Transcript for: “Fishing for answers in a sea of complexity: sustainable fish oil sourcing”

Nigel: In the next minute, 250 babies will be born to add to the world's population. In the next 30 years, the world population is expected to reach 10 billion people. These are the 10 billion reasons we do what we do every day. Please join us as we explore innovative pharmaceutical solutions and sustainability in digitalization initiatives that will help us rise to the challenge.

Nigel: Hello, everyone. My name is Nigel Langley. I'm the host of our new BASF Pharma Solutions 10 Billion Reasons podcast series. The podcast series will consist of short discussions with our experts, highlighting different pharmaceutical technology areas, their applications, and industry learnings.

Today, I have three special guests, Bailey, Manfred, and Douglas, and the category today is involved in omega-3 and the importance of sustainability in this area, omega-3 oils. So I'm going to ask Manfred, Douglas, and Bailey to actually introduce themselves first, and then we'll start with the conversation. So, Manfred.

Manfred: Yeah. Thanks, Nigel for this invitation. My name is Manfred Hark, I am the global procurement manager for omega-3 oils in BASF. I have more than 20 years experience in procurement. Some years thereof in renewable raw materials, and I'm based in our headquarters in Germany.

Nigel: Thank you, Manfred. How about you, Douglas?

Douglas: Hi, Nigel. I am Douglas Souza, global category buyer responsible for fish oil in Brazil, and my background is business administration and I responsible for the commercial areas, business relationship, and everything that involves negotiation.

Nigel: Thank you, Douglas. And Bailey, I know that we've met before on our previous podcast series, welcome back. Maybe you could also just give us a brief introduction of yourself

Bailey: Sure. Hi Nigel, hi everyone. I'm Bailey Risteen. I'm the Global Sustainability Manager for BASF Pharma Solutions, and I'm responsible for driving integration of sustainability, and to strategy, innovation, portfolio management, and product marketing for the business unit.

Nigel: So, listeneners can get an appreciation that this is a... Really, a global topic. We have, our colleagues here from different parts of the world, and if I may ask the first question, Bailey, to you, what does omega-3 sustainability mean?, and how does it fit into the context of the pharma industry?

Bailey: Yeah, sure. So, you know, in the last podcast, we had discussed more general- generally the topics that are happening right now in the pharmaceutical industry with respect to

sustainability topics like green logistics, packaging, CO2 emissions, and you know, there's so many different, areas of sustainability in pharma.

And I think for, for me, what I'm seeing the most right now has to do with CO2 emissions, and responsible sourcing, and, and the topic for today definitely fits into the responsible sourcing bucket.

You know, responsible sourcing for us and pharma really means taking a look at some of the raw materials that we're sourcing from to make our products, and so I think many people might be familiar with palm oil, and RSPO certified palm oil, and, you know, that's been a topic that's around for many years in the personal care industry, and is becoming more popular in the pharma industry.

Because many excipients are based on palm oil and RSPO is a way to ensure that the palm has been sourced responsibly, you know, avoiding deforestation and protecting human and labor rights, for example.

And I think in a way, the omega-3 industry is very similar to the palm oil industry. You know, omega-3 fatty acids can't really be created synthetically very easily, so instead, you know, we have to extract the molecules from natural resources such as fish, and algae, and seeds.

So on the one hand, you have the benefit of avoiding these fossil fuel based raw materials, which has a sustainability advantage, but then you also have to consider the source of, you know, your natural resources, and, and making sure you're sourcing them responsibly across all the pillars of sustainability, so that would be environmental, social, and economic.

You know, BASF, we primarily use fish oil as a raw material for our omega-3 portfolio, and so we really need to address sustainability from a value chain perspective, from fishery to formulation.

So this means starting all the way back to where the fish are originally caught, so at the fishery level, and then kind of moving through the value chain looking at our own production, how we process, refine, and concentrate the oil, and then finally, all the way to the point where the products are leaving our door, and are used in our customer's formulations.

Nigel: That's very interesting, Bailey, thanks for, that description. And then Manfred, maybe you can give some examples of how suppliers work to ensure that the sustainability... Sustainable fishing practices are actually taken?

Manfred: Yeah, sure. There are actually many great examples of how our suppliers work to ensure sustainable fishing practices in the omega-3 industry. IMARPE, the Peruvian Sea Institute, is a specialized technical agency of the Ministry of Production, and focuses on the study and preservation of ocean spaces and fisheries.

Our Peruvian suppliers work closely with IMARPE and the Ministry to continuously adopt new policies and new technology to manage the anchovy resource effectively. An important legislative milestone enacted in Peru was the law of individual quotas.

This law assigns maximum catch limits to vessels based on their fishing record and hold capacity. Previously, a global catch quota was in place, which resulted in vessels trying to catch as much fish as possible in the shortest possible time.

The Peruvians called it the Olympic race. As you can imagine, this led to low fishing efficiencies, and a large amount of waste. Another nice example is the development of a real time electronic sampling device that sends data from each catch.

For example, the percentage and the size of the juvenile fish from the vessel directly to IMARPE, and along with satellite data, allows for quicker action if the area needs to be banned or avoided by other vessels. This initiative has reduced the juvenile catch by between 30 to 60%.

Nigel: Thank you very much, Manfred, for that very extensive and comprehensive, questions and discussion, and, you know, I'm personally very pleased that we... BASF takes this, position very responsibly.

And that leads me into the next question, Douglas, if, you know... What does BASF's fish oil sourcing policy actually look like? If you can explain that then a little bit more for the listeners, that would be great.

Douglas: Yeah. It's a good question, Nigel. Sustainable fishery sourcing starts with choosing partners that live up to our principles. Since 2015, we have implemented a sourcing policy aimed at driving sustainable source beyond existing norms, including social standards according to our BASF supply code of conduct.

The initial policy was based on three guiding principles. The field code of conduct, and purchasing decision is instructed to our suppliers. Our three guiding principles are we constantly ensure a profound understand of the supply chain, and sustainability requirements. We assess suppliers continuously, and we foster dialogue and cooperation with partners along the value chain. In these spirit of guiding principles in 2022, we reviewed our fishery sourcing policy and this [inaudible 00:08:11] our commitment to environment and social responsibility in the omega-3 industry.

Starting January 1st, 2023, we require all fisheries that we sourced from, to have a third party certification of sustainable practices. Accepted certification includes marine storage and[inaudible 00:08:32], MIC, marine trusts firmly IF or RRS, and friends of the sea. In addition to requirement, through a third party certification, we maintain strict criteria that we do not accept it from our suppliers and would require immediate action upon violation. We're strict and do not accept it. Endangered fish species from [inaudible 00:08:58], destructive fishing practices like dynamite, poisoning, and bottom trawling, and the IUS fishing practices enforces child labor. We are continually evaluating the suppliers' compliance to our policies. We have developed a big thing for changing decisions erected that is currently being rolled out to our suppliers.

Nigel: Thank you very much, Douglas. I'm- I'm very intrigued actually why BASF is now from next year requiring all fisheries to have a third party certification. And maybe Manfred, could you actually explain a little bit more of the reasons behind that decision?

Manfred: Yes, sure. We believe that third party certifications address critical topics in the fish oil industry and provide an accountability framework to ensure compliance to the certification standards, which are regularly reviewed and improved based on new scientific knowledge and stakeholder input.

Critical topics that are covered by these certifications are biodiversity, environment, trackabilities, society, and accountability. In order to make these topics a bit more transparent, let me give you some examples. Biodiversity comprises the stock status, the biomass, the catch quotas, but also the bycatch limits. Environment, we are talking about ESH standards, the minimization of marine pollutions, but also a topic that is, very much in the headlines lately, the CO2 footprint.

Traceability is a very important topic for this industry and its credibility. It's about tracing back to species and origin. It's all the management and traceability framework. With regard to society, we are, these certifications are addressing labor rights and benefits, the occupational safety of the employees, and what is very important, and I think Douglas just mentioned that also, child labor, forced labor. We don't want to have that in our supply chain.

And last but not least, accountability stands for regular audits and record keeping, but also for violation repercussions.

Nigel: Thank you, Manfred, for that very comprehensive, report back on the importance of third party certifications. I've got a better understanding now of why we're doing this. And um, you haven't escaped, Bailey. I've got another question for you, and that will complete our podcast today. So Bailey, can you explain or show some examples of how BASF is addressing sustainability in the omega-3 value chain in addition to what we've heard today?

Bailey: Yeah, sure. You know, I think Manfred and Douglas did a really great job of explaining what we're doing at the fishery level. So at the beginning, I was talking about this concept of from fishery to formulation, and so we're making sure that we're as covered as possible on the fishery side where we have this new sourcing policy that we're really excited about.

And then we also can't forget about our own operations as part of that value chain. So, something that we're working on within BASF at our production sites is trying to increase our yields of omega-3, so the EPA and the DHA, as well as reducing energy and water consumption. So, you know at BASF, we have a culture of continuous improvement, and sustainability is very much embedded in our operation organization.

And so for our omega-3 production sites, this has actually resulted in a huge increase in our utilization of EPA and DHA and fish oil over the past 20 years. About 220% increase in those 20 years. And so that means that we're actually using our natural resources more efficiently and significantly reducing waste along the way.

And then we have some pretty energy-intensive EPA purification operations, so we have to also reduce our footprint there and we have been successful in reducing that by 33% over the past 4 years, and actually plan to reduce our footprint by another 70% in the next 5 years with new optimization projects, which is really exciting.

And then finally, I think the last talking point is related to energy recovery, you know. An example of this would be at our Sandefjord, Norway site. We've actually implemented more than 10 energy recovery projects in the past five years with a dedicated energy management team. So, you know, as a result, our energy consumption per kilogram of product has decreased by 20%. So this reduces our utility-related emissions and therefore our product carbon footprint, which is really exciting.

So, again, trying to tie the value chain together, we've got the fishery level with our sourcing policy, we've got a huge focus on continuous improvement, yield optimization, energy recovery at our own production, and that enables us to provide our customers with more sustainable products, and being able to help them, have lower impact for their final formulations.

Nigel: Thank you very much Bailey, and it's very gratifying that BASF is taking a lead in this area of sustainability in the omega-3 space. And with that, I'm very grateful to our experts that joined the podcast today. Bailey, Manfred, and Douglas. And I thank you also for listening in to this latest edition of our podcast in our series, and stay tuned, because there will be more.

Speaker 5: BASF. We create chemistry.