

For the 11th year running, Vision Group, together with the Embassy of the Netherlands, KLM Airlines, dfcu Bank and Koudijs Animal Nutrition, is running the Best Farmers Competition. The 2026 competition is running from April to November, with the awards in December. Every week, the Vision Group platforms will publish profiles of the farmers. Winners will walk away with sh150m and a fully paid-for trip to the Netherlands.

UGANDA BEST FARMERS

By Herbert Musoke

Where many see filth, bad smells and a degrading environment, Atmosave Organic Farm sees opportunity. They turn organic waste that clogs drainages and pollutes communities, into income-generating products. Guided by the slogan 'Gold from Garbage', Ophelia Nahabwe, the director of Atmosave Organic Farm, speaks with confidence about a model that converts urban waste into wealth. Through rearing black soldier flies, the farm produces larvae used as a protein in conventional animal feeds and organic fertiliser for crop production.

THE URBAN WASTE CHALLENGE

Kampala generates over 2,500 tonnes of garbage daily. However, according to the Kampala Capital City Authority (KCCA) annual report 2023, about 1,200 tonnes are collected, leaving the remainder in communities where it blocks drainage channels, contributing to disasters such as floods. The report revealed that about 80% of the waste collected in the city is biodegradable. Much of it comes from food markets such as St Balikudembe, Nakasero and Kalerwe.

For Nahabwe and her family, this problem pointed directly to a solution. They identified organic waste as a resource for rearing black soldier flies. The insects produce larvae, commonly known as maggots, which are rich in protein and used in poultry, piggy and aquaculture feeds. The residue left behind is processed into organic fertiliser used on their own farms and sold to others. "We wanted something that solves more than one problem. Waste management, animal feeds and soil fertility," she explains.

Nahabwe's interest in organic fertiliser dates back to her childhood. She remembers her parents growing bananas,

millet, beans and maize but harvests were low year after year. "The soils were tired. They had been used for a long time and yields kept declining," she recalls.

When the family later moved to Kampala, they attempted to farm in Mityana, Busunja and surrounding areas. The same challenge persisted.

"We did not want to use artificial fertilisers which experts say damage soil structure. That is when we turned to organic solutions from bio-waste," Nahabwe says.

EARLY STRUGGLES

The initial journey was not smooth. The family experimented unsuccessfully. "We used to bury the garbage and try all sorts of methods but nothing was successful," she narrates.

A turning point was in 2024 after Bukedde TV aired a feature on a black soldier fly farmer, who she only remembers as Martin in Kahayero, Wakiso district. They have now established a production centre at Kalerwe market and Mperwe, Mugal zone in Wakiso district where they produce black organic fertiliser, larvae (maggots) for livestock feed, and grow vegetables and spices on half an acre.

"We ran to him [Martin] in Kahayero, got training and that changed everything," Nahabwe says.

STARTING PRODUCTION

After putting up a structure that houses the boxes not only for security but to also protect them from rains which could kill them, Nahabwe purchased the farm's first black soldier fly eggs at a cost of about sh800,000. Each gramme of eggs cost sh15,000.

"That first stock became our parent stock. It develops into flies which keep laying eggs and sustaining production," Nahabwe explains.

"A black soldier fly lives for

ATMOSAVE ORGANIC FARM



Aaron Sserwadda and Ophelia Nahabwe (second-right) and other employees caring for larvae in the feeding boxes



Nahabwe spreading larvae to dry in the solar dryer. Larvae is harvested from seven days to 14 days to get the best protein

SETTING UP OPERATIONS

Atmosave operates production centres at Kalerwe market and Mperwe in Mugal Zone, Wakiso district. These sites produce organic fertiliser and larvae and support vegetable and spice farming on half an acre. Their first production site at home in Wakiso failed due to a lack of consistent waste supply.

"We realised that garbage must be near you. You cannot chase it," Nahabwe says. In 2024, the farm secured space at Kalerwe market, close to a steady waste stream. The site houses waste processing equipment and larva rearing boxes.

8-14 days depending on the weather. For instance, when it is cold, it does not live as long as the dry season. However, during the dry season and when there is a scarcity of water, the black soldier flies

die," he says. Its full cycle (from eggs to fly) takes 30 days. Aaron Sserwadda, the farm manager, explains that after the eggs have hatched, the flies take four days mating

and start laying eggs. They are collected and put in maize bran which provides the needed nutrients and you get well-grown larvae (maggots). They take 3-4 days to hatch into grub, which grow through stages (moults) called instars (instar 1-4 with each taking a day) before becoming mature.

Parent flies are kept in nets costing about sh60,000 near waste boxes. Unlike house flies, black soldier flies do not feed on filth.

"They only take water. It is the larva that eats the rotten materials," Nahabwe says. Small pieces of timber are placed in the nets for egg laying, says Sserwadda.

"We collect the eggs daily and put them into the garbage boxes," he says. The insect's lifecycle from egg to adult takes 30 days. Larvae go through four growth stages before maturing. "To get the best protein, you harvest the larvae for seven days and not exceed 14 days," Sserwadda explains.

COSTLY LESSONS

Nahabwe says early assumptions about waste availability proved expensive. "We thought all garbage was available everywhere," she says.

An attempt near Wakiso abattoir failed due to poor waste mixing. "We did not know how to mix garbage with cow dung. Larvae cannot feed on dung alone. By the time we realised, we had lost a lot of money," she recalls.

This pushed them back to the market set-up where fruit and vegetable waste is plentiful.

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ACHIEVEMENTS

From the money collected, they hired land at sh150,000 with a contract of two years on which they set up a bigger production site and established a demonstration farm to show people how their fertiliser is effective.

Atmosave grows spinach, eggplants and spices used in meal preparation. "We wanted farmers to see results for themselves and we are happy that a number

TURNING GARBAGE INTO GOLD



Nahabwe showing the packaged organic fertiliser produced by Atmosave Organic Farm



Sserwadda, the farm manager, showing the black soldier fly parent stock net. Unlike houseflies, black soldier flies do not feed on filth



Atmosave employee caring for vegetables

BENEFITS OF MAGGOTS

Prof. Jolly Kabirizi, a retired nutrition researcher with the National Livestock Resources Research Institute and the director of Kyukwa mixed farm at Sekuru-Wakiso, explains that maggots are among the insects used for livestock feed.

"With the rising prices for silver fish and scarcity of soyabean, larvae becomes a cheaper, sustainable and highly nutritious substitute source of protein for poultry, piggy and aquaculture, improving growth, enhancing immunity and productivity for a profitable venture," she says.

It has over 40% protein content with essential amino acids like lysine and methionine, fats and minerals including calcium and phosphorus which improve livestock growth and health.

"It utilises low-cost substrates, mainly organic waste, manure or agricultural by-products. It can significantly reduce feed cost especially for small-scale livestock farmers," she explains, adding that maggots convert organic waste into valuable nutrients, minimising environmental pollution and reducing the ecological footprints of industrial feed manufacturing.

"Their continued membership is very helpful to us as we have been enabled to acquire a lot of leverage, get relevant business networks and be visible," she says.

COMMUNITY IMPACT

Atmosave trains individuals in black soldier fly farming. "Some want management skills while others want us to set up the entire system," Sserwadda says.

The Mperwe site has also transformed the neighbourhood. "This place was bushy and insecure. Now it is productive and safe," Nahabwe says.

SUSTAINABILITY

Atmosave is a family company structured to operate even when directors are absent. Nahabwe works alongside her husband Francis Aweta and their children, Alvin Akunda, Alvis Akampa, Alvin Nahabwe and Elan Aweta.

"We are all part of the system," Aweta says.

"Proposal writing, looking for business and even the farm structures were designed by Akampa who is studying architecture," Aweta says.

They also have workers with each having designated responsibilities.

To ensure security, Sserwadda says that the farm is well-fenced. "But the beauty is that the business is on garbage and many look at it as a disgusting venture so they don't have interest in it," he says.

CHALLENGES ENCOUNTERED

Community perceptions remain difficult to change. "People look at it as a disgusting business. Some cannot even imagine feeding chicken on larvae," Nahabwe says.

Labour shortages persist as many youth view the work as low class. Additionally, belief in artificial fertilisers continues to slow market uptake.

LOOKING AHEAD

The farm plans to partner with KCCA to establish a processing centre directly at a dumping site.

"It costs us about sh70,000 per trip to transport garbage. Doing it at source would cut our costs and save the city money," Nahabwe says.

Plans include increasing output to three tonnes of fertiliser and more than one tonne of larvae monthly, producing finished animal feeds, adding value to spices through tea processing and establishing a café.

WHAT OTHERS SAY
Abdul Ssekamaanya, a leader at Kalerwe Market, says Atmosave has improved sanitation.

"They collect organic waste and turn it into something useful instead of it being a problem," he says. Livestock farmer Robert Galwango says Atmosave solved his protein feed challenge. "They did not just sell larvae. They trained me and now I am starting my own rearing," he says.

of them have realised that actually our fertiliser is not only natural but also very good for the soils," Nahabwe says.

Vegetables sell in packages ranging from sh10,000 to sh15,000 mainly to community members.

PRODUCTION AND MARKETING
Atmosave processes three to four tonnes of waste monthly to produce about one tonne of organic fertiliser. Monthly larva production ranges from 700kg to 900kg.

Organic fertiliser sells at sh2,500 per kilogramme. Fresh larvae sell at sh1,500

per kilogramme while dried larvae fetch sh3,500 after solar drying.

"We now manage banana farms for clients and referrals keep coming," Nahabwe says. Marketing is done through social media platforms under Atmosave International and through agricultural exhibitions like the annual Harvest Money Expo.

BUSINESS MANAGEMENT
Nahabwe says she was trained in business management by Mastercard Foundation and the National Social Security Fund, through Outbox and InFact Hub (Hi Innovation).

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"In the Hi Innovator course, we were trained in business development, branding, marketing, record keeping, human resource management and stakeholder engagement," she adds that this enabled them to emerge among the March 2025 top awardees that

earned them \$15,000 (sh55m) which they used to buy equipment like the garbage crushing machine, garbage transport means 'tukruk', an Accounts App, branding especially of the sacks for fertiliser and continuous training and business improvement mechanisms.