

Kiyaga will teach farmers at the Expo how to earn millions from fish



One of Kiyaga's fish ponds. He will train farmers on fish farming at the expo on Saturday



Kiyaga displaying fish from his pond

POND STOCKING

Kiyaga says proper stocking of fish determines the yield. "Most farmers are deceived to stock five to ten fish per square metre. Others even stock 20 and expect to have a massive harvest in tonnes, but this is wrong," Kiyaga advises. It is such farmers who harvest fish of 100g to 150g after eight months, yet the ideal harvest should be 0.5 to 1kg per square metre.

He says his stocking density is two to three fish per square metre. Here, a farmer is assured of harvesting fish between 800g to 1.2kg for catfish and mirror carp and between 450g to 500g for tilapia. In such a pond, one harvests 3kg-5kg per square metre for catfish and mirror carp and 1.8kg to 2kg for tilapia. In such, feeds are consumed three times in overstocked ponds than in well-stocked ponds, yet more yields are realised in less stocked ponds over the same period.

Proper pond stocking saves a farmer from feed wastage and ensures easy pond water quality management since there is no congestion. Quality of the species is yet another issue to look at.

Kiyaga says if you are to grow tilapia, you should look for Tilapia Meltica that can weigh up to 3kg if fed well. "The Fisheries Research Institutes have all these varieties," he says.

A standard pond that measures 40x20 feet should accommodate up to 40,000 fish at a ratio of 36,000 tilapia to 4,000 catfish. The catfish is very important to help regulate the population of tilapia in the pond. Tilapia lay a lot of eggs, which can result in congestion if not regulated.

WITH SH1.6M YOU CAN START FISH FARMING

By Joshua Kato

Fish has been predominantly farmed in ponds and in lakes like Lake Victoria and other water bodies across the country.

However, a new way of farming called aquaponics, where a farmer raises fish and vegetables together in a symbiotic system, is taking root in Uganda.

This trend is gaining momentum. Commercial aquaponics technology was introduced in Uganda in 2010. So far more than 200 farmers across the country are practising aquaponics. At the Harvest Money expo, this is one of the technologies that will be taught. The session will take place at 9:00am on Saturday.

"The technology is aimed at encouraging people to embrace fish farming to supplement their incomes at the same time providing proteins for family members. This is also one of the best businesses," says Charles Mulamata, who practises aquaponics at Rubaga in Kampala and Budo, Wakiso district.

To achieve the above objective, Mulamata, the pioneer of commercial aquaponics technology in Uganda, through Africa Aquaponics Association (AAA), trains interested farmers, in addition to setting up aquaponics systems for them.

In fish farming, feeds constitute 60%-70% of the expenses on the farm. With cattle, you need 8kg of feeds to get 1kg of meat, for pigs one

Who is Kiyaga?

All Kiyaga is a former footballer who played for SC Villa and Bulkwé FC. While playing football, was enrolled to play for Kenyan teams.

"I joined Kenyatta University in Kenya on scholarship and decided to pursue a fish farming course majoring in pond construction, maintenance and monitoring," he says.

On coming back in 2006, he set up Sanga Demonstration Farm, which currently has 50 ponds with over one million fish at various stages of growth. Annual fish harvests rake in millions of shillings.

needs 3kg of feed to 1kg of pork, while for poultry, one needs 2.2kg of feeds for 1kg of chicken, while fish you need 1.5kg of feeds to 1kg of fish fillet," explains Mulamata.

He says this kind of fish farming can be started with as low as sh1.6m.

Mulamata adds that unlike other fishing methods, aquaponics enables a farmer to earn throughout the year. Aquaponics offers one three sources

40,000

A 40x20 foot pond can accommodate up to 40,000 fish at a ratio of 36,000 tilapia to 4,000 catfish.

of income — sale of fish after six to nine months, sale of vegetables and agro-tourism on a monthly basis. This enables the farmer to meet farm expenses like wages for workers, buy feeds, electricity and other costs. By the time the fish is ready for sale, one has already covered the costs.

Aquaponics also focuses on vegetables because these give regular monthly income, instead of waiting for earnings from fish which come after six to nine months. Mulamata says that if managed properly, the vegetables and agro-tourism generate enough income for the running of the farm.

POND FISH FARMING

At the same time, there will also be a session on pond fish farming. This will be conducted by Ali Kiyaga, the director of Sanga Fish Farms. Kiyaga has been practising fish farming for over 10 years. He is also a fish farmers' trainer.

The fish farming session will take place at 9:00am on Saturday.

Sanga Fish Farm started when Kiyaga's father, Muhamood Mayombwe, commonly known as Kibaati, a former driver with the Luwero district local government, had taken his boss, Deo Nseroko for an agricultural show in Luwero where he met one exhibitor showcasing fish

farming.

Mayombwe says: "I got so interested that I went to his place to get more advice. He advised me to go and roll a sample of soil, then throw it in the air; it drops in one piece, then the place has sufficient water to sustain a pond, but if it separates there is no water despite being a swamp."

Experts also told Mayombwe that in the same way, he could dig a hole of about one foot deep and cover it. If it is filled with water by the following day, there is water, but if there is nothing then it is not there.

"Since every test indicated water at my swamp, together with my sons, including Ali Kiyaga in 2002 we dug the first pond and did exactly as we were instructed.

"I went to Kajjansi Fisheries Research Institute for the stock which cost sh150 per fry. I bought over 10,000 fingerlings and after the first harvest, I got over sh40m," Mayombwe recalls.

HOW KIYAGA DOES AQUACULTURE

Kiyaga says it is easier to practise aquaculture in a swamp than on dry land. For example, in a pond you have to fetch or pump water to have it oxygenated for the fish to survive.

He advises that if you have a



Tilapia Meltica can weigh to 3kg

swamp, you need a licence out aquaculture, you dig a of any size. His are 20x40 (standard), with an inlet ar The pond has to be slanted outlet being lower than the allow water flow.

Put garbage in a sack to planktons (don't use poly because these will make rot and should be put in place to avoid dirtying th Planktons are natural fee