



## National Center for Food and Agricultural Policy

### NCFAP 2020 Annual Report

#### I. Projects Completed in 2019

##### **I-1. “The impact of the EU-Mercosur trade agreement on land cover change in the Mercosur region.”**

**Sponsor:** *IMAZON*

**Principal Investigator:** Farzad Taheripour

**Term:** February – May, 2020

**Summary:** On June 2019, the European Commission and the Mercosur countries signed the EUM-FTA free trade-agreement that, once ratified by participating countries, is expected to increase commerce in agricultural products between the regions. The deal eliminates 93% of EU’s tariffs on Mercosur products to the EU. During the long negotiation, the prospect of the change raised concerns about increased deforestation in Mercosur – especially in the Brazilian Amazon, Brazilian Cerrado, and the Chaco of Argentina and Paraguay.

The **Amazon Institute of People and the Environment (IMAZON)** engaged NCFAP researchers to evaluate land use changes in the Mercosur countries resulting from the European Union’s reduced tariffs on agricultural products, mainly soybeans and beef, imported from Mercosur. NCFAP researchers estimated the induced land use changes due to the new trade agreement that may occur inside or outside of the Mercosur region. They considered all types of land transformation across uses: conversion of forest to pasture or cropland, pasture to cropland, cropland to pasture, conversion of idled land to crop production, and so on.

They found that the new trade agreement raises welfare in the EU, Brazil, and the rest of South America, with the EU gaining the most, in all examined scenarios. On the other hand, the US, China, and other areas lose welfare. However, the net global welfare gain is positive and significant. Sensitivity analyses indicate that if trade elasticities are larger there are larger gains for the EU, Brazil and the rest of South America. Also, the stronger is land governance in Brazil, the larger are Brazil’s gains and the lower are GHG emissions. That is because with stronger land use governance, Brazilian farmers bring more idled land into use under the EUM-FTA, instead of deforestation.

##### **I-2. “Case Study of Emery County Agricultural Water Quantification System Implementation”**

**Sponsor:** *Rural Water Technology Alliance (RWTA) for the State of Utah, Division of Water Resources.*

**Principal Investigators:** Rangesan Narayanan, Roger Hansen, Colby Green and Amy Green.

**Term:** August 1, 2019 - June 30, 2020.

**Summary:** Emery county, Utah has had real-time monitoring of the irrigation service area water conveyance and delivery systems since 1992. The purposes of this project are to engage stakeholders in Emery County -including water managers and producers- to understand, document, and evaluate the drivers, methods, costs, benefits and lessons learned from the actual implementation of a network of flow measurement structures with transparent, real-time monitoring. The ex-post cost-benefit analysis for Emery County prepared by NCFAP’s Senior Fellow provides guidance for real-time measurement and control systems to be installed in other Utah counties in the future.

## II. Continuing Projects

### II-1. Sponsored Research: “*Changing Demand and Relative Price Relationships among Oilseed Crops*”

**Sponsor:** *USDA Office of the Chief Economist, Energy Policy and New Uses*

**Investigators:** Stanley Johnson, Michael Helmar, Robert Myers, Aleks Schaeffer

**Term:** October 2019 – May 2021

**Summary** We will provide the Office of the Chief Economist two completed papers on the changes in vegetable oil prices historically and on the relationships between vegetable oil, meal, and petroleum prices.

The first looks at monthly soybean, canola, palm and sunflower vegetable oil and meal prices from 2000 through 2019. Because vegetable oils and meals satisfy different demands, a focus only on oil prices could be misleading. The analysis is designed to provide OCE an improved basis for exports and projecting domestic consumption of oils and meal.

The second focuses on the impact of increased production of vegetable oils on the price of petroleum. This is a new focus of analysis for OCE. We will utilize the monthly data used for the first paper to investigate how movements in those prices link to movements in petroleum prices. The objective is to begin to equip the OCE with a better understanding of the links between vegetable oil and petroleum prices. We know that they are linked, but no-one yet knows whether petroleum prices respond to the prices of vegetable oils, or if vegetable oil or meal prices respond to petroleum prices.

### II-2. Professional Development Training: “*Policy Brief Writing*”

**Sponsor:** *International Institute for Tropical Agriculture (IITA) “Enhancing Capacity to Apply Research Evidence in Policy for Youth Engagement in Agribusiness and Rural Economic Activities in Africa (CARE Scholars Program)”* funded by IFAD.

**Training provider:** Maureen Kilkenny

**Term:** 2018 – 2019 – 2020 - 2021

**Summary:** The objective of the program is to ensure that young African agricultural economists can produce high quality policy briefs from their research about ways to increase the employment of African youth in agriculture. The training provider’s deliverables each year include (i) evaluations of about 100+ applicant proposals (in French), (ii) development of training materials, (iii) presentation of a weeklong workshop to 30 post-graduate scholars (during 2020 due to covid-19 the workshop convened Monday through Friday, 6am to 10am PST via ZOOM); and (iv) provision of one-on-one guidance via email and ZOOM or SKYPE with the scholars while they write their policy briefs. The 2020-2021 cohort is the third and final cohort.

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