

Introducing our first aquaponics entrepreneurs in Jamaica

Under INMED Caribbean's *Increasing Access to Climate-Smart Agriculture (IACA)* program in Jamaica, five trained agri-entrepreneurs are now investing in and developing commercial aquaponics enterprises. Here, we feature three systems being developed by our farmers of the future.

Marcus Sewell

IACA's first agri-entrepreneur, Marcus Sewell has developed a commercial aquaponics system is composed of 5 half-55 gallon drums used for gravel beds seated on 2 x 14 treated wood frame. A 250 gallon IBC tank is used as the fish tank, connected to a filtration system consisting of 20 gallon (black) drums, with a swirl filter and pipe leading to a 15 gallon (blue) drum, serving as the biofilter. From the biofilter drum, 3/4 inch PVC pipe is connected to the 5 grow beds. The 5 grow beds have bell siphons which are connected in series with a 2 inch drain pipe, leading to a 55 gallon blue drum that is used for the sump tank.



The sump tank is then connected back to the IBC tank. The system plumbing uses 3/4 inch PVC pipe from IBC tank to the grow bed. The system is run by 4 solar panels with one inverter and one solar battery. There are two water pumps, one being located in the IBC tank and the other in the sump tank. One air pump services the fish tank with 4 air stones. Tilapia fish is the current fish used to provide nutrients to the plant grow beds. There is small Bloomsy solar weather station that is a part of the farm setup to keep track of the weather within the area.



Angella Ramdon-Salmon

Angella is one of 24 women who are participating in IACA. Her business plan involves the cultivation of high-quality organic herbs and spices in demand by upscale buyers. Her aquaponics system consists of

- 6 grow beds using 55 gallon drums cut vertically
- 3 fish tanks
- 3 sump tanks (55 gallon drums cut horizontally)
- 3 sump tanks

The herbs harvested from this system will be marketed along with natural products that will be developed using some of these spices. The products will be commercially available from Angella's website at <https://dewcoirgreenlimited.com> (website is currently under construction).



Louis McLaren

Louis McLaren is proving that you don't need a vast space to benefit from aquaponics. His small-scale system is enclosed in a 600 SF greenhouse, consisting of:

- 2 gravel grow beds measuring 8' x 4'
- 1 raft bed measuring 16' x 4'
- 1 200 gallon fish tank
- 1 filter and 1 mineralization tank
- 3 sump tanks

Louis is currently growing a bumper crop of romaine lettuce, generating, roughly 65 lbs of produce every 40 days.



Special thanks to IACA Project Manager João Cotter for compiling this update. Learn more about *Increasing Access to Climate-Smart Agriculture* and follow our famers at <https://inmedcaribbean.org>.