

From maggot to the dining table

By <u>Theresia Tjihenuna</u> 25 Apr 2017

Namibia - After visiting his farm recently to find out how potential fly farming producers are trained, The Namibian asked Netcor founder Johan van der Merwe to explain in detail what this type of farming entails, and how beneficial it is to the animal feed industry. "It is not magic. It is hard work," he says when asked how quickly one can expect a return on investment from the business. "It takes about 41 days from the time of the first production to your first worm harvest."



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Van der Merwe has described maggot farming as "the new super animal feed of the moment and the future, which gives a higher protein value than any other source, including bone meal, soya bean meal, and fishmeal, with an estimated value of 60,4%".

The Okahandja-based animal feed expert, who claims to have trained more than 800 producers for his business, says these trainees will provide his company, Namibia Educational Training Crusade (Netcor), with millions of maggots every month. The maggots will be dried, milled and mixed with natural organic material (such as food waste from supermarkets, etc.) for sale on the local and international market as feed for fish, chickens and even pigs, which in turn will end up on the table for human consumption.

He said most of the animal feed Netcor produces is delivered to one of their biggest clients, Osona Eggs. The rest is exported to Zambia and Angola.

Van der Merwe, who started his business in December last year, said fly farming has just got off the ground in Namibia. He, however, notes that fly farming has been in existence for the past couple of years, with South Africa being the biggest producer in the world.

Australian company Twynam Group is one of the pioneers in fly farming. The company says increases in global food demand, environmental issues, and overfishing had depleted the supply of fish meal and caused prices to soar in recent years.

"Maggot farming in Namibia is an absolute necessity because we import all animal protein feed, which is costly. With maggot protein produced in Namibia, we will save farmers a lot of money on imported feed and bring more affordable food to our consumers. Our climate is ideal for maggot farming throughout the year as it uses very little water, and it clears our environment of flies," Van der Merwe explained.

The maggot house

Maggot protein yields better growth rates, heavier carcasses and better quality meat and egg products than any other animal protein feed, especially when fed to cattle, fish, pigs and poultry, and it will save these farmers up to 32% on feed costs, and fish farmers up to 70%, meaning farmers can pass on the benefit to the consumers buying these meat products.

He said to get started, the maggots are produced in a standard 15x15 metre house, which is filled with growing matter (manure). Each house can produce more than 30 tonnes of maggots in 30 days, with each tonne sold to Netcor for N\$380 on a contract basis of an extendable 10-year term. This means each maggot house can realise a turnover of up to N\$13,690 per month, he added.

"The set-up cost of each maggot house is N\$62 000, which is an extremely good investment; even more so as breeding stock (flies) are not bought like livestock," he noted.

In a controlled environment, each fly lays over 2,000 eggs every 24 hours, and with each maggot house stocked with one million flies, this translates to two billion eggs every 24 hours. When these turn to maggots, they can weigh a minimum of 1,2 tonnes a day, which on a 30-day basis is 36 tonnes of maggot protein. When sold at N\$380 per tonne, this is N\$13,680 per maggot house per month.

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South African fly farming company AgriProtein, based in Cape Town, says the protein feed industry for animals is a US\$70- billion-a-year industry. On its website, AgriProtein says it is working with the Bill & Melinda Gates Foundation, having spent four years researching, planning and now using its core nutrient recycling technology on more complex waste streams. In 2012, the company received funding from the Bill and Melinda Gates Foundation to support its insect-based protein product and the company's commitment to waste solutions.

Namibian fly farmers share their experiences

Andreas Nerongo, a former primary school teacher from Otjimbingwe, is one of the first people to buy into the fly farming concept through Netcor. Nerongo (55), whose maggot business is just two weeks old, retired from teaching last year and decided to venture into the fly farming business. "I invested N\$400,000 of my pension money into this business," he says, adding that he already has three maggot houses.

When Van der Merwe set up all three maggot houses at his plot at Otjimbingwe, the starter pack also included a bag of manure as well as maggots.

"My business is still in the early stages, but I am expecting my first harvest in a month. Call me after a month, and I will tell you how much I have made," he says. "It was always my dream to have my own business," he says.

Another fly farmer from Otjimbingwe, Manfred !Howaeb (39), who also retired from the National Disability Council, said he started his business with four million worms which were provided by Netcor as part of his starter pack. !Howaeb invested N\$54,000 from his pension into his business. As part of his starter pack, he also received a drum of blood (from Meatco's slaughter house), and has employed 10 people in the venture.

Just a month into the business, !Howaeb said he has only managed to generate N\$2,800 from his first harvest, selling 1,6 tonnes of maggots to Netcor. "I was supposed to generate around N\$4,000, but could not because I took too long to deliver the maggots, and they became rotten," he admits. But despite the slow start, he is still optimistic that he has made a good investment that will yield returns soon. "Every business has teething problems, but I think I can survive on this business alone; although I am still doing some odd jobs on the side," he enthuses.

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