

CASE STUDY: Beaver Creek Coffee Farm - From Crop To Cup By Yvette Gietl



If you go on holiday to the South Coast, be sure to visit one of the only working Coffee Farms in South Africa.



Robbie, one of the owners' sons, says that they originally farmed bananas. They cultivated their own coffee bean trees from the seeds of four trees. They currently have 4 hectares of coffee plantations of the Arabica variety. The two main types of coffee farmed are Arabica (65% of world production) and Robusta. Coffee is the second largest commodity, other than oil, traded worldwide. Most coffee farms are situated between the Tropic of Capricorn and the Tropic of Cancer (Sub Tropical Regions)



Robbie went on to explain that they don't export their coffee as it costs them too much to produce. The labour costs in South Africa are very high, paying up to R200 per labourer per day. This makes picking and pruning which are very labour intensive, expensive. They are unable to compete with the prices of coffee farmed in countries like Kenya,

Tanzania, Brazil and India where labour costs as little as an American Dollar per worker per day. Beaver Creek Coffee farm also imports Coffee to supplement their crop and to meet the local demand. It is therefore cheaper for them to import coffee beans than to farm it themselves.



Beaver Creek Coffee farm receives over 40 000 visitors a year. Due to the Coffee Farm being close to popular holiday destinations along the South Coast, most of their visitors come over the school holidays. Robbie says that holiday makers can lie on the beach for only so many days till they start looking for something else to do.

Visitors can join a tour of the coffee farm where the process from seed to cup is explained. They have a coffee shop where one can pay for a bottomless cup of coffee and sample all their home grown and imported coffee blends (A blend is a unique selection and combination of coffee beans from different regions)

They also have a menu with light meals and a shop where one can purchase coffee, homemade jams and knickknacks.

On tour, Robbie explained that one could expect a harvest from a mature coffee plant within 3 – 4 years. The trees live for 60 – 70 years. He says he has seen trees in Kenya as old as 120 years! The red berries are harvested in winter. Each berry contains 2-3 seeds. The berries are processed shortly after being picked to prevent spoilage. The seeds are removed from the berry skin by washing in a machine called a pulping machine. The skins are composted for 3 years to be used as fertiliser.



1. The coffee trees produce berries within 3 - 4 years.
2. Washing the berries and separating the skins from the seeds.
3. Each berry contains 2 -3 coffee beans.
4. The skins are taken to be composted.
5. The coffee beans are sundried.

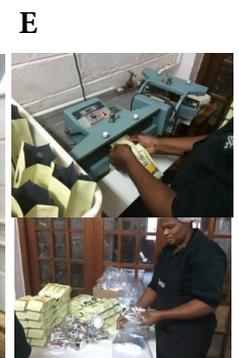


The seeds are then fermented for 48 hours. The seeds are dried in a dryer and then laid out to sun dry on large trays until the beans are 90% dry. When asked how they know the seeds are ready, Robbie said "the bite test". Basically, you shouldn't be able to bite through a seed! The seeds are then dried a second time. Robbie says that this second dryer has a heater but they don't use it unless totally necessary to try keep electricity costs down. The beans are then sent through a Huller machine that removes the husks of the seeds. The green beans are then graded, sorted into sacks and stored for up to 6 months.



The coffee taste and aroma is only released from the green bean once it has been roasted.

The roasting machine is powered by gas (A). The roasting drum is heated to approximately 200 degrees before the green beans are added. The temperature then plummets as it begins to heat the beans up. At about 180 degrees the beans will reach the "First Crack" stage, this happens after about 4 - 6 minutes of roasting. There is an audible crack almost like popcorn. The beans change colour as they roast, from light brown to a very dark brown/ black (B). The lighter the colour the lighter the roast, the darker the colour the stronger the roast and flavour. To achieve a darker roast the beans can be roasted till the "Second Crack" stage which is a little louder than the first, about 12 minutes into the roasting process. Roasting is more an art than a science and is very hands on. The colour needs to be checked every few seconds. When the coffee beans have reached the desired roast, they are emptied from the drum onto a cooling rack. The coffee beans are left to rest overnight. The coffee beans are then weighed and packaged. The beans are either sold whole so consumers can grind their own coffee beans or they are ground on site and then packaged (C-E). Beaver Creek Coffee Farm also sells the green beans that one can roast at home. Home roasters can use a simple popcorn machine to roast the beans.





To add value to the product, coffee is also packaged in capsules for coffee machines used in homes, offices, guest houses and hotels. The profit margin is the highest when the coffee is packaged this way.

The patent (copyright) of the capsules has expired. That is why they are able to manufacture them. Similarly to when the patent on a medicine has expired and any pharmaceutical company can manufacture a generic. A generic is exactly the same as the original, only much cheaper, as the costs of developing the product from scratch do not have to be incurred.

The rainfall along the South Coast is 2000mm per year. Robbie says that if they implemented an irrigation system, they would be able to increase their yield per plant. Some of the plants are dying and there is no apparent reason for this. They have examined for diseases and pests and are closely monitoring the situation. When asked about security, Robbie said that they have electric fencing and that the crime is limited to petty theft.

They are extending the current building which means they will have a bigger coffee shop and retail section. This will help accommodate the visitors that wait in a queue for up to 2 hours during the holiday season.



Beaver Creek Coffee farm distils their own coffee liqueur and are exploring new markets for this product. Beaver Creek Coffee Farm has a Red Berry Club. Subscribers to the club pay an annual subscription fee and receive 5 packets of Selected Coffees 5 times per year. For hobbyists who would like to try growing their own coffee at home, Beaver Creek also sells plants.

Roast your own coffee using a popcorn machine

www.youtube.com/watch?v=DR6V_mHXHnE

Beaver Creek Farm

YouTube www.youtube.com/watchv=dtReHiK7huc

Website

www.beavercreek.co.za

