Bean to Bar photo descriptions

Write your captions in the boxes above each description.

Cocoa trees grow in hot, humid climates in countries on or near the equator, such as Ghana and Brazil. They grow up to five metres high, but need shade, so farmers plant other tall trees, such as banana trees and nut trees, in among the cocoa trees. The ground around them needs to be well weeded, as weeds can smother the trees if they are left to grow. After 3–5 years, each tree can produce more than 20 pods like this, which are ripe when they turn yellow. The pods can be up to 35cms long. As well as growing on branches, the flowers that produce the pods sprout from the trunk itself, which looks quite strange.

This photo shows Comfort and her daughter Benedicta sitting in a clearing on their cocoa farm. They have already cut down the pods from the tree with the large, long knife – called a cutlass – which Comfort is holding. Pods are harvested twice a year. The main harvest is October to February, and there is a smaller one in June/July. There are 30–40 beans in a pod. Comfort splits the pods with the knife and Benedicta scrapes out the sticky white beans. Splitting the pods has to be done carefully so there is no damage. Nothing is wasted, the pods are turned into compost to help the trees grow or are burned and the ash used to make a kind of soap, which is cheap and works really well. The women have brought a spare basket with them (carried on their heads) so that they have something to sit on. Comfort wears Wellington boots, which are much safer than going barefoot – there are scorpions, snakes and insects on the muddy ground.

Comfort has collected her beans and wrapped them in banana or plantain leaves. She needs to leave them in a warm, shady place to ferment for 5 to 7 days. Here she checks to see how they are doing and adds in a few more beans so as not to waste anything. The beans have begun to ferment – the sticky goo on the leaves show the process has begun. During fermentation, microorganisms, particularly yeast, change the beans. Fermentation is what gives chocolate its distinctive chocolatey taste and colour.

These beans have fermented and are beginning to turn a chocolatey brown. They have been laid out in the direct sunlight to dry on special drying tables covered with a mat made from the locally grown raffia palm. The farmers in Mim take it in turns to use these tables. It will take 7 to 10 days for them to dry completely. Francis Bediaku is working on the drying table, turning the beans regularly to stop them sticking together in clumps and picking out poor quality beans. These regular checks, the long fermenting period, and the constant turning, are a mark of quality. These farmers really do check that their beans are the very best!

Once the beans are dry, farmers pack them into jute sacks and take them to the Kuapa Kokoo Recorder, Addae Mensah Joseph. He uses his scales to check each sack weighs 62.5kg and pays the farmer half of what he or she will earn. The other half is paid when the cocoa is accepted by Cocobod, the government cocoa board. The farmers can inspect the scales at any time to give them confidence that they are not being cheated. Each sack is printed with 'Ghana Cocoa Board, Produce of Ghana' and a number. The number is to prove the cocoa comes from a specific village in the Ashanti Region. This guarantees the quality from the farmer to the ship, and that the Kuapa Kokoo farmers in each village were paid the right amount for what they have grown.

Stephen Arthur and Kofi Atta, two cocoa farmers, load trucks with sacks of cocoa beans from Mim cocoa farmers. Each truck can carry 180 sacks. The sacks have to be stacked to ensure that the weight is evenly balanced, otherwise the truck would tip over on the pot-holed roads. 16 sacks weigh one tonne. They are taken to the Kuapa Kokoo warehouse at Kumasi, Ghana's second largest city, then to Tema, the port close to Accra, Ghana's capital city, for export by ship.

Tema is the biggest port in the country, and it's from here that most of Ghana's cocoa is exported. Containers are loaded on to ships, which carry cocoa to Europe, where it will be used to make chocolate.

This photo shows one of the many stages in the process which turns cocoa beans into chocolate. After the beans arrive at the European port, they are taken by lorry to the chocolate factory. Here the cocoa beans are roasted and winnowed (to get rid of their shells) and turned into cocoa butter and cocoa liquor. These are then mixed together in a process called conching. Sugar and milk are mixed in to a specific and secret recipe. The liquid chocolate is then tested to make sure the consistency and flavour are right. This man is quality control tester at the factory where Divine chocolate is made. The chocolate should be smooth and silky and have the right 'mouthfeel', as it's known in the business. After this, the chocolate can be cooled and formed into bars.

Elga Vogel is a production line worker at the Weinrich factory. She collects the bars which have been formed by pouring liquid chocolate into moulds, and sends them down the production line to be wrapped in Divine wrappers. They will then be transported to the UK. Cleanliness at the factory is vital, so all the workers wear plastic caps and gloves.

This is the very final stage of the chocolate chain – a stage we know well! The final link in the chain is you, the buyer. The choices you make have an influence all the way back through the chain to its very beginning, the cocoa farmer.