

# Why Aquaponics Farming in Africa?

Aquaponics is the merging of two types of farming, fish farming and vegetable farming. Basically in aquaponics we combine aquaculture and hydroponics.

In this crop production unit we have a vertical tower system growing spring onions, kales, broccoli and cauliflower. On the other side, we have eight troughs of coloured capsicum, four red and four yellow. In the fish ponds we are rearing Tilapia and catfish.

## How aquaponics works

Basically water coming from fish ponds provides nutrients to the crops so the crops depend on fish for nutrients. As water comes into the troughs it's filtered.

The excess ammonia from the fish poop, the excess fish feed in the water is brought here and pumped into the troughs and then basically the crop gets that manure and all those nutrients and as the water goes back to the fish the water is cleaner and also plant roots inject oxygen in the water.

## Advantages

Saving on water wastage by aquaculture; you can expect to be doing a water change which means a lot of energy input and a lot of power to sustain that change over unlike in aquaponics.

Good cash flow from both fish and your crops. Aquaponics is more pH tolerant. Cost management of nutrients; It is cheaper in the long run to have an aquaponic system than hydroponic system

## Conclusion

It has been busy four months of proper feeding, disease and pest management. From transplanting, through the growing stage to flowering, fruiting and today we are harvesting our first fruits. If managed properly this aquaponics system will provide a constant flow of sustainable income.