NMED has designed a simple ebb-and-flow system that eliminates the need for expensive and complex filters and oxygenation systems. Composed of fish tanks, grow beds and pumps, the entire system is built on the project site using common, locally accessible building materials.

Units can be designed to fit space available and production objectives—from individual family-sized units to commercial systems of various sizes. Water from the fish tanks is pumped to the grow beds through a PVC pipe to filter the fish nutrients through the gravel before exiting through troughs or pipes to return as filtered water to the fish tanks.

The units are designed to include solar power and battery back-up systems to reduce dependence on grid power and protect against power outages. In some locations, INMED utilizes solar power to further reduce energy consumption.

Benefits of INMED’s ebb-and-flow system include:
- Lower capital investment than traditional farming.
- Simplicity in design, construction and implementation.
- Simple maintenance and construction.
- No added fertilizers or chemicals (reduced fixed costs).
- Low energy inputs and environmental footprint.
- Resilience against extreme weather conditions.

Learn more about INMED Aquaponics in Jamaica at https://inmedcaribbean.org or https://inmed.org/aquaponics