

Award Period: Fall 2021

Principle Investigator: Warren Crawford, UW Extension, crawford@uwyo.edu

Expanding Food Production and Youth Development Opportunities in Belize

Global Perspectives Summary Report



WARREN CRAWFORD, YOUTH DEVELOPMENT SPECIALIST
CAITLIN YOUNGQUIST, AG AND NATURAL RESOURCES



Summary

This project supported Warren Crawford, Caitlin Youngquist, Donna Hoffman, Emily Haver, and Johnathan Despain, University of Wyoming faculty members to conduct site visits to develop and explore ideas to grow and expand small scale food production opportunities and agriculture education in Dangriga, southern region of Belize.

The University of Wyoming College of Agriculture, Life Science, and Natural Resources Extension department, has partnered with Stan Creek Ecumenical College and Secondary School to assist and provide advice in the development of a school farm to train the next generation of small scale food production agriculturalists. A key component of the exchange

was to build some of the infrastructure to sustain food production and train school personnel in the development of enterprise gardens and food productions plots.

Below are a few highlights of the exchange that was able to occur.

- Develop small scale food production plots and planted fruit, herbs and vegetables for use in the school lunch program.
- Build compost sites to increase soil health and help with food and animal waste disposal.
- Developed a strategy for use of the school greenhouse in tropical climate - plant starting and sales.
- Advised school personnel on poultry and egg production as well as



Local school children plant flowers and herbs as part of the school grounds beautification project.

waste management

- Built a community garden demonstration site using local materials and rain water capture

Expanding Food Production and Youth Development

Expanding Opportunities to Support Local Food Production



Youngquist teaching students proper planting techniques and the importance of soil and plant health.

Dangriga Belize, located in the Southern region, lies in the heart of the largest citrus production region of Belize. The food production systems in the southern region of Belize is primarily owned and operated by foreign interests and by a large Mennonite Community. The recent global pandemic (COVID-19) demonstrated how fragile the system is when the foreign owned ag productions shut down and the Mennonite community stopped selling in the local markets. The shutdown resulted in food insecurity for many of the residents and led to a movement toward teaching young people the importance of food production and agriculture practices

The Stan Creek Ecumenical school systems recognizes this fact and is trying to teach their students not only

the importance of a sustainable healthy food supply, but also the means of producing food for their families and local communities.

Through a connection with a Wyoming based church, the University of Wyoming Extension personal was asked to partner with Ecumenical College to advise and assist in developing an agriculture program. In addition, the school asked for assistance to help build a school farm so students can

learn first had small scale crop production and meat production. The food produced at the school farm will be used to supplement the school lunch program for all students at Ecumenical College.

Ecumenical College erected a green house to help develop plant starts; a chicken coop was built for meat and egg production; and a small scale food production plot was created for fruit and vegetable production.



Belizean students planting peppers that will be used in the school lunch program



"Chicken Coop" for poultry and egg production at the college.

Supporting Agriculture Education and Community Development

University of Wyoming personnel saw a need to expand the agriculture education program beyond the school farm in a effort to reach more local residents in producing food for the community. A community garden demonstration site was constructed from recycled or repurposed materials to show some ways local residents can construct a garden. The

demonstration site included a variety of fruit and vegetables as well as a rain water collection system. The intense heat associated with the Belizean dry season precipitated the use of a shade structure to show the importance of using water efficiently to keep the plants healthy.



Community garden demonstration site was built to show local residents some ways to use local materials and collect rain water for irrigation.



Belizean students prepare an underground composting system for their school.

Expanding International Opportunities in Agriculture



Ecumenical College is one of the most popular and prestigious schools in the southern region of Belize.

While in Belize, American visitors had the opportunity to tour and learn about some of the local, and the traditional Belizean foods and Belizean way of life. A visit to a Mennonite community farm, nursery, cacao farm, farmers market, and coconut oil processor was organized by the regional field office of the Ministry of Food and Agriculture.



Despain learning to process chocolate with traditional Maya stones.



Local resident washing and cooling their horses in the ocean water.



Local farmers market in a neighboring town to Dangriga.



Local Belizean cacao farmer explaining the process to extract cocoa beans.

Future Opportunities

It was clear when talking to farmers, agency personnel, and agriculture organizations in Belize, we share similar challenges and opportunities as the U.S. agriculture industry. The aging population and lack of youth interest in pursuing careers in agriculture is causing concern for the future of the industry. As the Ecumenical College moves to connect local agriculture leaders with agriculture students, the opportunities for both 4-H type agriculture programs and the local

ag industry can and will grow together. The University of Wyoming Extension programs can play a role in this growth by sharing resources and learn from one another via the internet is unlimited. Our post COVID-19 environment took UW Extension program virtual which also allowed us to focus our attention and continued partnership virtually. The identification of sister clubs between the Ecumenical students and Wyoming 4-H clubs will be pursued and a schedule developed to share 4-H project work through web based technology.

This project is just one step in developing long term international cooperation between the University of Wyoming Extension Programs and Belizean students and agriculture organizations in an effort to reach their full potential in our global society.

It is our hope that continued financial support can be obtained to provide future travel opportunities to continue the partnership to strengthen both the Wyoming and Belizean agriculture interests.

Special Thanks

A special thank you to the Global Perspectives program at the UW College of Agriculture, Life Sciences and Natural Resources. Thanks also to the staff at Stan Creek Ecumenical College who were such gracious hosts and made our trip so enjoyable.