

**Casestudy:
DIOXIN SALMON?**

**Friends of the Earth Scotland (FoE Scotland)
versus
Nutreco**

Early in January 2001, the British Broadcasting Corporation (BBC) issued a press release about a documentary on animal welfare on Scottish salmon farms which was scheduled to be aired shortly. The documentary, which was made in collaboration with Friends of the Earth Scotland (FoE Scotland), made allegations against Nutreco of questionable animal welfare practices and the presence of unaccountably high levels of dioxins and PCBs in farmed salmon.

Societal Interface Management Challenges

PUBLIC ✶ PRIVATE	PROFIT ✶ NON-PROFIT	EFFICIENCY ✶ ETHICS/EQUITY	
Relationship with public broadcasting corporation different from relationship with private broadcasting corporation (e.g. with respect to rectification)? Adequate food safety tests? Sustainability report according international standard/not?	Relationship with consumers enhanced as a result of other food safety risks Reputation vulnerable due to leading position in market Coalition with other companies? Relationship with small and large shareholders?	Control over production chain leads to improved efficiency but also to susceptibility to diseases Diversification strategy	Sustainable farming of healthy fish for healthy consumption Animal welfare Supply-chain responsibility and food safety Food quality

This case has been written by Alex van der Zwart with Rob van Tulder (RSM Erasmus University). This case applies the methods and theories as used in the book "International business-society management: linking corporate responsibility and globalization" (2006, Routledge), www.ib-sm.org. The Dutch newspaper articles in this case have mostly been translated into English.

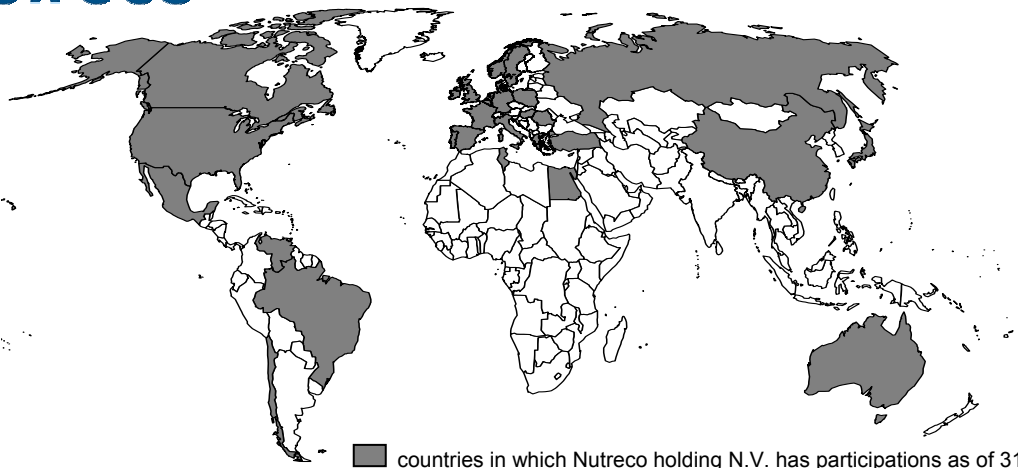


Nutreco NV

Nutreco Holding NV is an international company headquartered in The Netherlands. Its principal activities are the production of mix feed for pigs, poultry, cattle; feed for salmon and the farming, processing and marketing of first class salmon products. The company also produces premixes and specialist feed ingredients, it processes poultry and breeds poultry and pig stocks. The foundation for Nutreco was established in 1994 when British Petroleum disposed of its salmon and trout farms and abandoned activities in the area of mix feed for poultry and pigs. Operations are divided into two business streams, Nutreco Agriculture and Nutreco Aquaculture. The company comprises five business groups and eighteen business units with more than 120 production and processing plants in 22 countries and 13.000 employees. In Great Britain, Nutreco operates 20 salmon farms and ocean sites. Nutreco is listed on the Amsterdam Midkap Index. In 2003, Nutreco had a turnover of more than 3,6 billion euro.



Based on AR data (Source AR 2001 p54 and 77) the



The geographical breakdown of net sales, assets and investments based on location of production is as follows:

(EUR x million)	Net sales third parties		Total assets		Total investments in tangible fixed assets		Total investments in intangible fixed assets	
	2003	2002	2003	2002	2003	2002	2003	2002
The Netherlands	954.7	1,079.4	236.2	279.8	20.5	18.9	8.6	13.6
Spain	873.1	824.9	279.6	283.5	20.5	16.4	0.2	0.4
Norway	407.2	425.0	369.4	617.6	19.1	21.1	13.0	2.1
United Kingdom	314.1	311.2	151.0	165.4	7.5	7.2	-	-
Belgium	220.3	220.2	76.4	83.0	2.5	4.0	0.7	-
Chile	213.4	208.2	166.3	182.1	8.5	14.9	1.4	-
Canada	118.8	126.9	90.2	70.7	14.0	9.5	1.7	-
Germany	104.4	99.2	21.0	18.4	0.6	0.8	-	-
USA	74.8	92.5	50.5	52.5	1.3	-0.8	-	1.1
Other countries	393.5	422.1	262.6	256.4	12.0	7.9	0.7	0.2
Total	3,674.3	3,809.6	1,703.2	2,009.4	106.5	99.9	26.3	17.4



Conflict

At the end of 1999, Nutreco acquired a chain of Scottish salmon farms.¹ The deal had hardly been finalised when, in the course of 2000, a range of societal organisations started questioning the farming conditions at companies such as Marine Harvest – the new British branch of Nutreco. Concern was also expressed about the level of dioxins found in farmed fish. In the first week of January 2001, the BBC publicized information which was at the centre of a documentary about salmon farming that was yet to be broadcast. Salmon

FoE Scotland and the BBC

In the controversy surrounding dioxins and PCBs in food (including salmon), the British television station, the BBC, was informed and assisted by Friends of the Earth Scotland (FoE), among others. Friends of the Earth is an international organisation and has a branch in the Netherlands called Milieudefensie.

farming is one of the core activities of Nutreco which has farms, for instance, in Scotland, Chili, Canada, Norway and Australia. Nutreco is the largest producer of consumable salmon and fish feed and holds a leading position on the world market. Partly due to the falling consumption of meat as a result of BSE, swine fever and foot and mouth disease the salmon market was growing strongly at the time. As in the case of Nutreco Agriculture, Nutreco Aquaculture owns the entire chain of production and is therefore not dependent on third parties in its operations (except for governments and consumers). In this branch, however, disease can also affect earnings. In the past, the fish disease Isa in Scottish salmon farming ponds was a source of some concern to Nutreco. On 3 January 2001, four days prior to the date the documentary, ‘Warnings from the Wild: the Price of Salmon’, was scheduled to be



broadcast, the BBC posted a report on its website that claimed that

farmed salmon contained ten times more toxins than wild salmon.² Other media relayed the report. On 4 January 2001, the headlines of The Times read: ‘King of fish contaminated by chemicals’. Nutreco countered the allegations of British scientists that consumption of farmed salmon was dangerous due to high concentrations of PCBs and dioxin in the fish.³ Nutreco pointed out that as market leader, it was in the company’s greatest interest to ensure that salmon was farmed in an environmentally and socially accountable manner. Moreover, PCBs and dioxins had been present in nature for a long time due to human activities. Contamination of the North Sea and Baltic Sea was particularly great which was precisely the reason why Nutreco sourced its fish meal from less polluted regions.⁴ In the wake of the health issues surrounding BSE, foot and mouth disease, swine fever and salmonella all Nutreco’s activities seemed to be concentrated in a danger zone.

Two years earlier, Nutreco had been involved in another controversial food-safety affair: the ‘dioxin crisis’. This issue paved the way for the controversy surrounding the dioxin levels in salmon.

¹ Bom, J. (2002), “The Scottish ordeal” , *People, Planet, Profit*, Vol. 1, Fall 2002, p. 47.

² http://news.bbc.co.uk/1/hi/english/sci/tech/newsid_1098000/1098564.stm, consulted on 2 April 2002.

³ --- (2001), "Nutreco denies allegations of contaminated salmon", *Het Financieele Dagblad* (DUTCH NEWSPAPER, HEADING ORIGINALLY IN DUTCH), 4 January 2001.

⁴ --- (2001), "Openness only answer to foodscandle", *Het Financieele Dagblad* (DUTCH NEWSPAPER, HEADING ORIGINALLY IN DUTCH), 8 January 2001.



Dioxin issue

Dioxin is an extremely toxic substance which is produced by the burning of paper and PVCs, among other things. Dioxins have been present in the human environment for more than 60 million years, but suddenly at the end of May 1999 the substance provoked public outcry. On 28 May 1999, eggs were taken out of circulation in Belgium because chicken feed had been contaminated with dioxins as a result of coming into contact with industrial oil. These dioxins would have found their way into the chickens and eggs. The Belgian dioxin scandal saddled two of Nutreco's subsidiaries, Hendrix UTD in Netherlands and Pingo in Belgium, with serious problems.⁵ It subsequently emerged that the government had been aware of the contaminated feed, but failed to take action. And so the dioxin scandal was born, because the possibility now existed that there were more centres contaminated with the carcinogenic dioxins.

In Germany, the Netherlands and Belgium companies were closed, blockades at borders were put up, suspect produce such as chicken and eggs was withdrawn from supermarkets and a general ban on the slaughter and transport of poultry was instituted. In the Netherlands and Belgium, storm clouds gathered around the responsible members of government (respectively the State Secretary of Agriculture, Faber and the Minister of Public Health, Aelvoet).

From the investigations that were conducted, it emerged that Belgian feed fed to Dutch chickens and pigs via mixed feed producer Hendrix UTD had not been contaminated with dioxins after all (Nutreco, 1999: 24). An analysis of the research laboratory Rikilt DLO



confirmed that the feed was 'clean'.⁶ The contaminated chicken feed originated from a oil processing plant and animal feed manufacturer, Verkest in East Flanders and investigations showed that Nutreco subsidiaries had not been contaminated either.⁷ Employees at Verkest eventually admitted that animal and vegetable oils destined for feed also contained industrial oil. The owner and his son were arrested and charged with fraud and falsification of documents.⁸

In view of the public outcry the dioxin affair generated, Nutreco was aware of the potential crisis that could break out surrounding dioxin levels in farmed salmon. The best way for Nutreco to handle the situation was by being transparent, which is why the company gave its full cooperation in the making of the BBC documentary. But the company was not prepared for the negative picture which eventually emerged from the broadcast. Nutreco was not aware of the studies upon which the BBC and FoE based their allegations. The news elicited strong criticism from British food nutrition scientists (who also contested it in an interview), but the damage had already been done. Nutreco also felt that it had been misled and its trust betrayed. Shortly after posting the news report, the BBC retracted the allegation: the salmon was

⁵ --- (1999), "Dioxine-matter hurts Nutreco", *Het Financieele Dagblad* (DUTCH NEWSPAPER, HEADING ORIGINALLY IN DUTCH), 3 June 1999.

⁶ --- (1999), "Belgium forbids transport and slaughter stock", *De Volkskrant* (DUTCH NEWSPAPER, HEADING ORIGINALLY IN DUTCH), 4 June 1999.

⁷ --- (1999), "Dutch government lets companies and their meat production off the hook after dioxinresearch", *Het Financieele Dagblad* (DUTCH NEWSPAPER, HEADING ORIGINALLY IN DUTCH), 8 June 1999.

⁸ Kruijt, T. (1999), "We are used to disasters", *Algemeen Dagblad* (DUTCH NEWSPAPER, HEADING ORIGINALLY IN DUTCH), 3 June 1999.



‘cleaner’ than the BBC had claimed.⁹ However, the BBC refused to edit the suggestive images of thick layers of sediment at the bottom of a Scottish lake. In half-hearted attempt to account for its source, only the word ‘archive records’ were added.¹⁰ According to Nutreco, the images were out-dated and not even filmed on its farms.

Demonstrable indicators of reputational damage

Consumer market

In June 1999, at the time of the dioxin crisis, the Dutch SWOKA, the Institute for Strategic Consumer Research, conducted research among consumers. More than half of the interviewees claimed that they avoided products containing chicken or eggs.¹¹ A similar response might have been expected with respect to the dioxin levels of Nutreco’s salmon. But in spite of the crises in May/June 1999 and the commotion at beginning of 2001, Nutreco reported growth in earnings each (half) year. This can be attributed to the diversification strategy of Nutreco, i.e. the distribution of activities between the Agriculture and Aquaculture divisions. If less salmon is consumed, meat consumption increases. The greatest source of income for the nutrition company is from meat. Also in this market, the company functions according to the principle of communicating vessels. If pork is contaminated, more chicken will be consumed and vice versa.¹² Moreover, consumers regarded fish as alternative to meat ‘contaminated’ with BSE, dioxins and foot and mouth disease. Blows in the one sector could be absorbed by other sectors such as salmon farming and fish meal. The 1999 dioxin affair had a severely negative impact on the European market, involving significant one-off costs and in the longer term, low end-product prices. For Nutreco, the cost of the Belgian dioxin crisis in May 1999 amounted to approximately 10 million euros (Nutreco, 1999).^{13,14,15} In 1999, under pressure from the dioxin crisis, the earnings of Nutreco’s mixed feed division declined by almost 50 per cent (Nutreco, 1999: 19).

Sales and profit results in 2001 displayed an upward trend. Sales rose by 22,7 per cent and net profit by almost 1 per cent. This result was in keeping with the adjusted profit expectations announced in November 2001. This increase could largely be attributed to the strong recovery of the Agriculture division (Nutreco, 2001: 10). In the Aquaculture division, which incorporates salmon farming, Nutreco realised an EBIT of 91,5 million euros in 2001, a decline of 11,3 per cent compared to 2000 (103,1 million euros). According to the Board, this slide was largely the result of extremely low salmon prices. Organic growth was negative and amounted to 20,6 per cent.¹⁶ The declining salmon prices could largely be attributed to the 50 per cent increase in production in Chili which resulted in over production.¹⁷

⁹ <http://www.bbc.co.uk/>

¹⁰ Bom, J. (2002), “The Sottisch test”, *People, Planet, Profit*, Vol. 1, Fall 2002, p. 47.

¹¹ <http://www.agriholland.nl>, consulted on 10 October 2001.

¹² --- (2001), "Spreading of risks against foodcrises", *Het Financieele Dagblad* (DUTCH NEWSPAPER, HEADING ORIGINALLY IN DUTCH), 14 March 2001.

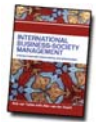
¹³ ANP (1999), "Nutreco suffers from dioxine-issue", *De Volkskrant* (DUTCH NEWSPAPER, HEADING ORIGINALLY IN DUTCH), 4 August 1999.

¹⁴ ANP (2000), "Dioxine and sick Scottish salmon don't affect Nutreco's profit", *De Volkskrant* (DUTCH NEWSPAPER, HEADING ORIGINALLY IN DUTCH), 8 March 2000.

¹⁵ --- (2000), "Dioxinecrisis is costing Nutreco 22 million guilder", *Algemeen Dagblad* (DUTCH NEWSPAPER, HEADING ORIGINALLY IN DUTCH), 8 March 2000.

¹⁶ <http://www.nutreco.nl>, consulted on 15 March 2002.

¹⁷ <http://www.intrafish.com>, consulted on 18 March 2002.

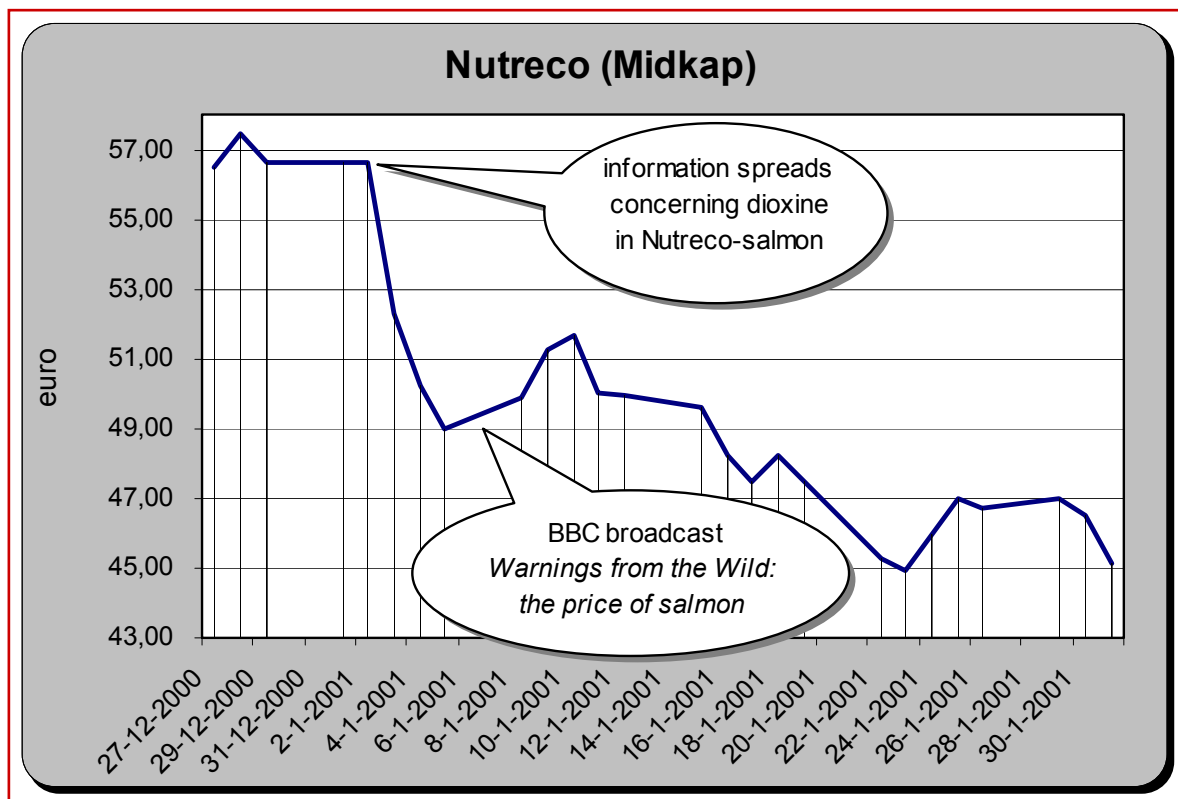


This decline was partly compensated for by an increase in volumes due to the continued growth in the worldwide consumption of salmon. Consumption in the important US consumer market showed an annual growth of 23 per cent. For the time being, it can be concluded that the European salmon market, at least, was affected the allegations of the BBC in January 2001.

Capital market

The Board of Nutreco reported that three large shareholders, Fortis, Aegon and ING had made enquiries in the first week of January 2001. Although the BBC had clearly disseminated inaccurate information, the price movements of the Nutreco share showed that its reputation had suffered a severe blow. On 1 January 2001, the share price was 56,60 euros. On the day the BBC published the news about the alleged unaccountably high dioxin levels in farmed salmon, the share price dropped by more than 7,5 per cent to 52,30 euros. The Nutreco share price, which had increased by 80 per cent in 2000, decreased by 10 per cent in two days. On the stock exchange, Nutreco trade volumes were twenty times higher than normal.¹⁸

An absolute low was reached on 5 January when the share price slid to 49 euros, a decline of 13,5 per cent. In three days, the company suffered a market value loss of 244 million euros. At the moment of Nutreco's decline on 3 January, the Midkap Induex decreased by almost 3 per cent. The following day, the AEX achieved an increase of 1,83 per cent while Nutreco registered a decline of almost 4 per cent. There is thus evidence of a significant reaction to the BBC news on the stock market (demonstrable indicator of reputational damage). The figure below depicts the price movements of the Nutreco share with regard to the dioxin salmon issue of early January 2001.



¹⁸ --- (2001), "Openness is only answer to foodscandal", *Het Financieele Dagblad* (DUTCH NEWSPAPER, HEADING ORIGINALLY IN DUTCH), 8 January 2001.



On the day following the BBC broadcast, the share price increased slightly which could be linked to the BBC's retraction. Nutreco's share price, incidentally, had never been as high as it was on 2 January, the day before the BBC disclosed the information. At the end of January 2001, the share price was 45 euros, a decline of more than 20 per cent compared to the beginning of January. For more than a year following the conflict, the share price did not rise above this level. By contrast, the Midkap Index increased by almost 8 per cent in January. Competitors' share prices, such as those of Fjord Seafood and Pan Fish who were listed on the Oslo stock exchange were also dragged down by the dioxin affair. In January 2001, their shares were among those that had suffered the greatest decline in value.

On 19 November 2001, Nutreco announced a profit warning due to the decreasing price of salmon. The news was totally unexpected for shareholders. A reputation can deteriorate swiftly at such a moment. Nutreco admitted that it was facing difficulties as a result of the BBC documentary.¹⁹ At the shareholder meeting, the management stated that in future, food safety would be an even greater priority for the company. As would a more detailed tracing of raw materials in the supply chain.²⁰

Labour market

According to Nutreco, the issue surrounding dioxin levels in farmed salmon had no negative impact on the labour market. The documentary had however created concern among current employees. It is never pleasant if the company you work for is portrayed in a negative light in the media.

Demonstrable indicators of disciplining

The approach Nutreco's management adopted in connection with the issue can be described as one of bridging. From the outset, the Board had given its full cooperation and been wholly transparent. Nutreco undertook several (disciplining) initiatives to manage the issue.

- More attention to tracing food components and food safety. Nutreco is currently in the process of completing a pilot project on tracing food components. This is part of its food quality management system, NuTrace® Salmon, which also functions as a sort of digital passport for fish. As from 2003, Marine Harvest customers can verify where a fish was hatched, which medicines were administered and in which quantities, and what the fish were fed.
- The company appointed a Corporate Food Safety Director.
- In 2001, Nutreco joined the World Business Council for Sustainable Development (WBCSD).

¹⁹ --- (2001), "Calm, steady CEO surprises with Nutreco news", *Het Financieele Dagblad* (DUTCH NEWSPAPER, HEADING ORIGINALLY IN DUTCH), 20 November 2001.

²⁰ <http://www.nutreco.nl> , consulted on 12 March 2002.



- The company gave its full cooperation in a study on salmon farming conditions in Scotland.
- Nutreco has published a sustainability report in accordance with the GRI guidelines on its social and environmental activities and performance. The report won the 2000 and 2002 AAC Award from the Foundation for Environmental-Accountancy (Vereniging voor Milieu-Accountancy, VMA). Since 1995, the VMA and Koninklijk Nederlands Instituut van Registeraccountants (Royal NIVRA) have awarded this prize for the best environmental report in the Netherlands. The Nutreco report was chosen by the jury as 'Best First-Time Reporter'. Moreover, the jury decided to enter the Nutreco report in the contest for the European Environmental Reporting Award (EERA).
- In June 2002, a new project 'Aquaculture and Society 2005' was launched. This project focuses on sustainable fish farming in collaboration with diverse stakeholders.

Outcome

Whose interests were met?

The dioxin issue/s ultimately led Nutreco to institute more stringent precautionary measures regarding tracing and food safety. As a result, the interests of FoE have been acceded to most, despite the unfounded accusations. Nutreco was open and willing to enter into dialogue from the start.

Issue resolved?

The issue surrounding unaccountably high levels of dioxins in Nutreco's salmon in Scotland was based on a misrepresentation of facts. The issue was resolved when the BBC retracted its claim.

The aftermath

In 2002, the British Royal Society for the Prevention of Cruelty to Animals (RSPCA) awarded Marine Harvest the Alistair Mews Award for its contribution to the welfare of animals in Scotland. The prize was awarded to Marine Harvest for its new technique in slaughtering salmon. Despite the fact that Nutreco has become a trendsetter in the area of CSR, with a code of conduct, an annual environmental report and countless initiatives aimed at sustainable development, societal organisations such as Friends of the Earth are keeping a close watch on the company. In 2002, campaigns in connection with fish farming conditions were once again being planned. Friends of the Earth International and FoE Netherlands still regards Nutreco as one of the 'Filthy Five' companies that conduct their business abroad in a socially and environmentally unaccountable manner. Alleged reprehensible labour conditions at Chilean fish farms were at the top of the FoE agenda. The struggle thus continues.