



*“Removing the obstacles and embracing the future to revive agriculture in Antigua & Barbuda”*

# Increasing National Production



# Backyard Gardening Program



- ❖ The Farmers Forum Antigua & Barbuda, CARDI and the Ministry of Agriculture, Fisheries and Barbuda Affairs have been working together and produced five(5) main crops that the program will concentrate on to prepare seedlings for distribution to approximately 7,000 households. Crops chosen are cassava, sweet potato, string beans, okra and pumpkin. These produce were chosen for their nutritional value which will be much needed substance to households.
- ❖ Seedlings will be prepared with assistance from CARDI, The Farmers Forum and Ministry of Agriculture. The Farmers Forum has reached out to its network of farmers and have been able to procure a lot of the raw materials required for this project. The Ministry of Agriculture will provide the remainder and CARDI will supply the facilities for preparation of seedlings.
- ❖ Distribution we are recommending to be done on a district level to be managed by Ministry of Agriculture Extension Division and other supporting agencies. It is important that the most vulnerable gets the assistance.



# Increasing Full-time Crop Farmers Production Levels



- ▶ A long list of crops have been detailed to be increased, by significant levels, for full-time crop farmers. An increase in these crops will aid in mitigating any fallout from a reduction of deliveries of food supplies to the nation. This will also assist in a reduction in food imports after the crisis period is over.
- ▶ Farmers need assistance with land preparation services, Land Clearing, Tractor Services. This will assist them in preparing otherwise unused lands on their farms and placing them under immediate production. Our first aim is to have an additional 500 acres between several farmers be put under planned production to ensure food levels throughout the year.
- ▶ Assistance with the purchasing of additional irrigation supplies, fertilizers, pesticides, fungicides and more. This could be as grants or small interest, hassle free loans. This cannot take too long to take effect.
- ▶ Immediate assistance to get water and electrical supply to farms. Many have applications in but are still awaiting connection. A reduction needs to be put into effect immediately.
- ▶ CMC and other suppliers need to increase its seed stock. Very important.



# Proposed crops for increase production

- ▶ Onion
- ▶ Lettuce
- ▶ Sweet Pepper
- ▶ Tomatoes
- ▶ Carrots
- ▶ Watermelon
- ▶ Cantaloupe
- ▶ Cabbage
- ▶ Butternut
- ▶ Table Squash
- ▶ Eggplant
- ▶ Okra
- ▶ Seasoning Pepper

- ▶ Sweet Corn
- ▶ Cassava
- ▶ Sweet Potato
- ▶ Yams
- ▶ Pumpkin
- ▶ Beet Root
- ▶ Irish Potato
- ▶ Cucumber
- ▶ Spinach
- ▶ String Beans
- ▶ Herbs
- ▶ Zucchini
- ▶ Yellow Squash






# Equipment & Services Required

- ▶ Excavator & Backhoes: Used for land clearing. We are seeking the assistance to clean more than 500 acres of farmlands.
- ▶ Plough: We need to have ploughing done on more than 500 acres of farmlands. This would mean we need to have approximately 10 acres of farmland, at a minimum, ploughed on a daily basis. Brush cutting, Ploughing, Banking and rotavating.
- ▶ Ponds: Cleaning and preparing of ponds and water ways to allow for availability of storage for water once rains come. Water plays an essential role in the farming community.
- ▶ Equipment should be made available from any source possible. The ABDF, SVRCG, ADC, MOA Extension Division, Ministry of Public Works.





## Production by National Hydro Growers

The resilience of the food system must be improved against this hazard and others. This novel coronavirus pandemic shows that we need to invest in local agriculture to boost our supply of local reliable food sources. Aquaponics, hydroponics and controlled environment agriculture can produce large amounts of food with minimal land space required.

To increase production by at least two-fold, in the event of food shortages, the hydro growers will require:

- ▶ XCD\$1,000,000 grant / low interest loans (offered at 0-1%) to facilitate the purchase of:
  - ✓ Equipment, Supplies, Inputs
- ▶ \*\*Low interest loans should attract relaxed repayments terms in line with crop yield and harvest.
- ▶ \*\*Established farmers should not require formal business plans to access low interest loans



The background of the slide features a large, dense herd of goats in a dry, open field. The goats are of various colors, including white, brown, and black, and many have prominent horns. In the top left corner, there is a small, circular inset image showing a mountainous landscape with a herd of cattle grazing in a green valley.

# Increasing Livestock Production

- ▶ The National Livestock Association's range of quality meats include beef, pork, lamb and goat. Considering the current effect of Covid-19 on global trade and our local food security, this cadre of farmers have pooled their resources and are more than capable of meeting the demands of the citizens of Antigua & Barbuda.
- ▶ We are proposing an increase in the production of locally produced pork and lamb during the next 6 months.

Required are the following to aide in increasing production:-

- ▶ Waiver of ABST on building materials and supplies required to create sheds and barns on farms.
- ▶ Reduction in rates for electricity and water. Also assistance with application process for both.
- ▶ Assistance with establishing forage material farms for feeding animals.



At the CARDI Antigua and Barbuda unit we have several drought tolerant grasses and legumes already established. Additionally we have the Mulberry and the Moringa plots to support alternative feed mixes for livestock farmers.

The unit continues to support livestock farmers and provide planting material thus far we have engaged over 50 livestock farmers in Antigua and Barbuda. We are now in the process of assisting the Ministry and IICA with respect to developing a protein bank across four different agro ecological zones across Antigua and Barbuda. Providing planting and technical expertise based on the range of forages present at the unit. Additional financial and equipment support should be given to rapidly increase the ability to generate more forage material for the livestock farmers should. An appropriate needs list will be provided later.

Forage material include: Guinea Grass, Green Panic, Chrysopogan, Dwarf Eggplant Grass, Stylo Hamata, Clitoria, Sirato, Mulberry, Moringa.





# Increasing Poultry Production



- ▶ It is well known that Antigua & Barbuda is self sufficient in eggs. We believe there is adequate supply of birds on the island to sustain the needs for eggs for the coming months. Our only challenge may be in the area of feed. This will be addressed in a subsequent slide.
- ▶ The poultry industry is plagued with the inability to process on any large scale. We are seeking assistance from the government for US \$20,000.00 to purchase and establish a small processing unit to allow for processing of broilers for meat. This will greatly increase our capacity.
- ▶ Small and low interested loans to purchase birds and feed to allow for an increase in meat production immediately. We have already sourced the chicks and have spoken to the feed company to purchase bulk feed.
- ▶ Tightening of the market to disallow imports of eggs. Most hotels have significantly reduced their orders putting a large amount of eggs back on the market for sales. In fact, we are anticipating a glut of eggs shortly on the market, therefore, we are recommending constant communication with the Poultry Association to determine our capabilities to supply eggs before license are signed off.

## Poultry Processing Equipment Package

- ▶ A single processing unit will allow for the control of processing of poultry meat. Our goal is to purchase at least 2 systems.
- ▶ Assistance with the purchasing of additional feeders and watering systems for poultry will allow farmers to increase production.



# Water, the most important implement

- ▶ Water across the agriculture industry is of grave importance. The inability to have a steady supply of running water will cause difficulty in the increase of our water supply. We are proposing the government aides the farmers with water bladders which can store up to 25,000 gallons of water at a time and a Solar water pump with adequate solar panels.
- ▶ Pump Estimated Landed Cost in Antigua US \$1,500.00
- ▶ Water Bladder Estimated Landed Cost in Antigua US \$1,500.00
- ▶ Financing should be made available and repayment be pegged to harvesting or processing times of the farms.



  
CHEERS PUMP  
SOLAR PUMP





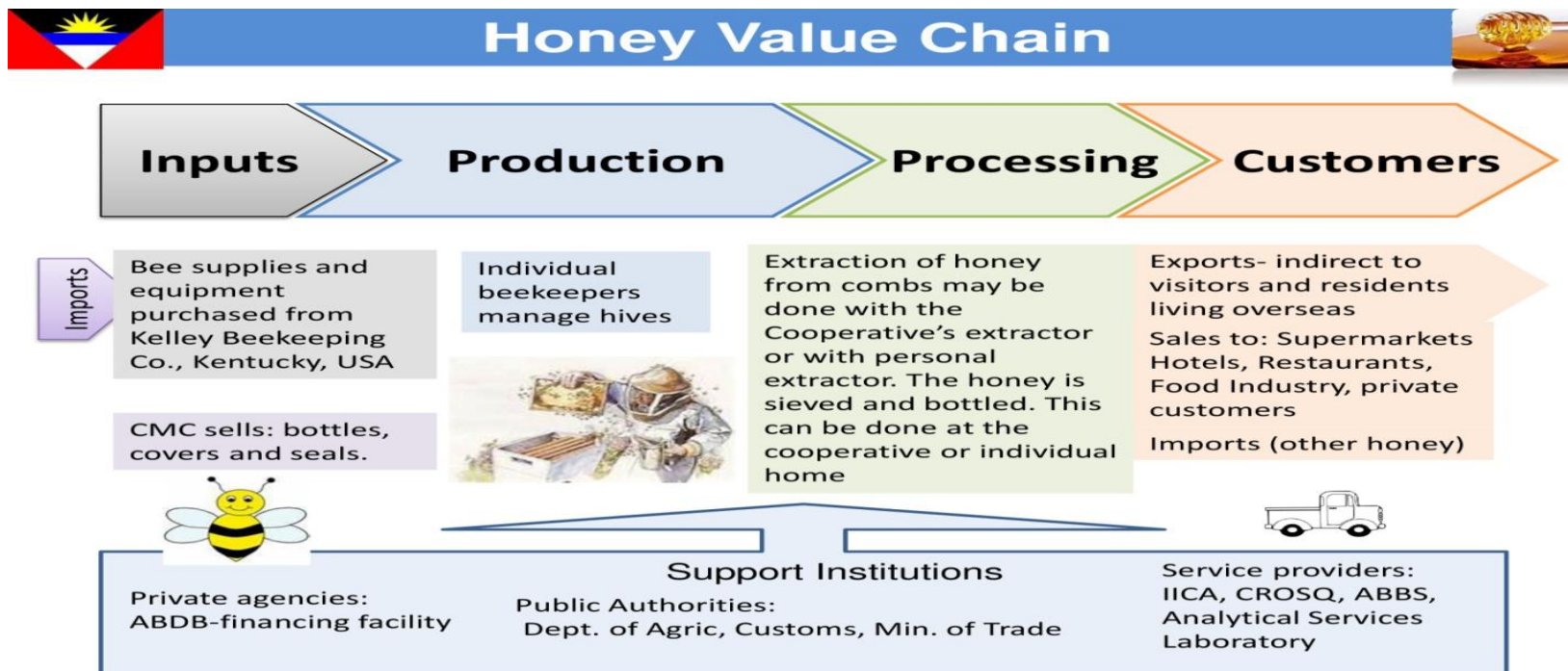
# Chilled, Freezer & Dry Storage

- Cold, Freezer and Dry Storage are of great importance as they will allow the sector to store food produced for prolonged periods. This is a current major deficiency on the island. We recommend dialoging with Supermarkets, Wholesales and other entities to determine space available that can be used to store relevant materials in the short term. In the long term, effort should be made to equip the various associations with the assistance to create a unified storage facility to allow for joint chilled, freezer and dry storage sites. Long term plan should be looked at with the Environment Division to see if there is any proposal that could meet a financing opportunity.



# Bees, an essential role in increasing production

- The beekeepers have a long-standing relationship with a number of links in the value chain. The farmers who depend on the bees for pollination, from time to time, will make arrangements with beekeepers according to the crop being grown. A few years ago a large melon farmer rented hives for pollination of his crops.



# Needs of the Beekeepers

- ▶ Restoration of the Electricity and Water Connection to the Beekeepers Cooperative Processing Facility.
- ▶ Assistance with repairs to the facility to improve production. Approximately \$40,000.00 XCD.
- ▶ Purchasing of new hives. Approximately 600 needed at \$200/hive. Total of \$120,000.00 XCD.
- ▶ Purchasing of other equipment required to facilitate the beekeepers.

# APICULTURE

HARSHIL.N.JINANDRA ROLL NO.



# Establishing an Artificial Insemination Program

- ▶ Establishing an AI Program to improve breed stock and reduction of timeline between litters.
- ▶ AI training has been completed by many persons within the Livestock Division, however, the programs have never been implemented.
- ▶ Semen was received on island to facilitate the process but was never kept properly therefore the material had to be discarded.
- ▶ Implementing this program on island needs be a collaboration between the Ministry of Agriculture and the Farming Community.



# Thank you for taking the time to listen!

## The Farmers Forum

**Marvin Joseph (Chairman)**

- ▶ ABPFA - Antigua & Barbuda Poultry Farmers Association
- ▶ NLA - National Livestock Association
- ▶ Southern Farmers Association
- ▶ ANBNROP - Antigua & Barbuda Network of Rural Women Producers/Processors
- ▶ Smart Farmers Association
- ▶ Antigua & Barbuda Beekeepers Cooperative

**Adolph Audain (Deputy Chairman)**

- ▶ Antigua & Barbuda Hydro Growers
- ▶ Antigua & Barbuda Chamber of Commerce
- ▶ Antigua & Barbuda Wine Makers Association
- ▶ Team Fresh Produce Cooperative
- ▶ ABAFY - Antigua & Barbuda Agriculture Forum for Youth

