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FARMER-TO-FARMER
The USAID John Ogonowski and Doug Bereuter Farmer-to-Farmer Program

**FARMER-TO-FARMER
VOLUNTEER ASSIGNMENT FORM**

Summary Information	
Assignment Code	TT67
Country	Trinidad & Tobago
Assignment Title	Aquaponics with Alternative Species (Shrimp, Crayfish, and/or Lobster)
Best dates for volunteer visit	After January 2023
Host Organization(s)	MIC Institute of Technology (formerly Metal Industries Company Limited) is an agency in the Ministry of Education established in 1974 as a joint venture of the Government of Trinidad and Tobago, the United Nations Development Programme / United Nations Industrial Development Organization (UNDP/UNIDO), and a number of private local industries. Having provided manufacturing support to customers through the design and production of high-quality tools, molds, precision machining, and Manufacturing Engineering, MIC Institute of Technology has rebranded itself as a unique entity, operating as both a commercial factory and training institution. The MIC Training Programme follows the German Dual System of Technical Vocational Training and uses the Factory Training Concept where foundation theoretical and practical skills are developed in MIC Institute of Technology and mastery of these skills are developed in the industry under guided supervision of a skilled Supervisor or Master Craftsman. In 2016 MIC-IT started a Crop Production pilot programme which was approved in 2017 and is now being offered under its MuST programme. The MuST Programme offers trainees the opportunity to be exposed to various occupational and employability skills training within the priority sectors. The trainees are exposed to the real world of work and life skills training while at the same time learning a technical skill to gain sustainable employment.
Assignment Information	
Objectives and Anticipated Results	In view of the limited availability of land and the debilitating effects of climate change on external field, soil and water conditions, many primary producers have been exploring climate smart farming options which require less land space and are not affected as severely by climate. Furthermore, many primary producers also want to diversify their farms and enter alternative realms of agriculture such as aquaponics. In this regard, MIC would like to provide training for participants and staff in aquaponics but not in the production of the usual species such as tilapia but rather in shrimp, lobster and crayfish. The institute is interested and prepared to teach their staff and students in the techniques of this mode of



	<p>aquaponics as they see these skills as complimentary to their technological curriculum. Therefore, in response to this need, a volunteer is requested to provide staff and participant training in:</p> <ul style="list-style-type: none"> • Introduction to Aquaponics- design, management, and maintenance • Planning and building small aquaponics unit for shrimp, lobster and/or crayfish • Care and maintenance of shrimp, lobster, and/or crayfish in aquaponics system <p>During the training, the MIC team would like to plan and build a small aquaponics unit for shrimp, crayfish and lobster as output from the training. Through this training, MIC staff and participants will be able to design, build, and maintain a small aquaponics unit in order to produce food amidst the challenges of climate change.</p>
<p>Expected Deliverables</p>	<ul style="list-style-type: none"> • Hands-on experience – Help participants to design and build small aquaponics unit for shrimp, crayfish and/or lobster • Provide materials to members for all subjects • Debriefing with country staff and Purdue after assignment • F2F Assignment Report and F2F Recommendations Form to be completed at the end of the assignment (completed for debriefing with staff) • Sign-in sheets for training sessions (work with Field Coordinator) • One outreach activity (news article, interview, presentation, etc.) about your F2F activity. • If applicable, “like” the Purdue F2F Facebook and Twitter pages and share your experience.
<p>Desired Volunteer Skill/Expertise</p>	<ul style="list-style-type: none"> • 5 years of experience in aquaponics for shrimp, crayfish and/or lobster • Experience training adults in low-income communities • Experience working in a developing country preferred • Flexibility • Language: Proficient in English
<p>Training Participants</p>	<p>About 15 staff and participants of MIC Institute of Technology</p>
<p>Resources to be Contributed by Hosts and Local Partners</p>	<ul style="list-style-type: none"> • Provide in-country transportation, office space for meetings, and facilities for training and/or workshops; and • Provide supplies, equipment, and other resources for training activities. • Access to computer, projector, and screen
<p><i>Farmer to Farmer Objective(s)</i></p>	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Increase agricultural sector productivity and profitability <input checked="" type="checkbox"/> Improve conservation and sustainable use of environmental and natural resources <input type="checkbox"/> Expand agricultural sector access to financial services <input type="checkbox"/> Strengthen agricultural sector institutions



<i>Type of Volunteer Assistance</i>	<input checked="" type="checkbox"/> Technology Transfer <input type="checkbox"/> Organizational Development <input type="checkbox"/> Business/Enterprise Development <input type="checkbox"/> Financial Services <input type="checkbox"/> Environmental Conservation <input type="checkbox"/> Administrative
<i>Type of Value Chain Activity</i>	<input checked="" type="checkbox"/> Information and Input Support Services (extension services, input supplies, veterinary services, etc.) <input type="checkbox"/> On-Farm Production <input type="checkbox"/> Processing (primary and final product transformation, storage, transportation, etc.) <input type="checkbox"/> Marketing (branding, advertising, promotion, distribution, sales, etc.)
<i>PERSUAP – Volunteer Assignment Type</i>	<input type="checkbox"/> Type 1 Volunteers provide direct assistance for the use or procurement of pesticides and are likely to recommend and/or provide advice on specific pesticide active ingredients or products. <input type="checkbox"/> Type 2 Volunteers provide indirect assistance for the use or procurement of pesticides; they are not expected to recommend or provide advice on specific pesticide active ingredients or products. <input checked="" type="checkbox"/> Type 3 Volunteers are not expected to be involved in pesticide issues. <input type="checkbox"/> Type 4 Volunteers work on a separately-funded USAID project/activity which may have a PERSUAP governing its operations related to the use and procurement of pesticides.
Volunteer Information	
Recommended Preparation	<ul style="list-style-type: none"> • Please thoroughly read and follow the instructions provided in the volunteer orientation packet. • Let field staff know if you need assistance or accommodations.

Project Overview

Trinidad and Tobago is a two-island country of a diverse population with rich history and culture. As an island nation, it is under the constant mercy of changing climate that is affecting natural resources and agriculture. At present, it is a net food importing country forcing the government to refocus its attention on sustainable agriculture as a part of its 2030 country development strategy. The tropical climate and available natural resources, if used properly, can make the country self-sufficient in vegetables, root crops and some fruits with a provision to export value added products. It is an opportune time for F2F volunteers to engage with agriculture extension officers and farmers to impart knowledge and learn about the culture and endurance of Trinbagonians. The objective of the F2F Trinidad and Tobago Country Program is to improve food and nutrition security through productivity, safety, and profitability as well as strengthening the extension service through capacity building.