

Example Comparison of Three-Crop Production in Aquaponics vs. Traditional Farming (from a recent local study)

Aquaponics Farm

- The systems can be established on non-arable or marginal lands
- The system can be built on a much smaller plot of land than a regular farm
- Produces 2,260 kg of pepper, tomato, and scallion
- After loan repayments, can earn as little as USD 6,100 per year, and often, much more
- Has as system lifetime of 50+ years

Traditional Farm

- Must be built where there is sufficient space and on land that can be farmed
- Produces 475 kg of pepper, tomato, and scallion
- Can earn USD 4,630 per year
- Has as system lifetime of 50+ years

Conclusions:

- Aquaponics farms can be built where traditional farms cannot exist, due to their smaller footprint and ability to be built on otherwise unfarmable land. Therefore, the additional profits made with an aquaponics farm versus a traditional farm are earned with less land!
- An aquaponics farm produces almost 5 times more in produce. It produces at a lower cost per pound due to no waste and all resources being directed towards growth and production.
- After repayment of the loan, the Aquaponics farm can yield a minimum of USD 1,470 more annually, and up to 10 times more profit under best conditions.
- A concrete aquaponics system can withstand extreme weather and last a lifetime
- While construction of an aquaponics farm is initially 1.5 times higher than a traditional farm, considering the higher rate of production of quality products, resource and climate resiliency, and higher total annual revenue, the investment in an aquaponics farm (after the payback of the loan) versus a traditional farm pays off—in about 4-5 years. After the loan is paid off, minimal operational and maintenance costs allow annual profits to soar!