

INNOVATING FOR DEFORESTATION-FREE PALM OIL

Danone published a **Forest Footprint Policy** in 2012 (www.danone.com): "Forests constitute an essential link in the Food chain. They regulate the climate, the water cycle and shelter the richest ecosystems in the world. Recognizing that their preservation is critical for the planet and requires the action of all parties involved, Danone has engaged in a dedicated policy, built on two complementary pillars: **eliminating deforestation from its supply-chain** and contributing to reforestation."

The company confirmed this commitment in its "zero-net carbon" Climate Policy published in November 2015. This new Palm Oil Policy, building on previous two versions published in 2012 and 2014, makes transparent our work on risk assessments and progresses, and take a step further aiming to foster positive change through innovation in sustainable palm oil production.

CONTEXT AND CHALLENGES



A steady rise in world demand for vegetable oils is driving the booming palm oil industry. While the oil palm is a native of West Africa, it is now grown primarily in Southeast Asia—nearly 85% of world production came from Indonesia and Malaysia in 2012. Plantation acreage doubled in Malaysia and rose five-fold in Indonesia between the beginning of the 1990s and the end of 2010.

It is indisputable that the palm oil industry has

contributed to tropical deforestation, since over half of all palm oil plantations were created by clearing forests. Current farming methods are a threat not only to terrestrial ecosystems, but also to the balance of soils, aquatic ecosystems, the resources of forest and riparian peoples, and the habitats of rare and endangered species.

Four major issues are particularly raised by the palm oil industry:

- 1. Destruction of tropical ecosystems hits rainforests and peatlands
- 2. Threatening of biodiversity
- 3. Greenhouse gas emissions
- 4. Threatening of local populations

Despite controversy over the non-sustainable practices associated to its culture, palm oil is nonetheless an agricultural product with exceptional qualities. Each palm tree produces between 45 and 50 liters of oil a year over its 25 to 30-year life, making it one of the top-producing oilseed plants of any kind. Palm oil plantations produce eight times more oil than an equal-sized field of soya, and six times more than a field of rapeseed.

As the world population rises, and with it demand for vegetable oil, palm oil offers an attractive and competitive solution for land use. But it is essential that the management of palm oil plantations—as practiced now and in the future—does not come at the expense of forests, peatlands and local populations.

RESPONSIBILITY

Globally, Danone is a relatively modest user of palm oil, purchasing a total of 31,000 metric tons in 2014 or around 0.05% of world production.

In 2014, Danone has worked with 6 direct suppliers, being refiners or ingredient manufacturers, spread across Europe, China, Indonesia, Australia and New Zealand. Our major suppliers have their own policy consistent with ours.

Overall, the oil came from 30 mills and 10 miller companies, located in Indonesia, Malaysia, Papua New Guinea, Guatemala and Solomon Islands.

Mills breakdown per country (as of 2014):

Country	Number of mills	Number of millers companies
Indonesia	5	3
Malaysia	9	3
Papua New Guinea	13	2
Solomon Island	1	1
Guatemala	2	1

All mills in Malaysia are located in Peninsular Malaysia. For Indonesia they are on the Kalimantan and Sumatra islands.

In 2016, our mapping will be updated so as to maintain a great level of traceability.

COMMITMENTS

Danone has committed to eliminate deforestation from its supply chain by 2020 while respecting the people living in forests nearby palm oil plantations, seeking long-term benefits.

Concretely, all palm oil used by Danone should:

• be traceable to the plantation where it was produced;

- come from plantations whose expansion does not threaten High Conservation Value (HCV) forests (*);
- come from plantations whose expansion does not threaten High Carbon Stock (HCS) forests
 (*);
- come from plantations whose expansion does not threaten any tropical peatland, of whatever depth;
- come from plantations that respect indigenous peoples' and local communities' rights to give or withhold their Free, Prior, Informed Consent (FPIC) (*) to operations on lands to which they hold legal, communal or customary rights;
- come from plantations that respect the rights of all workers.

Initially, Danone undertook to source 100% of its palm oil requirements from physically segregated sustainable palm oil suppliers certified by the Roundtable on Sustainable Palm Oil (RSPO)—at the time, the strictest standard in the industry. By the end of 2014 this commitment was met. The RSPO standard protects primary or old-growth forests, however, it has proven unable to safeguard other vulnerable eco-systems including tropical peatland and second-growth forests.

This is why Danone has raised the bar since 2014 by promoting sustainable palm oil production practices that both preserve eco-systems at risk and offer local communities long-term benefits. Under this policy, Danone has committed to sourcing traceable palm oil offering guarantees of no deforestation and exploitation.

* See the Appendix & Definitions section at the end of this document for more details

SUPPLY-CHAIN RISK ASSESSMENT



In May 2014, Danone joined TFT (The Forest Trust), an international non-profit organization that works with businesses to place environmentally and socially responsible products on the market.

During 2014 Danone completed Phase 1 of the project in cooperation with TFT and in partnership with suppliers: produce a detailed map of all supply sources back to mill a year ahead of schedule. Danone has worked with 6 direct suppliers, being refiners or ingredient manufacturers, spread across Europe, China, Indonesia, Australia and New Zealand. Some of our suppliers have policies fully consistent with our end-game.

In total, the oil came from 30 mills and 9 miller companies, located in Indonesia, Malaysia, Papua New Guinea, Guatemala and Solomon Islands.

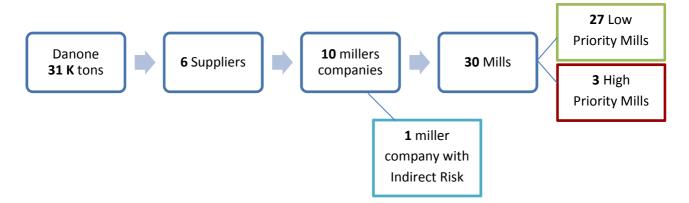
In the interest of full transparency, palm oil sources have been rated on environmental and social criterias that make up Danone definition of responsibly produced palm oil.

Three levels of priority have been defined:

- 1) High Priority: where doubts exist about millers that potentially have not followed Danone's policy principles in their operations,
- 2) Low Priority: where millers were estimated by TFT as representing a low occurrence of not being aligned with Danone's policy for their operations,
- 3) Indirect Risks: when suppliers could be at risk due to millers that are not linked to Danone supply-chain but could have practicies not consistent with Danone's Policy.

2 milling companies representing 3 mills in our supply-chain have been identified as High Priority. These milling companies may have plans to expand their operations directly within the current mill Fresh Fruit Bunches catchment area which means that oil coming from those expansion areas could physically end-up in our supply-chain in the future. In this case we are working towards making sure this expansion is fully consistent with our policy.

For Indirect Risks, millers could have expansion plans far away from the area Danone is sourcing the oil and thus the oil coming from those areas is not physically in Danone's supply-chain. Still we believe we must source from suppliers whose practicies are fully consistent with our No Deforestation principles wherever the oil is produced. We are working towards raising market awareness on No Deforestation.



Danone aims at maintaining the mapping alive and update it yearly.

ACTION PLANS WITH SUPPLIERS

Since 2015, Phase 2—transformation—will use the results of mill assessments to ensure that sources commit to practices meeting responsible palm oil criterias. Danone wants to support growers that

are genuinely committed to better practices. If there is no progress, the company will look for different sources able to meet its requirements.

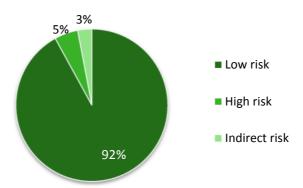
Danone's focus in 2015 is to engage with supply-chains designated as High Priority. Action plans per supplier have been set to reduce deforestation risks. Danone's goal is to have zero High Risk in Danone's direct palm oil supply-chain by the first-half of 2016.

Furthermore, new suppliers will be automatically engaged on the mapping and assessment of their palm oil sources. Meeting Danone's Palm Oil sourcing criterias is a pre-requesite for starting business.

	Key Actions	
For High Risk	Assess the risk of development on HCS & Peat areas	
Suppliers	Improve the Policy transparency and show public commitment	
For Indirect Risk	Engage with suppliers to promote practicies in line with Danone's Policy	

Deforestation Risk

Exposure in Volume



Starting 2016, and building on results of the first mapping that traced the Palm Oil from the mills to the factories, Danone will map the palm oil sources from **mills to plantations**, taking a step further on transparency and traceability. The progresses on traceability back to the plantation will allow Danone to re-assess supplier prioritization and broaden the actions to "Low Risk" ones.

At the end of this transformation phase, all palm oil used by Danone will be free of deforestation risk offering a robust traceability system and monitoring process to ensure the full compliance with this policy.

Each year, Danone will publish a full and transparent report detailing progress.

OUR NEXT MILESTONES

End 2015:

- o Maintain 100% of Palm Oil sourced under RSPO Fully Segregated and Certified scheme
- o Achieve 100% traceable back to the mill
- o 100% High-Priority suppliers engaged into timebound plans to meet Danone requirements

End 2016:

- Maintain 100% of the Palm Oil sourced under RSPO Fully Segregated and Certified scheme
- o Maintain a updated mapping and diagnosis of the supply-chain
- o No High-Risk suppliers in Danone's direct supply-chain
- Achieve 100% transparence back to plantation (except from new suppliers if any)
- o Assessment and definition of monitoring process for Low-Risk suppliers

When those targets will be met, Danone will define new timelines to reach its goal of eliminating all deforestation impacts before 2020 and contribute at its level to the transformation of the Palm Oil industry, co-creating solutions with suppliers to eliminate deforestation practices.

But risk management is not enough. We believe there is also an urgent need to pioneer "positive solutions" to promote "deforestation-free" palm oil production seeking positive long term benefits for ecosystems and smallholder communities.

INNOVATION & SMALLHOLDERS

Danone believes that the journey towards responsible palm oil requires innovative approaches and a higher level of co-creation between all stakeholders involved for positive solutions.

Danone supports the principles of "The Palm Oil Innovation Group" (POIG) and signed-up the Charter for Retailers and Manufacturers . POIG brings together leading NGOs with palm oil producing companies, brands and other actors in the supply chain to share and develop leading practices to ensure that responsible palm oil becomes available in the market place. This aims to support the RSPO through building on RSPO standards and commitments by both demonstrating innovation to implement RSPO existing standards as well as highlighting critical issues for improvements. Together with other POIG members, we believe that reforms and improvements of RSPO audit procedures, quality control and complete and comprehensive reporting in Annual Communication of Progress (ACOP) reports should be done. We also believe that the RSPO's Greenpalm Certificate system should be phased-out and we support the integration of POIG grower indicators into the Principles & Criteria of the Roundtable on Sustainable Palm Oil (RSPO).

For Danone It is also critical to go beyond standards and innovate in the way the industry works towards smallholders inclusiveness.

Nowadays it is estimated that 65% of the Palm Oil production come from smallholders who do not have access to technical support or management practices to avoid deforestation, protect valuable ecosystems and have better access to market.



In 2014, Danone launched the Livelihoods Fund for VELIHOODS Family Farming (Livelihoods 3F) based on the belief that sustainable farming, climate change

and poverty are closely linked. Danone is one of the funding investors, together with Mars, Inc., behind a new investment fund aimed at helping companies learn how to sustainably source the materials they need from smallholder famers, while at the same time delivering large-scale social, environmental and and economic impact to those farmers and their communities. Livelihoods 3F's goal is to implement projects that will simultaneously restore the environment and put degraded

ecosystems back on track, while improving the productivity, incomes, and living conditions of smallholders rural farmers in developing countries. As a result, investing companies will be able to connect their supply chains to the projects that will offer a farm-level traceability, smallholder inclusion and a model for largerscale replication across the supply chain.

Starting 2015 Danone has explored opportunities together with Livelihoods 3F to invest in the transformation of Palm Oil production from smallholders. Livelihoods 3F will work hand-in-hand with locally anchored organizations with a deep understanding of social dynamics of family farmers. Combining this with best-in-class experts in the areas of social engineering, landscape management and agronomic best practices adapted smallholders, the projects will achieve their economic, social and environmental objectives at large scale (several tens of thousands of farmers) and follow them up through ad hoc impact indicators over at least 10 years.

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The Livelihoods Fund for Family Farming (Livelihoods 3F) will implement projects that will simultaneously restore the environment and put degraded ecosystems back on track while improving the productivity, incomes, and living conditions of small rural farmers in developing countries. Livelihoods 3F aims to invest 120 million euros in the next 10 years to implement projects in Africa, Asia and Latin America.

"Livelihoods 3F is based on the conviction that sustainable farming, climate change and poverty are closely linked," said Bernard Giraud, President of Livelihoods Venture, Investments by Livelihoods 3F will have a triple objective: i) Economic: increase both yields and farmers' incomes ii) Social: empower farmers, especially women, and improve the livelihoods of farming families iii) Environmental: promote responsible farming practices and technologies that sustainably use natural resources to help enhance the resilience of farms, particularly in the face of climate change. It will provide upfront financing and technical support to NGOs and farmers' organizations that will implement the projetcs in the field with farming communities.

"The challenges of sustainable agriculture, which lies at the base of the food chain, can only be solved if we know how to develop radically different aproaches tackling and social concerns environmental economic. simultaneously" said Frank Riboud, President, Broad of Director, Danone.

http://www.livelihoods.eu/



APPENDIX AND DEFINITIONS

APPENDIX

Destruction of tropical ecosystems hits rainforests and peatlands

Nearly 20% of the deforestation observed in Indonesia and Malaysia in the 2000s was a direct result of the palm oil industry's expansion. Indonesia has been hardest hit, with some 1.8 million hectares of virgin forest cleared every year; while the country is home to just over 3% of the world's forests, it accounts for over 14% of global deforestation. An estimated 85% of Sumatra's forests have now been cleared, driven largely by logging and conversion to palm oil plantations. And in Borneo, World Bank experts estimate that all forests of the plains not already protected by legislation will have been cleared before 2020.

At the same time, deforestation is occurring ever more frequently in peatlands (*). And unlike other ecosystems, peatlands are generally afforded little or no protection by legislation, which makes them tempting targets for businesses seeking to create vast plantations.

While tropical rainforests and peatlands (*) offer a wide variety of "services" to the ecosystem, peatlands are above all remarkable for their ability to store carbon. The water they contain dramatically slows the decomposition of plants and organic matter, with carbon removed from the atmosphere by plants stored indefinitely in decomposing plant tissue. When these environments are degraded, the carbon stocked in them is released into the atmosphere. Decomposition of peat following the destruction of peatlands leads to around 81 million tons of carbon emissions every year¹. Tropical peatlands also play a vital role in water cycles, climate and landscape stabilization at both regional and local level.

Today palm oil plantations are being introduced in other primary forest areas including Papua New Guinea, Central Africa and the Amazon basin.

Biodiversity threatened

When a primary tropical rainforest is cleared to make way for a palm oil plantation, biodiversity plummets by 90%. Conversion triggers fragmentation and a reduction in natural habitats that eliminates 80 to 100% of mammals, reptiles and birds in the area. As the palm oil industry destroys forests, it thus threatens the survival of species listed as critically endangered by the IUCN**, including the Sumatran orangutan, rhinoceros and tiger. Other endangered species include the Sumatran elephant and Borneo orangutan, with 3,000 animals dying each year.

Moves to drain the world's peatland, which has its own aquatic biodiversity, poses another threat of extinction.

¹ Source: http://blog.ucsusa.org/why-should-we-conserve-southeast-asias-peat-swamp-forests-479

Greenhouse gas emissions

According to Greenpeace, 12% of the world's greenhouse gas emissions (14-21% CO2 emissions) are caused by deforestation. In Indonesia, a full 83% of greenhouse gases stem from the combined impact of deforestation and peatlands (*) conversions, and the country ranks third worldwide for greenhouse gas emissions.

A large share of this total is due to forest and peat fires. Peatlands, which can be up to 30 meters deep, are first drained by cutting canals, then dried. Once dry enough to burn, they are set on fire during the dry season. And since they often contain only organic material, their carbon is transformed into greenhouse gases. A study published by Nature Climate Change showed that in 2010 alone, clearing to develop the palm oil industry in the Kalimantan region led to the emission of over 140 million tons of carbon dioxide—a figure equal to the exhaust of 28 million vehicles over one year.

Local populations threatened

Deforestation also has a severe impact on local populations, affecting both their livelihoods and customs. It reduces their living space, including hunting and gathering territory; it destroys certain sacred sites; and, ultimately, it surrounds and isolates the last remaining communities of forest peoples by encircling them with tens of thousands of hectares of palm plantations.

While it is true that millions of families make a living producing palm oil, the industry has also given rise to a host of social problems. This is particularly true when customary rights are not recognized, and governments confiscate community land, then place it with private growers. Their creation of palm oil plantations has a dramatic impact on revenues from subsistence farming, and also affects the value of forest products and biodiversity.

DEFINITIONS

High Conservation Value (HCV) forests: areas containing resources of exceptional or vital biological, ecological, social and/or cultural importance that must be preserved, including rare and endangered species and their habitats. For more information, visit the HCV resource network site. This criterion is part of RSPO certification and is thus already met. http://www.hcvnetwork.org/

High Carbon Stock (HCS) forests: include primary or old-growth forests; high-, medium- and low-density forests as well as regenerating forests. Danone expect their supplier to follow the HCS Approach toolkit (http://highcarbonstock.org/). Danone will continue to adopt best practices to identify HCSs as they are developed.

Peatlands: areas with soil that contains more than 65% organic matter (definition partially based on RSPO Best Management Practices Manual http://www.rspo.org/file/COP summary small.pdf). Danone will not accept plantation development on peatlands, regardless of depth and will constantly seek advice to keep this definition aligned with state-of-the-art scientific and expert stakeholders consensus.

Free, prior and informed consent: affirms that indigenous peoples have the right to genuine participation in all decisions, policies and initiatives that concern them. For more information, visit the UN site dedicated to REDD. This criterion is part of RSPO certification and is thus already met.

http://www.unredd.net/index.php?option=com_docman&task=doc_download&gid=8717&Itemid=53

Palm Oil Innovation Charter for Retailers and Manufacturers: The Palm Oil Innovations Group (POIG) aims to support the RSPO through building on RSPO standards and commitments and by both demonstrating innovation to implement RSPO existing standards as well as with additional critical issues. With a focus on the three thematic areas of environmental responsibility, partnerships with communities, and corporate and product integrity, POIG members will strengthen their commitments to socially and environmentally responsible palm oil production and procurement.

As retailers and manufacturers we have come together to help find solutions to the challenges the palm oil industry is facing.

http://poig.org/

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