Case Study: Simbi Roses, Kenya

Originally just a two hectare flower farm, now Simbi Roses covers 27 hectares and produces up to 40,000,000 stems per year of 19 different Rose varieties for the international market. Their mission aligns with many of LEAF’s central aims, to produce high quality flowers, whilst enriching the environment and improving the local community.

“We decided to become LEAF Marque certified because of market demands… there is a responsibility for growing and harvesting and producing of flowers… without losses to the environment.”

For Simbi Roses, the benefits of Integrated Farm Management (IFM) and LEAF Marque are apparent through the continual improvements to their business. The holistic approach to farm management has led to increased attention to detail, efficiency savings across the board, improvements to soil conditions, improvements to the landscape and biodiversity of the site and increased community engagement. Simbi Roses report that IFM has contributed to financial savings for the company and becoming LEAF Marque certified has opened additional markets.
Improving efficiencies

Simbi Roses aim to create a complete system, which uses by-products to aid the production of renewable energy. They are proud to have the first Anaerobic Digestor (AD) site for biogas production in Kenya.

“The installation of the energy facility, the first biogas in the country, brought lots of people and social media to look and see how we get power from leaves.”

The AD unit uses the shredded leaves, a by-product of the flower production, to produce biogas which is then used to fuel the pumps. Additionally, energy from on-site solar panels is used to increase the temperature of the digestors, improving the efficiency of the process and demonstrating their commitment to reducing their reliance on fossil fuels.

The process of becoming LEAF Marque certified prompted Simbi Roses to carry out an energy audit to highlight recommendations for improvements on their site. This led to an overall decrease in energy usage, through the installation of LED energy saving lights across the site and the installation of three new, energy efficient pumps. They have investigated the implementation of more solar panels which could be used to power the LED lights in the pack houses, however, at present there are financial constraints preventing their installation.

Improving water management

A combination of drip irrigation, fertigation and hydroponics is used across the site which has lowered fertiliser costs and reduced water consumption by 40%.

“Targeting the roots mean we are able to address the issue of less water wastage and we have enhanced water harvesting from the greenhouses.”

Additionally, water is collected from 33 greenhouses and funnelled into concrete channels to prevent soil erosion. The channels lead to a reservoir where the water is stored ready for use.

The composting sites and AD unit are located far from the natural or man-made water bodies to ensure there is no risk of nitrate leaching or other pollution of watercourses. Additionally, Simbi Roses have implemented a thorough checklist for staff which ensures there are regular checks to equipment, including the fertigation units and fertiliser storage units, to ensure they can respond quickly to any leaks or spillages. These sites are also sealed so that in the event of a leak or spillage, it will not reach the watercourses.
Protecting crops and soils

Simbi Roses estimate that the use of IPM has resulted in financial savings on fertilisers of 1.7 million Kenyan Shillings.

“We have scouting and early warning signs, so rather than waiting for an event to come, we are scouting and spot spraying. This is limiting the number of chemicals applied to the crops.”

As a result of IFM, they believe soil conditions have improved. By-products of the flower production process which are unsuitable for AD, including flower stalks, go to an on-site composter, which is then applied to the soils and enriches the soil organic matter.

“Yes, IFM has helped. We are improving soil flora and fauna, for example, if we scoop some soil, open it up, you would be able to see lots of worms and if you use a microscope, you can see the numbers of beneficial bacteria.”

Additionally, the company carried out an environmental risk assessment to determine the impact of the farming practices used, on the environment. As a result, they have planted grass and trees in areas identified as at risk of soil erosion, demonstrating their commitment to improving their natural environment.

Enhancing landscape and biodiversity

Simbi Roses believe that IFM has resulted in an enhanced landscape and improved the biodiversity on their site.

“We have a forest which we planted in the buffer zones, and we have planted trees between the greenhouse, some are fruit trees. The provision of food brings in animals.”
Habitats for birds and beehives have been created to produce honey which the workers harvest. Lots of wildlife is visible on the site, including monkeys, butterflies, birds and bees. Additionally, a family of hippos and many species of fish can be found in the reservoir.

“During lunchtimes workers move around to go and see the animals, so it is a good thing; it shows that there is a good environment because of the interactions between bees, monkeys, hippos and everything living here.”

**Community engagement**

Simbi Roses engage with the community on-site and off-site. On-site activities include educational visits for schools and local people, which aim to teach the benefits of sustainable flower production and the potential of biogas as an alternative to fossil fuels. Additionally, a “Simbi Sports Day” is held for workers, their families and the local community, increasing public awareness of the company.

All 542 workers receive free lunches every day, as well as transport allowances to cover their travel expenses to and from work. This aligns with their company mission to alleviate poverty and other social vices.

Using money from a Waitrose fund, they offer training to employees in ironwork, providing them with the skills to build their own houses. Workers have also received laptops, which can be used by the family to increase connectivity and aid studies. Additionally, water tanks and gas stoves have been installed in employees’ homes.
Simbi Roses have been involved in various community development projects, including the building and renovation of classrooms at many local schools, installation of water collection systems, tree planting to provide shelter, and the provision of sewing machines and other equipment to specialised schools for the physically challenged. The introduction of free primary education in Kenya has resulted in a sharp increase in attendance and thus class sizes, resulting in overcrowded and underfunded schools.

“We found most children sitting on the classroom floor. There was a concentration problem. So, we provided desks.”

Landscaping at local hospitals, laying down grass and making colourful flower beds has also been carried out.

“So when you are waiting to see the doctor, the environment around you can make you feel better.”

Simbi Roses believe IFM and LEAF Marque certification has aided their company in all three areas of sustainability, resulting in financial savings, engaging the local community and they believe they have...

“enriched the environment”