



DARIADARIA “A MINDFUL MESS” PODCAST TRANSCRIPTION AND TRANSLATION #25 SUSTAINABLE PALM OIL: IS IT POSSIBLE?

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Hello and welcome to a new episode of “A Mindful Mess.” I will leave the intro very short today because it could be a very complex and slightly longer episode. Today is the much anticipated episode on palm oil. I was in Ghana a few weeks ago, and it happened at the invitation of Dr. Bronner’s. Dr. Bronner’s is an organic fair trade sustainable cosmetics company that mainly produces soaps. I was invited to look at their palm oil production.

In advance, this is not a sponsored episode. I was not paid by Dr. Bronner’s. I was not paid for the trip or other postings I made. Only the travel expenses were paid, i.e. the flight and the accommodation and the food on site, and the visa was also paid.

This topic is incredibly important and is very important to me because it is a topic in which the sides are so divided. I did not really deal with the issue of palm oil before and learned so much in Ghana. I was there for only a few days.

I would say we just start this episode now. First of all, it must be said that no oil, apart from palm oil, has such a large yield per hectare of cultivated land. If you look at it, palm oil has three times as much per hectare as rapeseed oil. If you consider that our population is growing so fast and that really insane food needs arise, you have to resort to foods and plants that have a high yield.

Because at some point in time, the area we have at our disposal will not be enough to meet the food needs

of the population. Why is palm oil used so much? It has different, really great features. On the one hand it binds liquid oils. For example, in nut creams, like Nutella. Insanely important because the nuts themselves already have a lot of fat and the palm oil can bind the liquid oils. That means it makes it paintable. Of course you could also use domestic oils for it, but they would have to be hardened first. The hardening of oils produces trans fats and they are harmful to your health. In addition, palm oil is heat stable — we will come back to this later, which brings the high heating during refining with it.

In any case, on the one hand palm oil is used, which is in the pulp. But also palm kernel oil, that is in the core. The palm kernel oil has a buttery taste and therefore it is often

used in margarine. Palm oil is also used to make surfactants. Surfactants are detergents. All detergents and cleaners contain about 3-30% surfactants. They are made either from petroleum or from tropical oils. Especially from palm kernel oil, if one speaks of the latter.

Palm oil is used in both food and cosmetics. The annual harvest now stands at 50 million tons. This is the most important vegetable oil

If you look at it, the entire EU is behind in palm oil consumption behind India and Indonesia. This whole palm oil boom started in the 70's and since 1980 these plantation areas have increased tenfold. The problem with palm oil is that this palm oil plant grows only in a very narrow latitude, and that around the narrow area around the equator. That is, only there can you grow this plant that is so productive. The thing is, around the equa-

If you look at that, more than a quarter of the rainforest that was cleared in Borneo until 2008, was for palm oil plantations. The problem is also, there is first a clearing of the rainforest. This means that tropical wood is obtained. This then provides for the initial funding to then clear even more rainforest. This usually works as slash-and-burn. Then huge areas of tropical rainforest are burned off and then palm oil plantations are put on top.



The largest palm oil countries are Malaysia and Indonesia, which account for 87% of global production.

As always, this topic of palm oil is not black and white. Palm oil is a plant, a natural crop, and you can either grow or mine a resource in a fair way, or through exploitation. It is a big misconception that many people say there is no good palm oil at all. And that's just not true. There is great palm oil, which was obtained according to biological criteria. But it accounts for less than 1% of the acreage. That's also why, at the end of the day, the reason why you should not boycott palm oil is because you should boost that 1%. But I'll come to that at the end of the episode.

before soybean oil. I have just said that palm oil is in food and cosmetics, or mainly in soaps and active-washing care products. If you take a closer look, it is worldwide that 71% is in food, 24% in candles, soaps, cosmetics and other industrial products; 5% are used for energy, for example in biofuel. It must be said that it is distributed differently depending on the country. That means that in Germany, it is 41% in biofuel and only 40% in food. That is, Germany, for example, has a really low palm oil consumption. The EU as a whole has insanely low palm oil consumption.

tor in the area where the palm oil plant grows best is mostly rainforest. That's why so much rainforest has been cleared to plant palm oil in most parts of the world because it only grows there.

Of course, this leads to a displacement of flora, so of rainforest and many other plants, of course, too. And fauna — in the worst case of orangutans, who have just lost a lot of habitat in Indonesia or in the Asian region, or I believe, even there, a species extinction has taken place due to these palm oil plantations.

Most importantly, I just mentioned that Malaysia and Indonesia are the largest palm oil producers with 87%. There the plant did not feel natural.

Of course, palm oil only grows in West Africa and South America. In Indonesia and Malaysia, the plant was imported because it can grow there because it is near the equator. There were huge areas burned

then. I have never been to Borneo, but I have heard many times that when flying to Borneo, you just fly over palm oil monoculture plantations the last seven minutes before landing. That should be terribly bad. Of course, I have already looked at an incredible number of movies and documentaries, and have been dealing with the orangutan situation a bit longer. It must be said, that this is unfortunately 87% of the palm oil production.

So I was in Ghana and Bronner's started a women's co-operative there in 2007, which was already producing palm oil at the time. I call it women's initiative, and it was also a women's cooperative. In Ghana, where palm oil always grows naturally and is used for agriculture, it is women's work. The men grow the field and harvest the plant, and the women do the production where they peel the plant or they empty the pulp.

Dr. Bronner's uses, I forgot to say, palm oil in the solid soaps, and there it is just important for the consistency. Anyway, Dr. Bronner's supports this project. I do not know if they bought it or just co-financed it. Anyway, they came across it in 2007 and started to build bigger for their own production.

Meanwhile, Serendipalm is completely independent financially. Dr. Bronner's is just a buyer of palm oil and financed it, nothing more. It was like an incubator situation, where Dr. Bronner's money supported and then the whole thing became independent.

There are 250 people employed. 150 of them are women. But I also

have to say that, and that is one of the few criticisms that I have about the project, that many women are employed there, but not many are in leadership positions. There are, I think, 23 leadership positions and unfortunately there are only four women. This, of course, is a cross-section of the situation as it is worldwide. It is always important to me to point out that there is still a lot of catching up to do here. But it has to be said that all the people who work there, including those in the non-executive jobs or salaried employment, are permanently employed. They are all insured, they all have various bonuses, from Christmas and Easter money to a hot meal a day. They can also have a meal a day even if they do not come to work or if they are ill or have holidays. All women enjoy maternity protection there and of course

really great circumstances for the community. All the products that are created there and it is not just Dr. Bronner's as a buyer, but also Rapunzel and Gepa, who also buy palm oil from Serendipalm.

They are of course Fairtrade certified. The whole production is Fairtrade certified and what many do not know, for every one of these Fairtrade products purchased, it includes in the price 10% for a Fairtrade fund that goes to the production site that the community can then draw from. In other words, that's where the whole community really participates, which simply illustrates the potential for fair trade, how to get involved in this 10% that goes into this fund every year, which we pay as consumers, and understand how it is used.



they all get a holiday. This is an employment relationship that hardly exists in Ghana in the agricultural sector. That's terrific, because Dr. Bronner's in this place north of Accra, the capital, which is about three hours to Aswan, has created

For example, in Aswan, solar panels were mounted on the street to provide light at night. Four deep water wells were built. A maternity hospital was set up. Unfortunately, some fair trade seals have also fallen into disrepute because there are quite

a few corners where the certifications are not so consistently pulled through or where there are gaps — see coffee. We forget how great it is, the 10% we pay more for when we buy Fairtrade, which does the community in a good way.

It's also worth mentioning that companies like Rapunzel or Gepa, who are also buying from Serendipalm Palm Oil, are willing to pay a triple for this, and of course, organic-fair products are a bit more expensive because you can easily change the market locally by buying these products because these are just companies willing to pay more. And that is really great and you forget that very often. To stay with the facts, for Serendipalm; Seven out of 30 containers that are made there go to Rapunzel, a few are still for Gepa, but most of them go to Dr. Bronner's and there are about 850 to 900 tons of palm oil produced. I was also involved in reviewing conventional palm oil production, GOPDC in Ghana, and they make as much as Serendipalm in one hour, because of course machines are used in conventional palm oil production and that does not happen with Serendipalm.

Women produce palm oil by hand or, of course, men are also involved, but they are mainly women. Of course you could work much more efficiently and effectively if you replaced humans with machines, but that's exactly what Dr. Bronner's and Serendipalm are not. There



are about 650 farmers involved, so 650 beings supply Serendipalm. They are all certified organic or on the way there. Why am I saying that on the way? Because it takes three years to become fully organic certified. In other words, they all work according to organic standards, but they only get the seal after three years. The trees used or standing there are on average 19 years old. That is, these are not newly cleared and planted palm oil plantations.

These are areas that have always been used for agriculture. Since no rainforest was cleared recently and when it was cleared, it was a long time ago. You cannot avoid that. There are many areas that have been farmed 30 years ago and then they started to build there, but speaking of these huge areas in Malaysia and Indonesia that have been cleared for palm oil plantations, that's no comparison to palm oil that comes organic and fair from Ghana. What is also important to say is that there is no orangutan habitat in Ghana, or is West Africa. That means, this problem does not

exist here either.

It is harvested in the high season every three weeks and in the low season once a month, so much less, because just no pesticides and herbicides and so on are used. And then you can regenerate the plant again in between. But I think this number makes clear how profitable palm oil is and how much you can get from palm oil. Usually the market price is \$60 a ton and Serendipalm pays \$100 a ton. So that's an insane difference and customers like Rapunzel, and also Dr. Bronner's, just pay a premium to this usual market price, because they want to ensure that no people and nature are exploited here. That is, if the farmers get paid more, they can give nature more time to regenerate and not slaughter their fields and plants too much, as if they had to spend less money at the same time.

I have brought a few more facts for those who are interested. So what happens, these fruits, huge drops I say with many small palm oil fruits on it, are delivered by the farmer. Then this is weighed and then there are quite a few women sitting in a hall, who take the fruits and then they break up the fruit with their hands and just separate the pulp from the shell. They are paid in buckets, so they fill up little buckets every day and the market price is also based on buckets filled per day. The market price is \$ 1.50 per bucket and at Serendipalm, the women earn \$1.75 per bucket and a

woman can do around to six buckets per day.

You can see that, which is a very low daily salary compared to our salaries, but is still above average for the standard and convention that actually prevails there. Important in palm oil is also the extraction rate. As I have already explained, palm oil is extracted from the pulp and palm kernel oil is extracted from the palm kernel. At Serendipalm, no palm kernels are processed, which are sold separately in another production step and then sold again. In other words, they only process palm oil from palm meat, and in conventional productions that use machines, the extraction rate - that is, how much oil you can squeeze out of this pulp - is 22%. Dr. Bronner's has optimized the processes to such an extent that the extraction rate is 19%.

Which is insanely great, because here are no machines but people at the start and that shows that people can work very efficiently and that you can also achieve a very good extraction rate without making people unemployed and therefore their existence unnecessary. The big question at the beginning was, what are the alternatives to palm oil and what happens if you boycott it? It is clear in this movie "The Green Lie" where it was said there is no good palm oil and that there should be a call for a boycott everywhere.

What bothers me about this boycott and the insanely emotionalized debate that is being waged is that you do not talk about alternatives at all and what it means when

you boycott palm oil. If you boycott palm oil, if the need remains the same and people want to buy the same kind of products, their whole biscuits and chocolate creams and so on and so on, then you have to switch to soya, sunflower, coconut or rapeseed oil, just to give a few examples. And those, which we have already learned, have a really much higher space requirement.

In other words, more land will mean more greenhouse gas emissions and more animals and plants being displaced. This is a logical consequence and conclusion: if we boycott palm oil and continue to consume the products we consume, then we have an even bigger problem. That said, the solution in this case, I'll come to that in the end when I say a small conclusion, but



the solution to all of this is simply not to boycott palm oil, but to boycott the bad palm oil, which is simply 99% of the mass.

Which was also a big question and I would like to ask that now: how are palm oil and products declared as

an ingredient, as this is often very hidden? Namely in food it is declared as vegetable oil or fat and in cosmetics as cetyl palmitate, isopropyl palmitate or just the palm oil kernel oil as Sodium Palm Kernelate. Which was also a question, because often palm oil is also listed as a derivative or hidden in products and that is insanely complex topic and I'm not a chemist, so I can only conditionally give you an answer. But derivatives are in principle substances that arise from chemical transformation processes. In most cases, they are cencides or emulsifiers.

This is due to the fact that palm oil can be fractionally, well, fractionated, that is, decomposed into individual constituents and from these new chemical compounds

then arise the derivatives. The derivatives are usually fractionated from palm kernels and there are the palm olein and the palm stearin. This ratio is usually usually 80% olein and 20% stearin. They are then used as cencides, emulsifiers, and many other substances but as I

said, I'm not a chemist, and you can really read about it on the Internet, if you wanted to learn about palm oil derivatives. I also link something in the info box. A big question, which is also very complex: I would like to ask immediately, is palm oil carcinogenic? Apart from the fact that it is really complex and I have to try to explain it. These probable carcinogens are created when the palm

few others that have been aware of this problem for a long time. Especially companies like Rapunzel are looking very much out there, where production is deliberately kept below 200° C. For example, Rapunzel has also published a statement confirming that the target value that they have set is the limit for baby food. It also comes from the Federal Institute for Risk Assess-

carcinogenic. But not from productions that pay attention, when refining the oil, to not go too high when heated.

The next big question, which is still in the room, and which many of you have asked, how do I recognize sustainable palm oil and what seals and certificates are there.



So, now take a block and a pen. [laugh] No. It's a bit complicated. There is the RSPO, the Responsible Palm Oil Standard. This Responsible Palm Oil standard is quite a mess. This is a very vague guideline, one would almost say, that is in the hands of industry. If you look, one-fifth of all palm oil producers is part of this RSPO. That includes Lindt and Nestlé, and as they all are called. The industry makes this standard, which has nothing to do with organic. This is not an eco-label, but at most a minimum requirement. There are still pesticides allowed. There is much evidence that companies licensed with this seal violate the requirements. If you read RSPO, you can forget about it [laugh].

oil is refined. This happens at high temperatures, that is, when the oil is heated strongly. These probable carcinogenic substances that are then formed also arise when rapeseed oil, sunflower oil, or shea butter, for example, are heated.

ment, which set a TDI value. This is the Tolerable Daily Intake. That said, this federal institute says this is a value that you can absorb for a lifetime without causing any health damage or effects.

The substances we are talking about are 3-MCPD fatty acid esters and glycidyl fatty acid esters. Officially, the release of these substances happens at a temperature of 240° C. Unofficially, one even speaks of 200° C. We do not yet know if these substances are carcinogenic, but there is a suspicion. What really needs to be stressed is that palm oil productions like Serendipalm are one, and later on I'll mention a

This TDI was 2µg per kilo, and they have now lowered 0.8µg per kilo for these substances just mentioned, more than halved. The values of Rapunzel and thus also of Serendipalm are below this 0.8µg limit. That means you would have to eat several glasses of organic chocolate cream a day, so that you somehow come to a value that is suspected to be carcinogenic.

That means yes, palm oil can be

Then there is the Palm Oil Innovation Group, the POIG. It is composed of all members of the aforementioned RSPO Responsible Palm Oil Standard. But then there are still NGOs here. That's one instance higher. In other words, companies also enter into voluntary commitments. For example, they should not grow on peat soils, protect woodlands, and reduce synthetic pesticides. I agree. But they only have to reduce these practices, they do not have to stop them or stop using pesticides. That means we already know that this is

a bit more enforced, but it's still not a standard that you can trust somehow.

Then there is the Forum Sustainable Palm Oil, FONAP. I have not found much to that, which is not really worth mentioning, because it is not a standard that is worth mentioning. That is, all of the standards we've talked about are not organic. In short, what does organic farming mean? For organic cultivation of palm oil or other plants you do not use synthetic fertilizers or pesticides, no chemical herbicides. For example, it is fertilized with compost or other natural materials. The soil is always overgrown, fertility is preserved. That is, the soil is added to the nutrients it needs.

That is, you look at what plants extract from the soil the nutrients and which plants you have to grow again, so that the soil again the nutrients are added. All this means that the soil does not erode. The weeds are removed manually. If you have pests, fight those with beneficials, so by natural means. Of course, organic oil palms are also plantations. However, these are much smaller and mostly the land that has previously been used for agriculture.

What is also, is that the EU Organic Regulation does not explicitly exclude the clearing of forest land for palm oil. That said, if you have a palm oil product that is organic, you still cannot be sure that forested land hasn't been cleared for it. But the thing is, all organic palm oil producers, now it gets complicated, are also RSPO members. A good part of this standard, which unfortunately

is very vague that after 2005 no forest or other area was destroyed.

Put simply, the EU organic directive does not preclude grubbing up. That is, you can be organic, but have cleared forest. But all organic producers are part of this RSPO standard, which states that no forest land needs to be cleared after 2005. That means that once you have organic, you can assume that after 2005 at least no forest land has been cleared.

What has to be said, of course, is that that organic does not meet social requirements. That said, organic is not always fair. That's why you have to pay attention to fair trade certifications. Labels of which we have spoken now, Responsible Palm Oil Standard, Rapunzel Gepa and so on who have all sorts of certifications. But now I'm just talking about big manufacturers who focus on bio. You have to make sure that it is fair certified. There is a strict label, the Fair for Life certificate, which is strictly monitored and used very well.

What I mentioned earlier, but what may or may not have to be underscored, is that organic palm oil never comes from Indonesia, but only from South America and West Africa. There is no organic palm oil from Indonesia or Malaysia. There are very few manufacturers, there are about four I've found that produce organic palm oil. That's the very first from Serendipalm that I've visited. Then there is Natural Habitat, which is in South America. Agropalma, I think in South America. And Dabon, where, for example, Alnatura obtains palm oil.

What is my conclusion on this whole palm oil topic? I think nothing of a boycott at all. I believe that we can easily access this less than 1%. Some sources even speak of the 0.1% organic fair palm oil we should support. We should really look to supporting those companies that are doing well and right. And not look at the smallest error, but sometimes go to the big ones and knock there and boycott.

In the German-speaking area, where so much palm oil is used for biodiesel, we can do without it. We can deliberately do without chocolate and snacks. Products where we may not need palm oil. In my opinion, that's the solution. In my opinion, the solution to all issues is not a black and white thinking, but a differentiated approach. And an approach where you deal with it every day and do not just say, "Yes, that's the black-and-white theme and I say yes or no." Especially with palm oil, you have to say yes.

Thank you for listening to this very complex, informative episode. I've put a lot of links into the info box and show notes from this episode.

I am pleased that we continue to talk and discuss this topic and exchange views. Ciao, see you next time.



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