: A budget narrative must be provided). All line items should be described in sufficient detail that would enable FAS to determine that the costs are reasonable and allowable for the project per federal regulations; and
- Include all components of the proposal in a single PDF document.

The SF-424 and SF-424 A can be completed within the ezFedGrants platform. However, the other required forms must be downloaded from the Forms sections on Grants.gov. The Certification regarding Lobbying and the Grants and Agreement Coversheet will be sent to you along with this NOFO.

Unique Entity Identifier and System for Award Management (SAM)

The link below provides information on 2 CFR §25.110. Please read.

<https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&SID=7a45f973880240465cd255471f1380ef&ty=HTML&h=L&mc=true&n=pt2.1.25&r=PART>

FAS is using ezFedGrants to post NOFO's and issue agreements, which is an electronic grants management system. Applicant(s) with electronic access are to submit their applications electronically through:

<https://grants.fms.usda.gov>

Before you can apply, you must have a DUNS number, be registered in SAM, and have access to the ezFedGrants website). **Applicants are encouraged to register early. The registration process can take approximately four weeks to be completed. Therefore, registration should be done in sufficient time to ensure it does not impact your ability to meet required submission deadlines.**

DUNS number. Instructions for obtaining a DUNS number can be found at the following website: <http://www.dnb.com/duns-number.html>

The DUNS number must be included in the data entry field labeled "Organizational DUNS" on the Standard Forms (SF)-424 forms submitted as part of this application.

System for Award Management. In addition to having a DUNS number, applicants applying electronically through ezFedGrants must register with SAM. Step-by-step instructions for registering with SAM can be found here:

www.sam.gov

Failure to register with SAM will result in your application being rejected during the submissions process.

ezFedGrants System Access and Electronic Signature

Level 2 eAuthentication. The next step in the registration process is to obtain a Level 2 eAuthentication account that will allow access to the ezFedGrants system. Instructions for getting a Level 2 eAuthentication account can be obtained by emailing GrantorHelpdesk@fas.usda.gov.

You may also request Level 2 eAuthentication online at:

<https://www.eauth.usda.gov/MainPages/index.aspx>

If you experience any issues with self-registration or have eAuthentication-related questions, please contact the eAuthenticationHelpDesk for assistance:
By phone: 1-800-457-3642 or email eAuthHelpDesk@ftc.usda.gov

Requesting a role in ezFedGrants.

After obtaining eAuthentication, users will need a role in the system. Descriptions of the roles available and instructions on how to request a role can be obtained by emailing GrantorHelpdesk@fas.usda.gov.

You may also go into the link below for instructions on requesting eFG access. The document is called “External Portal Access Request Submission”.

https://www2.nfc.usda.gov/FSS/Training/Online/ezFedGrants/access_user_roles.php

Electronic Signature. Applications submitted through ezFedGrants constitute a submission as electronically signed applications. When you submit the application through ezFedGrants, the name of your Signatory Official on file will be inserted into the signature line of the application.

If you experience difficulties accessing information or have any questions please email the Helpdesk at GrantorHelpdesk@fas.usda.gov.

The Federal awarding agency may not make a Federal award to an applicant until the applicant has complied with all applicable DUNS and SAM requirements and, if an applicant has not fully complied with the requirements by the time the Federal awarding agency is ready to make a Federal award, the Federal awarding agency may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

Intergovernmental Review

This program is not subject to E.O. 12372.

Funding Restrictions

This will be a cost reimbursable agreement issued under 7 U.S.C. 3319a. University indirect costs for cost reimbursable agreements are limited to 10% of direct costs.

Allowable Costs:

To help in this review, and expedite the award process, budgets must include a detailed budget narrative explaining all line item costs. The categories listed below are examples of some of the more common items found in project budgets. All items should be described in sufficient detail that would enable FAS to

determine that costs are reasonable and allowable for the project per federal regulations.

1. Salaries and Fringe Benefits:

Requested funds may be allocated toward salaries, fringe benefits, or the combination thereof. Only individuals that hold positions at eligible U.S. institutions should be listed in this category.

2. Travel:

For domestic travel, provide the purpose of the travel and information used in calculating the estimated cost, such as the destination, number of travelers, and estimated cost per trip. There are several restrictions associated with traveling on federal funds. In most cases, airfare must be purchased in economy class from a U.S. carrier. Travelers must also adhere to federally mandated domestic per diem guidelines. Additional information may be found in the circulars listed in the “Legislative Authority” section of this announcement.

3. Supplies:

All personal property excluding equipment, intangible property, and debt instruments as defined in this section.

4. Other Direct Costs:

Other Direct Costs are those anticipated charges not included in other budget categories, including materials and supplies, lab fees, publication costs, reasonable consultant fees, computer services, sub-awards (the level of detail required for the sub-award budget is the same as the recipient organization), equipment rental, facility rental, conferences and meetings, speaker fees, honorariums.

5. Indirect Costs:

Indirect Costs may not exceed 10% of direct costs (7 USC 3319a).

Unallowable Costs:

General purpose equipment (no particular scientific, technical, or programmatic purpose) and scientific equipment exceeding \$5,000 or more; entertainment; capital improvements; thank you gifts, and other expenses not directly related to the project are not allowed. “Please note, Cochran Fellows (as trainees, not students) are considered EXEMPT INDIVIDUALS under the IRS Substantial Presence Test for tax purposes. The exemption falls under one or both of the following categories: either the Foreign Government-Related Individuals standard or the Closer Connection Exception. The only requirement is to complete IRS Form 8843 (Sections 1 and 2). These funds are for federal financial assistance, as such no taxes should be withheld from Cochran Fellows since they are exempt.”

Management and Administration (M&A) Costs:

M&A costs are not allowable.

Indirect Facilities & Administrative (F&A) Costs:

By statute, indirect costs for cost reimbursable agreements cannot exceed 10% of direct costs.

Other Submission Requirements

All applications must be submitted electronically as indicated above.

E. Application Review Information

Application Evaluation Criteria

Prior to making a Federal award, the Federal awarding agency is required by 31 U.S.C. 3321 and 41 U.S.C. 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.

Technical Expertise and Experience (45 points)

Trainer must have appropriate technical background to provide the desired training. If necessary, other appropriate collaborating scientists should be identified to meet any of the objectives which the primary trainer cannot address. Trainer's experience and knowledge of relevant agricultural conditions within the Fellows' country(ies) or a similar location will be considered as appropriate. Also taken into account is the trainer's experience with international training and adult-education.

Overall Program (50 points)

The overall program plan and design should be relevant to the specified training objectives and Fellows' backgrounds. The program plan should be thorough, well thought out, and will achieve the desired post-program deliverables. Relevant agricultural practices within the region of the university will be considered as appropriate. Relevant University resources should be identified. Additional resources/organizations should be identified as appropriate. Site visits and meetings should be meaningful to the content of the program. Overall Program will also be reviewed based on host institutions ability to demonstrate flexibility and their quality assurance plan.

Budget (25 points)

The proposed budget should be appropriate for the number of Fellows and length of the program. The budget should include appropriate cost savings where

available and narrative should accompany each line item. Host is strongly encouraged to use the Budget Worksheet provided in this NOFO.

Quality (5 points)

The overall proposal will be reviewed for overall quality, ensuring that proposal is comprehensive, well thought-out and contains correct spelling and grammar.

Review and Selection Process

Other factors may also be taken into consideration such as regional diversity in the review process. After review by appropriate offices, it is expected that all applicants will be notified within three weeks after the closing date for applications.

F. Federal Award Administration Information

Notice of Award

Notice of award will be given to the institution via email. This email is not an authorization to begin performance. The notice of Federal award signed by the grants officer (or equivalent) is the authorizing document through electronic means. It should also indicate if there are any pass-through obligations that successful applicants are required to meet upon receiving award funds, including specific timeline requirements.

Administrative and National Policy Requirements

All successful applicants for all grant and cooperative agreements are required to comply with Standard Administrative Terms and Conditions, which are available online at:

https://www.fas.usda.gov/grants/general_terms_and_conditions/default.asp

The applicable Standard Administrative Terms and Conditions will be for the last year specified at that URL, unless the application is to continue an award first awarded in an earlier year. In that event, the terms and conditions that apply will be those in effect for the year in which the award was originally made.

Before accepting the award the Recipient should carefully read the award package for instructions on administering the grant 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.

Reporting

Federal Financial Reporting Requirements

The Federal Financial Reporting Form (FFR), as known as the SF-425, is available online at:

<https://www.grants.gov/web/grants/forms/post-award-reporting-forms.html#sortby=1>

At the top of the website select **FORMS**, and from the drop down box select **POST AWARD REPORTING FORMS**.

Program Performance Reporting Requirements

- Ensure that each Fellow completes the Cochran Training Program Evaluation; and
- Development of an Action Plan by each Fellow, in accordance with the Action Plan template. The Action Plan identifies goals and outlines specific steps or activities which each Fellow will perform upon return to their home country. An Action Plan generally includes steps, milestones, measures of progress, responsibilities, assignments, and 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 recipient).
- A pre-training questionnaire to determine Fellows baseline knowledge of the learning objectives. (Template and examples will be provided)
- A post-training questionnaire to determine the knowledge gained in each of the learning objectives. (Template and examples will be provided)
- Analysis of the pre and post training questionnaire. (Template and examples will be provided)
- Deliverables are due two weeks after the completion of the training.

Close Out Reporting Requirements

Within 90 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.

The recipient is responsible for returning any funds that have been drawn down but remain as unliquidated on recipient financial records.

G. Awarding Agency Contact Information

Contact and Resource Information

For all questions, contact:

Lev Kuchevski, International Program Specialist

Hours of operation: 7:00 AM – 3:30 PM Eastern Standard Time

Telephone: (202) 690-1243

E-mail address: lev.kuchevski@fas.usda.gov

1400 Independence Ave, SW, Room 3238; Stop 1031

Washington, DC 20250-1031

Debbie Nip, International Program Specialist

Hours of operation: 8:00 AM – 4:30 PM Eastern Standard Time
Telephone: (202) 690-1913
E-mail address: debbie.nip@fas.usda.gov
1400 Independence Ave, SW, Room 3238; Stop 1031
Washington, DC 20250-1031

H. Additional Information

1. Extensions

Extensions to this program are allowed.

Applicants may request a no-cost extension in order to complete all project activities. The request must be submitted 60 days prior to the expiration of the performance period.

Requests for extensions are subject to approval by FAS.

2. Prior Approval

The Recipient shall not, without the prior written approval of the FAS Program Manager, request reimbursement, incur costs or obligate funds for any purpose pertaining to the operation of the project, program, or activities prior to the approved Budget Period/Performance Period.

3. Budget Revisions

a. 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 prior written approval by the FAS Program Manager.

b. The Recipient shall obtain prior written approval from the FAS Program Manager for any budget revision that would result in the need for additional resources/funds.

c. The Recipient is not authorized at any time to transfer amounts budgeted for direct costs to the indirect costs line item or vice versa.

Appendix

U.S. Department of Agriculture Foreign Agricultural Service

Statement of Work

Cochran Program for Georgia Fruit Value Chain Development and Marketing Eastern Europe and Eurasia Region

SCOPE OF WORK

The Cochran Fellowship Program's Eastern Europe and Eurasia Region is requesting the design and delivery of a training program for six (6) Fellows from Georgia: 1 director of a private produce company, 1 Government Regional Agricultural Manager, 1 director of scientific research center, Ministry of Agriculture, 1 private agronomist-consultant, 1 NGO project manager, 1 head of a small fruit cooperative and 1 agricultural specialist/ interpreter from the U.S. Embassy in Georgia to provide language assistance, for a total of seven (7) participants.

The fruit and vegetable industry in Georgia plays an important role in the economy and the agribusinesses are facing many challenges in production, processing, and marketing of products. The Fellows are interested in value chain development, advanced horticultural technologies, orchard and farm management practices, modern cultivation technologies, post-harvest handling and transportation of fruit and berries, packing/processing methods, new and innovative marketing techniques, high yield crop varieties, storage, quality and food safety standards, effective irrigation technologies, fertilizers, methods to address soil salinity, and high density orchards in open field and greenhouse. Other topics of interest are: seed and seedling growing; specialty crops suitable to small farmers; post-harvest handling and marketing of high-value horticultural crops; a sustainable expansion of fresh high-value products; and an effective substitution of off-season imports of fresh fruits and berries from Turkey to Georgia that will increase the incomes of local farmers.

The program should focus on the best agricultural practices in the U. S. for successful high value fruit businesses (big, medium and small farmers) and processors and distributors with an emphasis on family and small orchards and farms. This training program should introduce the fruit and berry producers to U. S. technologies, post-harvest techniques, processing and marketing methods for high value products, and fruit and berries rootstock suitable for Georgia. The program objective is to expose the Fellows to advanced U.S. technologies, marketing strategies, and post-harvest techniques. The goal of this activity is to assist Georgia to increase livelihoods of small holder farmers through improved high-value horticultural crop technologies which can promote U.S. exports of rootstock, international trade and food security in Georgia.

LEARNING OBJECTIVES

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

Horticultural Farm Management

- Emphasis on medium and small orchards and farms within the U.S., including their operations and management
- High-yield fruit and berry varieties
- Integrating post-harvest techniques
- Fertilizers and plant protection technologies
- Specialty crops
- Seed and seedling growing
- Greenhouse and low tunnel technologies
- Modern irrigation technologies in open field and greenhouses and resolving soil salinity
- Organic produce
- Fruit grafting
- Nursery development

Fruit and Vegetables Handling, Storage, Packing and Warehouse Operations

- Packing house operations (sorting/grading, packaging)
- Storage of produce (cooling, cold storage, smart fresh, evaporating cooling storage)
- Transporting produce to the market/handling mixed loads of produce
- Methods of accepting products in the warehouse and loading the products for export
- Long term storage of fruit and berries, methods/techniques
- Use of computer software in warehouse operations/management

Horticultural Marketing

- New marketing technologies, research, promotion, and planning
- Value chain development (producers – processors – traders – banks)
- Standards and quality control
- Food safety regulations
- Fruit and berries seeds and seedlings that could interest the Georgian Fellows

PERIOD OF PERFORMANCE

This consecutive 2 week training program should be provided between May 1 - August 31, 2018

PLACE OF PERFORMANCE

- The host institution shall propose the place(s) of performance in their Technical Proposal.
- The host institution will be reimbursed for travel and subsistence expenses based on Federal Travel Regulations.

DELIVERABLES:

- Provide a thumb drive of the training highlights to each Fellow and the Cochran Fellowship Program;
- Ensure that each Fellow completes the Cochran Training Program Evaluation; and
- Development of an Action Plan by each Fellow, in accordance with the Action Plan template. The Action Plan identifies goals and outlines specific steps or activities which each Fellow will perform upon return to Georgia. An Action Plan generally includes

steps, milestones, measures of progress, responsibilities, assignments, and timeline. The contractor 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 recipient).
- A pre-training questionnaire to determine Fellows baseline knowledge of the learning objectives. (Template and examples will be provided)
- A post-training questionnaire to determine the knowledge gained in each of the learning objectives. (Template and examples will be provided)
- Analysis of the pre and post training questionnaire. (Template and examples will be provided)
- Deliverables are due two weeks after the completion of the training.

GOVERNMENT FURNISHED ITEMS:

- Emergency Medical Insurance
- Certificates of Eligibility for J-1 visas

HOST INSTITUTION SHALL PROVIDE:

- International and domestic plane tickets
- Ground transportation in applicable cities, except Washington, DC
- The Fellows' subsistence expenses (lodging and per diem allowance)
- Secure and guarantee lodging during the entire program

**U.S. Department of Agriculture
Foreign Agricultural Service**

Statement of Work

**Cochran Program for Moldova High-Value Horticultural Crop Development and Trade
Eastern Europe and Eurasia Region**

SCOPE OF WORK

The Cochran Fellowship Program's Eastern Europe and Eurasia Region is requesting the design and delivery of a training program for six (6) Fellows from Moldova (2 Directors of private produce companies, 1 Government District Manager, National Food Safety Agency, Autonomous Region of Gagauz, 2 private Agricultural Managers, and 1 Horticultural Researcher, Institute for Scientific-Practical Horticulture and Food Technologies) and two (2) interpreters from Moldova to provide language assistance, for a total of eight (8) participants.

The fruit and vegetable industry in Moldova is underdeveloped and the agribusinesses are facing many challenges in processing, and marketing of products. The Fellows are interested in value chain development, advanced horticultural technologies, orchard and farm management practices, modern cultivation technologies, post-harvest handling and transportation of fruit and vegetables, packing/processing methods, new and innovative marketing techniques, high yield crop varieties, storage, quality and food safety standards, effective irrigation technologies, fertilizers, methods to address soil salinity, and high density orchards in open field and greenhouse. Other topics of interest are: seed and seedling growing; specialty crops suitable to small farmers; post-harvest handling and marketing of high-value horticultural crops and a sustainable expansion of fresh high-value products.

The program will focus on the best agricultural practices in the U. S. for successful high value fruit and vegetable businesses (large, medium and small farmers) and processors and distributors. This training program will introduce the fruit and vegetable producers to U. S. technologies, post-harvest techniques, processing and marketing methods for high value products, and fruit and vegetable rootstock suitable for Moldova. The program objective is to expose the Fellows to advanced U.S. technologies, marketing strategies and post-harvest techniques. The goal of this activity is to assist Moldova to increase livelihoods of small holder farmers through improved high-value horticultural crop technologies which can promote U.S. exports of rootstock, international trade and food security in Moldova.

LEARNING OBJECTIVES

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

Horticultural Farm Management

- Emphasis on medium and small orchards and farms within the U.S., including their operations and management
- High-yield produce varieties, berries, tomatoes, cucumbers
- Integrating post-harvest techniques

- Fertilizers and plant protection technologies
- Specialty crops
- Seed and seedling growing
- Greenhouse and low tunnel technologies
- Modern irrigation technologies in open field and greenhouse and resolving soil salinity
- Organic produce

Fruit and Vegetables Handling, Storage, Packing and Warehouse Operations

- Packing house operations (sorting/grading, packaging)
- Storage of produce (cooling, cold storage, smart fresh, evaporating cooling storage)
- Transporting produce to the market/handling mixed loads of produce
- Method of accepting products in the warehouse and loading the products for export
- Long term storage of produce, methods/techniques
- Use of computer software in warehouse operations/management

Horticultural Marketing

- New marketing technologies, research, promotion, and planning
- Value chain development (producers – processors – traders – banks)
- Standards and quality control
- Food safety regulations
- Fruit and vegetables seeds and seedlings that could interest the Moldova Fellows

PERIOD OF PERFORMANCE

This consecutive 2 week training program should be provided between May 1 - August 31, 2018

PLACE OF PERFORMANCE

- The host institution shall propose the place(s) of performance in their Technical Proposal.
- The host institution will be reimbursed for travel and subsistence expenses based on Federal Travel Regulations.

DELIVERABLES:

- Provide a thumb drive of the training highlights to each Fellow and the Cochran Fellowship Program;
- Ensure that each Fellow completes the Cochran Training Program Evaluation; and
- Development of an Action Plan by each Fellow, in accordance with the Action Plan template. The Action Plan identifies goals and outlines specific steps or activities which each Fellow will perform upon return to Moldova. An Action Plan generally includes steps, milestones, measures of progress, responsibilities, assignments, and timeline. The contractor 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 recipient).
- A pre-training questionnaire to determine Fellows baseline knowledge of the learning objectives. (Template and examples will be provided)
- A post-training questionnaire to determine the knowledge gained in each of the learning objectives. (Template and examples will be provided)

- Analysis of the pre and post training questionnaire. (Template and examples will be provided)
- Deliverables are due two weeks after the completion of the training.

GOVERNMENT FURNISHED ITEMS:

- Emergency Medical Insurance
- Certificates of Eligibility for J-1 visas

HOST INSTITUTION SHALL PROVIDE:

- International and domestic plane tickets
- Ground transportation in applicable cities, except Washington, DC
- The Fellows' subsistence expenses (lodging and per diem allowance)
- Secure and guarantee lodging during the entire program

**U.S. Department of Agriculture
Foreign Agricultural Service**

Statement of Work

**Cochran Program for Tajikistan Orchard Management
Eastern Europe and Eurasia**

SCOPE OF WORK

The Cochran Fellowship Program's Eastern Europe and Eurasia Region is requesting the design and delivery of a training program for seven (7) Fellows from Tajikistan: (1) Senior Researcher at Tajik Academy of Agricultural Sciences, (1) Production Manager at NGO "SAS Organic", (1) Regional Extension Manager at Chemonics International, (1) Field Mobilizer at NGO "Cross Border Economic Relation", (1) Manager at Fruit Trees Seedlings Production Farm, (1) Head of Viticulture Department at the Institute of Horticulture and Vegetable Growing, (1) Orchard Specialist at International Association of Producers and Exporters Agriproducts of Tajikistan, and one (1) interpreter from the U.S. Embassy in Tajikistan to provide language assistance, for a total of eight (8) participants.

As part of the Government of Tajikistan's plan to increase fruit production to improve food security and increase the incomes of local farmers, there has been a move toward intensive orchard management. This program will attempt to increase sustainable agricultural productivity, support equitable increases in farm incomes, and improve food security and the development of enhanced crop resilience. The program will educate Fellows on how to protect their harvest and reduce vulnerability to drought, heat, pests, and disease.

Training should include: in-depth overview of US intensive orchard management with an emphasis on family-owned and small orchards, how to use land and water resources more effectively in hot and dry conditions, drought- and heat-tolerant seed varieties, pesticide and fertilizer management. Visits to orchard farms, nurseries, markets are to be included.

The program objective is to assist with the development of crop resiliency and marketing strategies which will allow the Fellows to access the global market and participate in international trade. The goal of this program is to increase livelihoods of small holder farmers through improved orchard management which can lead to strengthened international trade and food security in Tajikistan.

LEARNING OBJECTIVES

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

- Intensive orchard management (short period but high production, less space between rows) - especially apricots, apples, cherries, peaches, pears, pomegranates, lemons, oranges, almonds, pistachios
- Form/Design of new intensive orchards (intervals, tilling, conditions)
- How to encourage farmers to switch to intensive orchard management

- How government and research institutions disseminate information to farmers; how to build network in rural communities with no access to internet and government agencies with little funding
- Government subsidies and incentives for small farmers
- Sustainability-focused government policies
- Nursery management
- What kind of seedlings are best
- What minerals and fertilizer are best
- Learn about drought tolerant and heat tolerant orchard varieties
- How to plant and manage dwarf trees
- Methods of pruning and grafting
- Irrigation for intensive orchard management especially for conditions with unreliable electricity (pumps are currently used)
- Drip irrigation
- Water resource management
- How to manage intensive orchards in hot, dry conditions and drastic temperature changes
- Pest/disease prevention and management (environmentally friendly methods)
- Processing of fruit – storage, transport (especially apricots)
- Modern technology in fruit processing and drying
- Marketing

PERIOD OF PERFORMANCE

This consecutive 2-week training program should be provided during May 1 - August 31, 2018.

PLACE OF PERFORMANCE

- The host institution shall propose the place(s) of performance in their Technical Proposal.
- The host institution will be reimbursed for travel and subsistence expenses based on Federal Travel Regulations.

DELIVERABLES:

- Provide a thumb drive of the training highlights to each Fellow and the Cochran Fellowship Program;
- Ensure that each Fellow completes the Cochran Training Program Evaluation; and
- Development of an Action Plan by each Fellow, in accordance with the Action Plan template. The Action Plan identifies goals and outlines specific steps or activities which each Fellow will perform upon return to Tajikistan. An Action Plan generally includes steps, milestones, measures of progress, responsibilities, assignments, and timeline. The contractor 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 recipient).
- A pre-training questionnaire to determine Fellows baseline knowledge of the learning objectives. (Template and examples will be provided)
- A post-training questionnaire to determine the knowledge gained in each of the learning objectives. (Template and examples will be provided)

- Analysis of the pre and post training questionnaire. (Template and examples will be provided)
- Deliverables are due two weeks after the completion of the training.

GOVERNMENT FURNISHED ITEMS:

- Emergency Medical Insurance
- Certificates of Eligibility for J-1 visas

HOST INSTITUTION SHALL PROVIDE:

- International and domestic plane tickets, including related fees such as baggage fees
- Ground transportation in applicable cities, except Washington, D.C.
- Secure and guarantee lodging during the entire program
- The Fellows and interpreter's subsistence expenses (lodging and per diem allowance)

**U.S. Department of Agriculture
Foreign Agricultural Service**

Statement of Work

**Cochran Program for Turkmenistan Agriculture in Arid Environments
Eastern Europe and Eurasia**

SCOPE OF WORK

The Cochran Fellowship Program's Eastern Europe and Eurasia Region is requesting the design and delivery of a training program for seven (7) Fellows from Turkmenistan: (1) research assistant for the Cotton Breeding Office in the Ministry of Agriculture and Water Resources, (2) specialists for the Department of Marketing and Foreign Affairs at the Ministry of Agriculture, (1) researcher and professor in hydro-engineering at the Turkmenistan Agricultural University, (1) senior researcher in the Plant Protection Department at a research institute, (1) professor of irrigation at an agriculture institute, (1) head of Tech Department for private company Gunesli Meydan and (1) interpreter from the U.S. Embassy of Turkmenistan, for a total of eight (8) participants.

The majority of rural Turkmenistan populations rely on agriculture for their livelihoods, and Turkmenistan's agricultural system is heavily reliant on irrigation. Turkmenistan has a fragile ecosystem, emphasized by recent drought-like conditions that have increased rates of desertification in the country. Farmers are facing challenges of having sufficient water to irrigate their crops for the entire summer growing season, resulting in poorer soil quality and lower yields.

This custom-designed training activity should focus on soil and water conservation technologies. Training topics are: operation and maintenance of modern irrigation systems, U.S. organizational structure, regulations and incentives for water management, and modern water-saving techniques. The Fellows should learn about modern irrigation technologies and equipment, water management and environmental conservation, and the U.S. organizational system for water management at local, state, and federal levels. Some visits with researchers of irrigation and crops suitable in dry regions may also apply. The purpose of this activity is to assist Turkmen farmers by exposing them to U.S. advanced conservation and irrigation techniques and methods. The goal of this project is to strengthen the capacity of the farmers and enhance agricultural sustainability and food security in Turkmenistan.

OBJECTIVES

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

- Operation and maintenance of modern irrigation technologies, especially drip irrigation/sprinklers
 - Especially for cotton, as well as wheat, sugar beets, soybeans, vegetables and fruits
- Water management and best practices for arid regions
- Environmental conservation

- Mitigation of waterlogging and soil salinization, rising water table
- Irrigation water recycling
- Adaption to changing climate; floods and drought
- Crops/GMOs suitable for arid regions
- Capacity building for environmental analysis and management
- Technicalities of reservoirs and water transport systems (canals, aqueducts, pump stations)
- U.S. organizational structure for water management at federal, state, and local levels
- U.S. regulatory systems for water use, conservation, environmental protection
- Incentives to use water conservation techniques
- Data sharing among irrigators, irrigation scheduling , voluntary programs/collaboration within the private sector for water conservation
- Extension systems and training for information dissemination
- Plant protection
- How U.S. uses GPS
- Irrigation research and the role of universities/research institutes in water management, irrigation, and water conservation

PERIOD OF PERFORMANCE

This consecutive 2 week training program should be provided between June 1 - August 31, 2018.

PLACE OF PERFORMANCE

- The host institution shall propose the place(s) of performance in their Technical Proposal.
- The host institution will be reimbursed for travel and subsistence expenses based on Federal Travel Regulations.

DELIVERABLES:

- Provide a thumb drive of the training highlights to each Fellow and the Cochran Fellowship Program.
- Ensure that each Fellow completes the Cochran Training Program Evaluation.
- Development of an Action Plan by each Fellow, in accordance with the Action Plan template. The Action Plan identifies goals and outlines specific steps or activities which each Fellow will perform upon return to Turkmenistan. An Action Plan generally includes steps, milestones, measures of progress, responsibilities, assignments, and timeline. The contractor 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 recipient).
- A pre-training questionnaire to determine Fellows baseline knowledge of the learning objectives. (Template and examples will be provided)
- A post-training questionnaire to determine the knowledge gained in each of the learning objectives. (Template and examples will be provided)
- Analysis of the pre and post training questionnaire. (Template and examples will be provided)
- Deliverables are due two weeks after the completion of the training.

GOVERNMENT FURNISHED ITEMS:

- Emergency Medical Insurance
- Certificates of Eligibility for J-1 visas

HOST INSTITUTION SHOULD INCLUDE THESE ITEMS IN PROGRAM BUDGET:

- International and domestic airline tickets
- Ground transportation in applicable cities; except Washington, DC
- Secure and guarantee lodging during the entire program
- The Fellows' subsistence expenses (per diem and lodging)

**U.S. Department of Agriculture
Foreign Agricultural Service**

Statement of Work

**Cochran Program for Dairy Processing Ingredients
Eastern Europe and Eurasia - Ukraine**

SCOPE OF WORK

The Cochran Fellowship Program's Eurasia and Eastern Europe Region is requesting the design and delivery of a training program for seven (7) Fellows from Ukraine: 1 Director, Info-analytical Consulting Company, 1 Chairman of the Supervisory Board, Private Dairy Processing Company, 1 Executive Manager, Private Dairy Processing Company, 1 General Director, Private Milk Canning Factory, 1 Financial Director, Private Dairy Processing Company, 1 CEO, Private Dairy Processing Company, 1 Technologist, Private Dairy Processing Company and an Agricultural Specialist/interpreter from the U.S. Embassy in Ukraine to provide language assistance, for a total of eight (8) participants.

Ukrainian dairy processing managers are increasing efforts in the dairy industry, but most lack information on modern dairy production and processing technologies, technical aspects of dairy processing inputs and advanced marketing strategies and methods. The participants are interested in quality control of milk and food safety, milk, cheese, butter, cottage cheese, sour cream, yogurt and other dairy processing products. Topics should include: milk quality control, dairy processing technologies and equipment, food safety standards, modern dairy value chain and dairy processing ingredients and suppliers. The program should include visits to dairy processing plants with a broad variety of products (with a focus on large and medium companies) and a few modern dairy farms.

This training program will introduce the participants to the best agricultural practices in the U. S. on large, medium and small dairy processing companies and include contacts with U.S. companies involved in exporting dairy processing ingredients. The program objective is to assist with the development of advanced technological and marketing strategies which will allow the Fellows to increase the quality and quantity of dairy products, utilizing U.S. processing ingredients. The goal of this activity is to support expanding U.S. exports of dairy processing ingredients to Ukraine and enhance capacity building, agricultural sustainability and food security.

LEARNING OBJECTIVES

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

- Quality control of milk and dairy products
- Dairy processing technologies and equipment
- Food safety standards and grading for milk and dairy products
- Import opportunities for U.S. dairy processing ingredients
- Full dairy cycle from farm to table, relations with milk producers and raw milk quality control

- Distribution, marketing and sales in dairy industry, historical spatial distribution of dairy production in the U.S., consequences for trade, dairy breeds, farm size, pricing and national milk producing regions
- U.S. dairy breeds overview, historical and future trends
- U.S. dairy farmers and industrial milk production overview: farm size, trends, spatial distribution
- New dairy technologies and products suitable to Ukraine
- Marketing strategies and methods, milk committees in States, U.S. Government support programs
- Logistics systems in dairy industry, operation of retail distribution centers
- Private labels and brands
- Pricing and financing systems, futures and wholesale trade
- Role of cooperatives in dairy industry
- Dairy value chain including suppliers, wholesale and retail customers, margin distribution
- Consumer preferences in the U.S. – structure of dairy products consumption and historical changes, short vs. long shelf life products, industry trends
- Novel/innovative and niche dairy products on U.S. market, future trends
- Whey processing, lactose extraction, dry whey
- Import regulations on casein, powdered milk, butter, dry whey
- Control of fake products in the U.S.
- Dairy Industry Associations in the U.S.

PERIOD OF PERFORMANCE

This consecutive 2 week training program should be provided in late May 1 - August 31, 2018.

PLACE OF PERFORMANCE

- The host institution shall propose the place(s) of performance in their Technical Proposal.
- The host institution will be reimbursed for travel and subsistence expenses based on Federal Travel Regulations.

DELIVERABLES:

- Provide a thumb drive of the training highlights to each Fellow and the Cochran Fellowship Program;
- Ensure that each Fellow completes the Cochran Training Program Evaluation; and
- Development of an Action Plan by each Fellow, in accordance with the Action Plan template. The Action Plan identifies goals and outlines specific steps or activities which each Fellow will perform upon return to Ukraine. An Action Plan generally includes steps, milestones, measures of progress, responsibilities, assignments, and timeline. The contractor 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 recipient).
- A pre-training questionnaire to determine Fellows baseline knowledge of the learning objectives. (Template and examples will be provided)
- A post-training questionnaire to determine the knowledge gained in each of the learning objectives. (Template and examples will be provided)

- Analysis of the pre and post training questionnaire. (Template and examples will be provided)
- Deliverables are due two weeks after the completion of the training.

GOVERNMENT FURNISHED ITEMS:

- Emergency Medical Insurance
- Certificates of Eligibility for J-1 visas

HOST INSTITUTION SHALL PROVIDE:

- International and domestic plane tickets
- Secure and guarantee lodging during the entire program
- Ground transportation in applicable cities, except Washington, DC
- The Fellows' subsistence expenses (lodging and per diem allowance)
- Interpreter to provide language assistance

**U.S. Department of Agriculture
Foreign Agricultural Service**

Statement of Work

**Cochran Program for Uzbekistan Water-Saving Technologies
Eastern Europe and Eurasia**

SCOPE OF WORK

The Cochran Fellowship Program's Eastern Europe and Eurasia Region is requesting the design and delivery of a training program for seven (7) Fellows from Uzbekistan: (1) head for the Agency for Project Implementation at the International Fund of the Aral Saving, (1) procurement specialist for the Project Implementation Unit of Arab Coordination Group at the Ministry of Agriculture and Water Resources, (1) deputy chief in the Administration of Nari-Kashkadarya River Basin Irrigation System, (1) deputy director of the Karakalpakstan branch at the Scientific Research Institute of Irrigation and Water Problems, (1) chief specialist of Water Management at Nazar Business and Technology, LLC, (1) regional consultant/project manager assistant/specialist on Remote Sensing, GIS, and Climate Change at the International Water Management Institute, (1) chief and vice rector at the Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, and (1) interpreter from the U.S. Embassy in Uzbekistan, for a total of eight (8) participants.

The majority of rural Uzbekistan populations rely on agriculture for their livelihoods, and Uzbekistan's agricultural system is almost entirely reliant on irrigation. Uzbekistan has a fragile ecosystem, emphasized by recent drought-like conditions that have increased rates of desertification in the country. The previously fertile area of the Aral Sea basin is now devastated from overuse and changing weather conditions over the past 40 years. Farmers are facing challenges of having sufficient water to irrigate their crops for the entire summer growing season, resulting in poorer soil quality and lower yields. Additionally, as the country grows in population and economically, Uzbeks are becoming more aware of their environmental impact and capabilities to manage it.

This custom-designed training activity should focus on water conservation technologies and policies in arid climates. Training topics are: operation and maintenance of modern irrigation systems, U.S. organizational structure and regulations and incentives for water management and conservation, and modern water-saving techniques in agriculture and irrigation/water transport infrastructure. The group should learn about modern irrigation technologies and equipment, water management and environmental conservation, and the U.S. organizational system for water management at local, state, and federal levels. Some visits with researchers of irrigation and crops suitable in dry regions may also apply. The purpose of this activity is to assist Uzbek farmers and policymakers by exposing them to U.S. advanced conservation and irrigation techniques and methods. The goal of this project is to strengthen the capacity of the farmers and enhance agricultural sustainability and food security in Uzbekistan.

OBJECTIVES

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

- Operation and maintenance of modern irrigation technologies for arid regions, especially for:
 - Drip and micro irrigation
 - Cotton, wheat, rice, corn, and horticulture such as apples, grapes, strawberries
 - Greenhouses
- Water management and best practices for arid regions
- Environmental conservation
- Mitigation of waterlogging and soil salinization
- Irrigation water recycling
- Adaptation to changing climate; floods and drought
- Capacity building for environmental analysis and management
- Technicalities of reservoirs and water transport systems (canals, aqueducts, pump stations)
- U.S. organizational structure for water management at federal, state, and local levels
- U.S. regulatory systems for water use, conservation, environmental protection
- Incentive programs to encourage water conservation techniques and investment in water-saving technologies
- Data sharing among irrigators, irrigation scheduling , voluntary programs/collaboration within the private sector for water conservation
- Extension systems and training for information dissemination
- Tools and methods for water measurement and planning; GIS mapping
- Role of soil health and organic matter in irrigation
- Irrigation research and the role of universities/research institutes in water management, irrigation, and water conservation

PERIOD OF PERFORMANCE

This consecutive 2 week training program should be provided between May 1 - August 31, 2018.

PLACE OF PERFORMANCE

- The host institution shall propose the place(s) of performance in their Technical Proposal.
- The host institution will be reimbursed for travel and subsistence expenses based on Federal Travel Regulations.

DELIVERABLES:

- Provide a thumb drive of the training highlights to each Fellow and the Cochran Fellowship Program.
- Ensure that each Fellow completes the Cochran Training Program Evaluation.
- Development of an Action Plan by each Fellow, in accordance with the Action Plan template. The Action Plan identifies goals and outlines specific steps or activities which each Fellow will perform upon return to Uzbekistan. An Action Plan generally includes steps, milestones, measures of progress, responsibilities, assignments, and timeline. The contractor 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 recipient).
- A pre-training questionnaire to determine Fellows baseline knowledge of the learning objectives. (Template and examples will be provided)
- A post-training questionnaire to determine the knowledge gained in each of the learning objectives. (Template and examples will be provided)
- Analysis of the pre and post training questionnaire. (Template and examples will be provided)
- Deliverables are due two weeks after the completion of the training.

GOVERNMENT FURNISHED ITEMS:

- Emergency Medical Insurance
- Certificates of Eligibility for J-1 visas

HOST INSTITUTION SHOULD INCLUDE THESE ITEMS IN PROGRAM BUDGET:

- International and domestic airline tickets, including related fees such as baggage fees
- Ground transportation in applicable cities; except Washington, DC
- Secure and guarantee lodging during the entire program
- The Fellows' subsistence expenses (per diem and lodging)