

II Rotation in the forest

FSC-certified forest management is based on a sound forest management plan. The forest which is harvested is divided in separate zones, like slices of a big cake, usually 25 or 30. The zones may differ in size, depending on the density of the forest and other forest conditions. Each year the harvesting of trees takes place in one zone only. During the years that follow, the timber company moves from one zone to another. It is called rotation. After 25 or 30 years, depending on the number of zones, the timber company may return to the first zone and harvest there again. In the meantime trees, especially young trees, have had time to grow. IFO applies a rotation of 30 years.

Since logging takes place in one zone only, there is no logging disturbance in the other zones. Therefore the larger an FSC-certified forest concession is, the better it is for the animals that live there, they have more space to withdraw. IFO's concession is home to approximately 70,000 gorillas and approximately 4,000 elephants.

HIGH CONSERVATION VALUE IFO only harvests trees selectively in 800,000 hectares. All together 355,000 hectares across the concession are not touched because they are so-called High Conservation Value areas or because they are vulnerable,



Antoine Couturier, IFO's director responsible for environmental and social company policies and certification.

such as water banks and swampy forest. The remaining part of the concession consists of villages and areas that have been assigned to the forest communities.

High Conservation Value areas are important to maintain the level of biodiversity. They may be nesting or feeding areas for animals or contain rare, endemic plants and old patrimonium trees. High Conservation Value also applies to areas of cultural and religious significance to the local population or areas which are important to meet the basic needs of communities who harvest wild fruits and other products in the forest.

Trees are harvested selectively and in a responsible way. Felling trees and getting the logs out must be done with care in order to minimise their impact. In January 2016, Britvec and his men cut 100 trees per day, one tree per hectare on average.

Antoine Couturier (1973) is IFO's director responsible for environmental and social company policies and certification. He has studied physical geography and post doc tropical ecology. Like Britvec, he is French. Couturier: 'Trees must have a Minimum Felling Diameter (MFD), below that we do not fell.' The MFD's are included in IFO's forest management plan. IFO's MFD's are 10 to 30 cm higher than the obligatory diameters of the forest law of the Republic of Congo, in order to ensure sufficient forest regrowth during a rotation period of 30 years. But, what is sufficient?

Spurting initially, tropical hardwood trees continue to grow slow. The diameter of the Sapelli grows 0.5 cm to 0.8 cm per year, Wenge 0.8 cm per year, the diameter of the also highly appreciated and famous Ebony grows 0.2 cm per year. If IFO would return to the first zone after 30 years, eligible Sapelli trees would have grown 15 to 24 cm in diameter, Ebony only 6 cm. Therefore, Couturier tells, IFO does not harvest, but keeps a large part of the trees above the minimum diameter. 60% of Wenge and 90% of Ebony above the minimum



diameter are not harvested and left alone. The law in the Republic of Congo in January 2016 only mentions minimum diameters and no maximum diameters. If a logging company were to cut all objective trees above the minimum, the quality of the forest would deteriorate. Many logging companies don't care. However, IFO operates with a maximum diameter and that is remarkable. IFO will not cut trees with a 2 metre diameter or more, Couturier tells. That means that the biggest and oldest trees are not touched and left alone.

Nevertheless a problem may rise. It has to do with the preference of the international market for only a relative small number of well-known tree species, especially the very popular Sapelli.

I am rather surprised when Britvec tells me that IFO harvests 90 % of the much wanted Sapellis with a diameter between 100 cm and 200 cm in January 2016. Within this diameter range, only the lesser quality Sapellis with twisting

IFO's concession is home to approximately 70,000 gorillas and 4,000 elephants.

trunks and Sapellis which carry seeds and are protected are not harvested. It makes me wonder what the effect will be. If this would go on, many generations of Sapelli would almost vanish. In the whole north of the Republic of Congo Sapellis are under pressure. The market wants them.

LESSER KNOWN TREE SPECIES Couturier is not worried: 'Over the whole year 2016 this will level out and the impact will be much less. Since the start of our forest management plan in 2007 about 80 to 85% of eligible Sapellis have been felled. For most other principal species only about 15 to 50% of trees above the minimum diameter have been felled. It is a fact during the first rotation in natural forests that a "bonus" of larger trees is present. Due to the fact that we respect



Architects, project developers and authorities in Europe, the United States and Asia have an important role to play by prescribing timber of Lesser Known Tree Species.

minimum diameters – and ours are higher than required by law – there will be enough trees to harvest in future felling cycles of 30 years. Volume increment will be the same and the harvest of the so-called Lesser Known Tree Species will be added. Our management plan is carried out and respected in such a way that every single species will be present for generations to come.’

Couturier has identified a number of promising Lesser Known Tree Species in the concession. He tells the concession hosts 276 different tree species, a number of which have not even been described yet. IFO plans to harvest 200,000 m³ of timber in 2016, yet this year’s potential of the concession allows a harvest of 350,000 to 400,000 m³, taking Lesser Known Tree Species into account, according to Couturier. Couturier: ‘IFO always cuts much less than could be logged sustainably.’

Couturier is right. Growing demand of Lesser Known Tree Species could release the pressure on well-known tree species. Architects, project developers and authorities in Europe, the United States and Asia have an important role to play to support sustainable forest management in the Congo Basin well into the future, by prescribing timber of Lesser Known Tree Species from FSC-certified forests.

Two days after visiting the tree harvesting zone of 2016, I go and have a look in zone 2009 at my request to see how the forest looks six years after harvest. The road which enters the zone has been closed off by two large logs and laterite heaps, as it should according to FSC-principles and criteria. No car can enter here. It is overgrown with vegetation, more than 1 metre high. I see dung of elephants, a good sign. Then I ask Fulgence Opendzobe and Timothée Epoutangongo, the two men who took me, if we can leave the path and go straight through the closed undergrowth of the forest. It is a bit of an adventure and Timothée cuts our way through with a machete. Looking up I see big trees: the much wanted Azobe, a Sapelli and also Lesser Known Tree Species like Limba and Kanda. There is a lot of light, trees



Measuring a log.



Fruits of the shrub Afromomum. Gorillas love them, they open the fruits with the nails of their fingers.

have been harvested here, but some parts of the concession are less dense than other parts.

On the ground we discover red pointed fruits on light brown roots. They are the size of a thumb of a grown up person and fruits of the shrub Afromomum. Gorillas love them, they open the fruits with the nails of their fingers. So do I, the inside is like a passion fruit, the taste is delicious. Later I come across dung of gorillas. This is a beautiful forest. High up the wind blows through the leaves of the trees. It is a game of shadows and light.