

# **JOYCE MUGURE NDUNG'U**

KIAMBU COUNTY | SISTEMA 8 | INSTALLATION DATE: 03/28/2019



"Using biofertilizer as a chicken feed reduced costs by 50% and now I get much healthier and bigger chickens"

## **ABOUT JOYCE**

Joyce owns a 1-acre farm in Kiambu. As subsistence and commercial farmer, she grows crops such kale, maize, and napier grass and raises chickens, cows and rabbits. Her cows provide her with milk which she sells as well as biogas for cooking and 190 liters of biofertilizer a day from her Sistema 8 biodigester.

#### LIFE BEFORE BIOFERTILIZER

Before using biofertilizer, the highest yield she could expect from her kale production was 50kg per week, giving her a weekly revenue of up to KES 1500. Achieving this yield took hard work and regular use of synthetic fertilizers such as CAN and NPK, and pesticides to control insect pests and pathogens on her kales. Her milk production was 35 liters a day, giving her a revenue of KES 1190 per day, while the cost of chicken feed was KES 600 for 10kg each week.

#### LIFE AFTER BIOFERTILIZER

After only one year of using biofertilizer, Joyce reports that her weekly kale production has increased to 150kg per week, with a noticeable improvement in quality too. Her revenue from kales has increased to KES 4000 per week. She has now completely stopped using synthetic fertilizer that used to cost her KES 7200, as well as pesticides that used to cost her KES 1000 per year. Instead she now uses biofertilizer and ferments it to make a biopesticide spray. She also uses her biofertilizer as an animal feed supplement for her chickens. As a result, her chicken feed requirements have reduced by 50% to 5kg per week at KES 300. Her chickens are bigger and healthier than before. Her cows are also more productive and now give her 40 liters of milk per day, providing her with an additional daily KES 170.

### **IMPACTS**





**200%** increase in kale production from 50 to 150kg per harvest



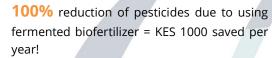
**267%** increase in revenue from kale production



**15%** increase in milk productivity, thanks to increased fodder availability

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**100%** reduction of synthetic fertilizers = KES 7200 saved per year!



**50%** reduction in chicken feed costs thanks to using biofertilizer as an animal feed supplement

\*This case study is based on farmer feedback/testimonies