

A DECADE OF DUTCH FOOD POLICY

SUSTAINABLE DEVELOPMENT OR STANDSTILL BETWEEN 2007 AND 2017?

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Colophon

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Summary

Animal food production is one of the most harmful sectors for the planet, as it contributes to planetary deterioration in numerous ways, including climate change, natural resource depletion, emissions to air, water and soil. Other negative externalities include poor animal welfare and risks for human health. The need and urgency for a sustainable food system have been long known in and argued for by the scientific community. However, sustainable food policy has been on and off of the political and governmental agendas, in one of the world's greatest producers of animal food: the Netherlands. While the country recently adopted its first national climate law and has committed to achieving both the Sustainable Development Goals and Paris Climate Agreement, there is still no clear strategy for sustainable development of its food system.

The aim of this research is to gain more insight in the role of the Dutch national government in sustainable food policy between 2007 and 2017, and to find out whether policy content and governance modes have taken place. The research question is: "How has the role of the Dutch government in national sustainable food policy changed between 2007 and 2017 and why?" The theoretical framework combines agenda setting and governance approaches to help answering these questions.

The policy department responsible for national sustainable food policy – the ministry of Economic Affairs, in The Hague – was the main site of data collection. Methods included open interviews, a focus group and observations of the policy site. In the focus group, a timeline of policy evolution was created and discussed by civil servants. All participants were involved with sustainable food policy between 2007 and 2017. Hence, a well-informed timeline could be reconstructed in which the most important factors that influenced policy and governance change were highlighted.

Important focusing events, such as animal disease, animal welfare or food fraud crises, have caused for policy change (in)directly by demanding acute policy responses. Political instability, changeover of government, and shifts in the national mood were important for both change in the content and governance modes of sustainable food policy. Policy content and responsibilities have shifted considerably over the decade. While the government has tried to increase food sustainability several times – mostly through improving consumption practices –, it has been playing a large role in maintaining the harmful animal industry at the same time.

This hints to a lack of policy coherence, unclarity about responsibilities for government and societal actors, a lack of strategical steering, and structural problems in the animal industry that are not addressed. There is a need for strong, strategic communicative governance and clear boundaries within which the food system can operate. A recommendation for the government is to initiate a conversation with all involved stakeholders to discuss the future of the food system together.

Preface

Before you lies the Master's Thesis "A decade of Dutch food policy – sustainable development or standstill between 2007 and 2017?", a qualitative study of policy change and governance change in the field of Dutch national sustainable food policy. It has been written as a final task to complete the Environment and Society Studies programme at the Nijmegen School of Management of the Radboud University.

The research project was undertaken at the Ministry of Economic Affairs in The Hague, at the Plant Supply Chain and Food Quality (PAV) policy department. I was an intern there from March 2017 to June 2017. It was an interesting time, full of learning possibilities. It expanded my horizons and increased my wonder for the interactions between policy and politics in the real world. Before the internship, I had only read about it in books and articles and watched it on the news. The experience of working and studying at the ministry truly was a life-changing experience. As I found all my tasks and events there so interesting, it sometimes would complicate my research. Fortunately, the wonderful policy team I was part of, always wanted to help me – and did.

I would like to thank my supervisors Martijn, Gijs and Eric, and the entire PAV policy team for the instructive and pleasant time I spent there. Nancy, thank you for helping me out with the focus group. Peggy, thank you for being ever so kind and funny, and for helping me out in every way you could.

Then, I would sincerely like to thank my supervisor from Radboud University, Ingrid, without whom I might have never been able to finish the thesis or present it in its current form. Ingrid, your constructive and tailor-made feedback has helped me a lot. I really enjoyed working with you.

Furthermore, I would like to thank my friends and family for being here for me. You all helped me to push through and keep me motivated, in your own ways. Melissa and Bram, thank you for letting me spend so many joyful weekends at your place in Amsterdam to get out of the house and into a different mindset. Jelmer, thank you for always listening to me and getting me through the intense last mile. Julia and Iris, thank you for cheering me on. Kelly, Claudia, Jiska and Anneloes, thank you for doing some final checks. Last but not least, thank you Mom and Dad for not giving up on me and for continuing to support me, even though that must have been quite the task from time to time.

I hope you enjoy your reading!

Rosalie Braakman

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List of Abbreviations and Translations

Abbreviation	Dutch	English
–	Beter Leven Kenmerk	Better Life Trademark
CDA	Politieke partij; christelijk democratisch appel	Political party; Christian Democratic Appeal
CU	Politieke partij; ChristenUnie	Political party; Christian Union
D66	Politieke partij; Democraten 66	Political party; Democrats 66
EL&I	Ministerie van Economische Zaken, Landbouw en Innovatie	Ministry of Economic Affairs, Agriculture and Innovation
EZ	Ministerie van Economische Zaken	Ministry of Economic Affairs
–	Gezondheidsraad	Health Council of the Netherlands
LNV	Ministerie van Landbouw, Natuur en Voedselkwaliteit	Ministry of Agriculture, Nature and Food Quality
NAGF	Nationaal Actieplan Groenten en Fruit	National Action Plan Vegetables and Fruit
NVWA	Nederlandse Voedsel- en Warenautoriteit	Netherlands food and consumer product safety authority
OVV	Onderzoeksraad voor Veiligheid	Dutch Safety Board
PAV	Plantaardige Agroketens en Voedselkwaliteit (beleidsdepartement van EZ)	Plant Supply Chain and Food Quality (policy department at EZ)
PvdA	Politieke partij; Partij van de Arbeid	Political party; Labour Party
PvdD	Politieke partij; Partij voor de Dieren	Political party; Party for the Animals
PVV	Politieke partij; Partij voor de Vrijheid	Political party; Party for Freedom
RIVM	Rijksinstituut voor Volksgezondheid en Milieu	National Institute for Public Health and the Environment
RVO	Rijksdienst voor Ondernemend Nederland	Netherlands Enterprise Agency
SBIR	Small Business Innovation Research	Small Business Innovation Research
–	Schijf van Vijf	Wheel of Five (VCN instrument)
VCN	Voedingscentrum Nederland	Netherlands Nutrition Centre
VVD	Politieke partij; Volkspartij voor Vrijheid en Democratie	Political party; People's Party for Freedom and Democracy
WRR	Wetenschappelijke Raad voor het Regeringsbeleid	The Netherlands Scientific Council for Government Policy

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Introduction

1.1 Introduction to the research

The global climate crisis is moving fast

Although humans have always impacted the Earth, it was not until after the Second World War that the most critical chapter in the environmental history of humankind began: The Great Acceleration (figure 1.1). Since then, we are playing a dominant role in geology and ecology, as our numbers, means, and organisation levels rapidly expanded, leaving impacts that will last for a very long time. Our species' current behaviour is causing the transgression of planetary safety boundaries in a historically unmet tempo, not only risking our own species' future existence, but that of all life on earth as we know it.

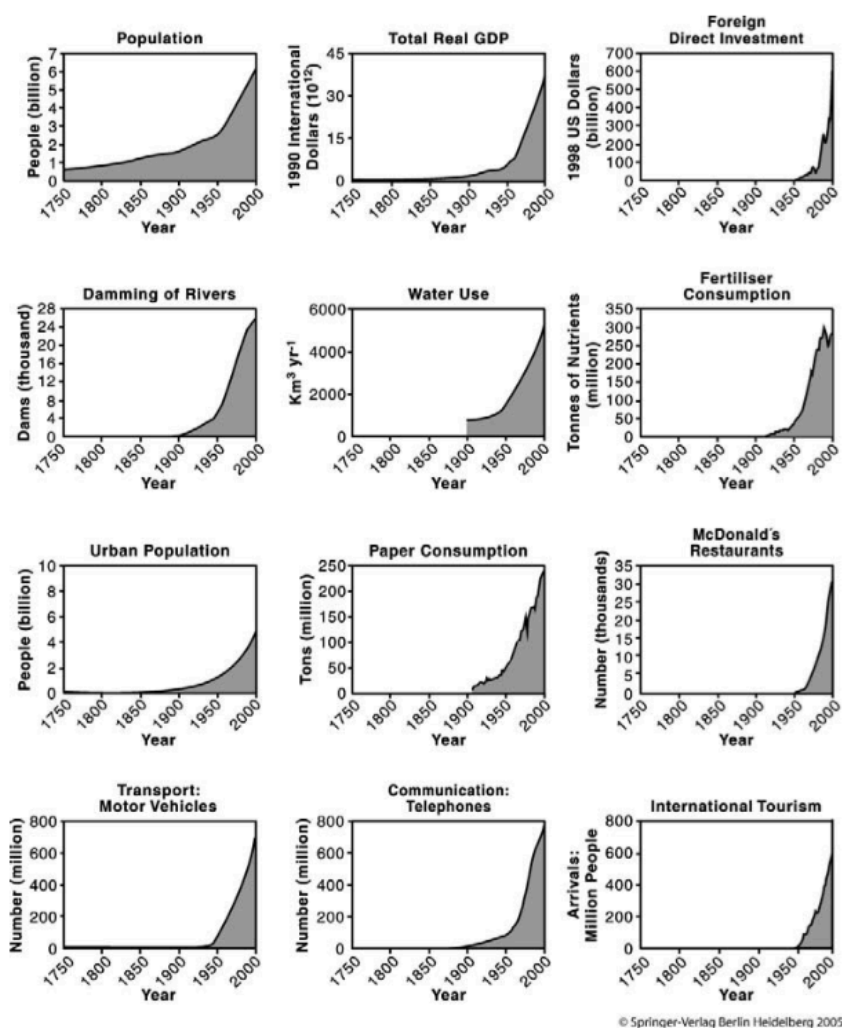


Figure 1.1 – A representation of humanity's Great Acceleration. Source: Steffen et al. (2009, p.617). Original caption: "The change in human enterprise from 1750 to 2000 (28). The great Acceleration is clearly shown in every component of the human enterprise included in the figure. Either the component was not present before 1950 (e.g., foreign direct investment) or its rate of change increased sharply after 1950 (e.g., population)."

Rockström's (2009a; 2009b) Planetary Boundaries framework delineates nine safe boundaries for critical Earth system processes, or a "planetary playing field". It is expected that, within these boundaries, our production and consumption patterns are able to operate safely (Rockström, 2009a), and stresses the highly complex interrelations between them. Crossing those boundaries could lead to the disruption of regional climates, and risk major climate dynamic patterns such as the thermohaline circulation to collapse and rapid sea-level rise – drastic changes which are difficult for society to cope with and likely underestimated with current models (Bonnet et al., 2018; Rockström et al., 2009a; Sun et al., 2017; UNEP, 2010). By maintaining business as usual, we are heading to 'unacceptable change' of Earthly systems and risking uncontrollable environmental change resulting in a collapse of society as we know it (Steffen et al., 2007; Rockström et al., 2009a, p.2).

Currently, three out of seven scientifically estimated boundaries are already transgressed: climate crisis, biodiversity loss, and changes to the global biogeochemical nitrogen cycle (Figure 1.2). The crossing of the other four – stratospheric ozone, global freshwater use, land system change, and ocean acidification – is on their way and may be pushed by the interrelatedness with the others. In addition, two other boundaries are proposed that need further research on transgression levels and possible impacts: chemical pollution and atmospheric aerosol loading (Rockström, 2009a).

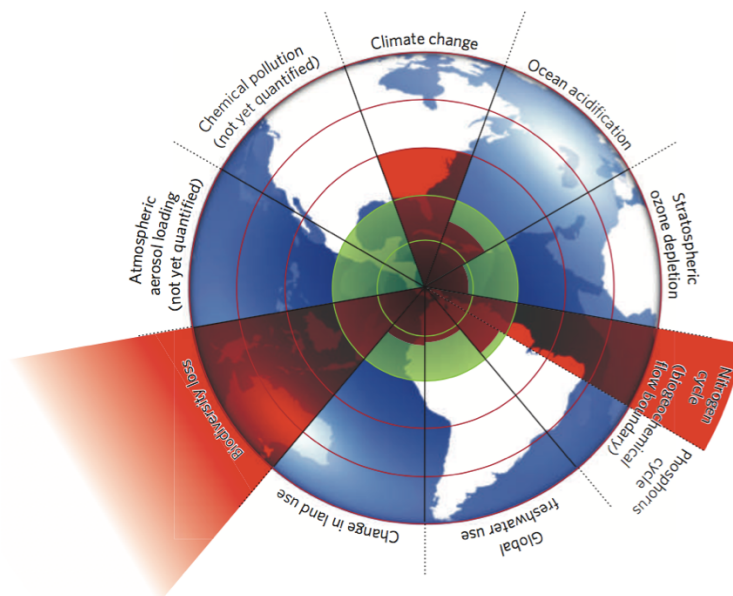


Figure 1.2 – Leaving behind the green-coloured safe zone: estimated transgression levels of planetary boundaries. Source: Rockström et al. (2009b). Original caption: “The inner green shading represents the proposed safe operating space for nine planetary systems. The red wedges represent an estimate of the correct position for each variable. The boundaries in three systems (rate of biodiversity loss, climate change and human interference with the nitrogen cycle), have already been exceeded.”

The climate crisis currently is one of the most discussed, controversial, and pressing of planetary boundaries. Due to anthropogenic skyrocketing greenhouse gas (GHG) emissions, the average temperature on Earth will increase 1.5–4.8°C, and “...it is *very likely* that sea level will rise in more than about 95% of the ocean area” by the end of this century (figures 1.3 and 1.4) (IPCC, 2014, p.10-13, emphasis in original). Moreover, current and future impacts of climate crisis include more severe and more frequent extreme weather events, water shortages and droughts, floods, heat waves, wildfires and cyclones, landslides, air pollution, ocean warming and acidification, precipitation change, species extinctions and ecosystem

changes, and food insecurity (IPCC, 2014, p.10-16). Consequently, both natural and human systems will be affected.

It is worth mentioning that these effects have largely been caused by just a quarter of the global population (Cruzten, 2002), while the impacts are likely to be unevenly distributed as well: “[p]eople who are socially, economically, culturally, politically, institutionally or otherwise marginalized are especially vulnerable to climate change and also to some adaptation and mitigation responses” (IPCC, 2014, p.54).

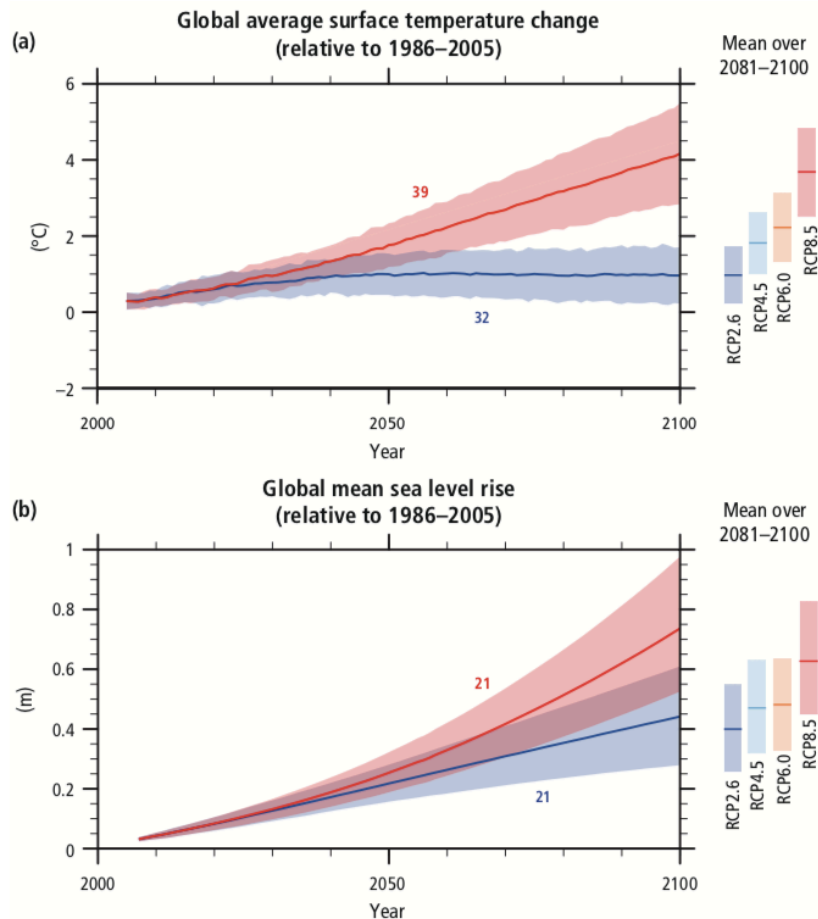


Figure 1.3 – IPCC estimates for global average surface temperature change and global mean sea level rise. Source: IPCC (2014), p.11. Original caption: “Global average surface temperature change (a) and global mean sea level rise (b) from 2006 to 2100 as determined by multi-model simulations. All changes are relative to 1986-2005. Time series of projection and a measure of uncertainty (shading) are shown for scenarios RCP2.6 (blue) and RCP8.5 (red). The means and associated uncertainties averaged over 2081-2100 are given for all RCP scenarios as coloured vertical bars at the right hand side of each panel. The number of Coupled Model Intercomparison Project Phase (CMIP5) models used to calculate the multi-model mean is indicated.”

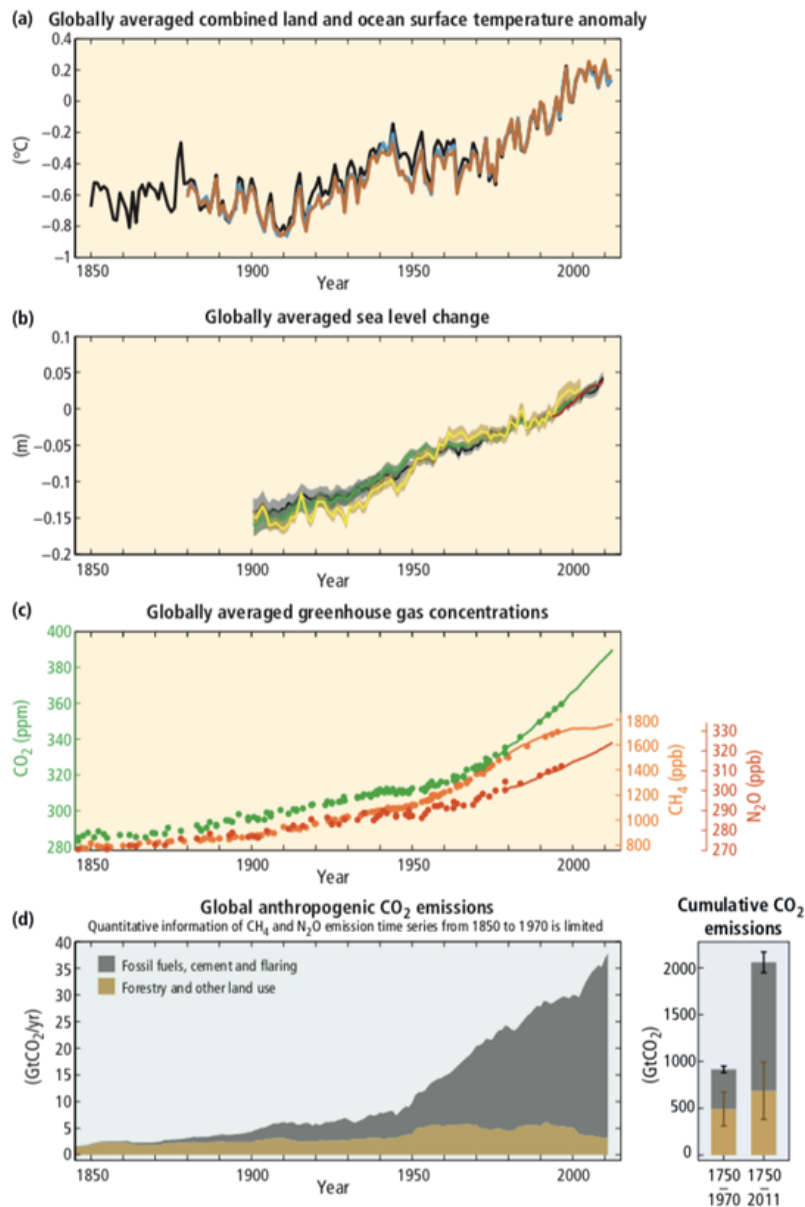


Figure 1.4 – Global changes and anthropogenic influences thereon. Source: IPCC (2014, p.3). Original caption: “**The complex relationship between the observations (panels a, b, c yellow background) and the emissions (panel d, light blue background) is addressed in Section 1.2 and Topic 1.** Observations and other indicators of a changing global climate system. Observations: **(a)** Annually and globally averaged combined land and ocean surface temperature anomalies relative to the average over the period 1886 to 2005. Colours indicate different data sets. **(b)** Annually and globally averaged sea level change relative to the average over the period 1886 to 2005 in the longest-running dataset. Colours indicate different date sets. All datasets are aligned to have the same value in 1993, the first year of satellite altimetry date (red). Where assessed, uncertainties are indicated by coloured shading. **(c)** Atmospheric concentrations of the greenhouse gases carbon dioxide (CO₂, green) Methane (CH₄, orange) and nitrous oxide (N₂O, red) determined from ice core data (dots) and from direct atmospheric measurements (lines) indicators: **(d)** Global anthropogenic CO₂ emissions from forestry and other land use as well as from burning of fossil fuel, cement production and flaring. Cumulative emissions of CO₂ from these sources and their uncertainties are shown as bars and whiskers, respectively, on the right hand side. The global effect of the accumulation of CH₄ and N₂O emissions are shown in panel c. Greenhouse gas emission data from 1970 to 2010 are shown in figure SPM.2.”

Food and agriculture

One of the most harmful sectors is food and agriculture. After the energy-sector, the sector contributes the most to climate crisis and greenhouse gas (GHG) emissions; it is responsible for 21-37% of all anthropogenic GHG emissions, as is expected by the Intergovernmental Panel on Climate Change (Bonnet et al., 2018; IPCC, 2019, p.10). Due to climate change, there is high confidence that “...agricultural pests and diseases have already responded to climate change resulting in both increases and decreases of infestations” (IPCC, 2019, p.10).

Besides major contributions to global warming and disruptive climate crisis, other sustainability problems linked with food and agriculture include deforestation, biodiversity loss and threatening of wildlife, pollution of air, water and soil, toxic emissions, fresh water shortage, excessive land use, landslides, natural resource depletion, land system change, ecosystem change, habitat change, nitrogen and phosphorus cycle disruption, eutrophication, overfishing, ocean dead zones, ocean acidification, various (indirect) human health issues, and animal welfare issues (UNEP, 2010; IPBES, 2019a).

Another major problem of agriculture is its excessive and poor land use. The sector accounts for 38% of global land use (UNEP, 2010). Land systems have changed since intensive farming relies heavily on environmentally-degrading industrial agro-inputs, such as pesticides, fertilizers, and machinery, which in turn pressure the planet further by causing pollution, nitrification and soil quality reduction, stratospheric ozone depletion, overexploitation of resources, habitat change and further climate crisis (Bonnet et al., 2018; Sun et al., 2017; UNEP, 2010). While risking future sustainability and human well-being, more ice-free land surface still continues to be converted to cropland, so that the planetary safety boundary for land use is likely to be crossed in the coming years (Rockström et al., 2009).

An associated issue with global climatic and ecosystem change is that of nitrogen and phosphorus cycle disruption due to agriculture's usage of unnatural amounts of fertilizer (Crutzen, 2002; UNEP, 2010). On local and regional levels, interference with nitrogen and phosphorus cycles has already led to eutrophication, abrupt non-linear shifts in lakes and marine ecosystems, such as anoxia in the Baltic sea, and potentially explains mass extinctions of marine life of the past as well. Further “...increase in N and P flows at regional to global scales may cause undesired non-linear change in terrestrial, aquatic, and marine systems, while simultaneously functioning as a slow driver influencing anthropogenic climate change at the planetary level” (Rockström et al., 2009a, p.12-13).

Another natural resource that is being exploited and polluted by agriculture is fresh water: 70% of global water is used for agriculture (Bonnet et al., 2018; Sun et al., 2017; UNEP, 2010). This is a major problem as “[g]lobal manipulations of the freshwater cycle affect biodiversity, food, and health security and ecological functioning, such as provision of habitats for fish recruitment, carbon sequestration, and climate regulation, undermining the resilience of terrestrial and aquatic ecosystems” (Rockström et al., 2009a, p.15). Besides these substantial global changes, local burdens of water shortages and toxicity are likely to vary and be unevenly distributed, as with climate crisis.

Agriculture is considered as the prime culprit of air pollution in both the United States and the European Union (Sun et al., 2017). Besides air pollution's contribution to climate crisis and global warming, other effects such as acid precipitation and photochemical ‘smog’ are anticipated as well. (Crutzen, 2002). Currently, the oceans are cleaning up about a quarter of human GHG emissions by breaking down CO₂. It can be questioned, however, for how long this ability will last, as ocean acidification increases (Rockström et al., 2009a).

Evidently, there currently is a variety of interconnected and mutually reinforcing environmental problems linked directly or indirectly with food production and consumption. Because of its large contribution to those problems, this sector could play major role in solving them too. To do so, it is important to address the most harmful industry within the food and agricultural sector: animal agriculture.

Impacts of animal agriculture

By looking more closely to the impacts different food groups have on the planet, one sector appears to be towering over the others: the animal sector. Many studies (Bonnet et al., 2018; Machovina et al., 2015; Stehfest et al., 2009; UNEP, 2010) have examined the sector's share of GHG emissions and conclude that the sector is responsible for between 14.5 and 18% of GHG emissions, which makes it an approximate equivalent of the transportation sector. Even though the most important source of those GHG emissions is methane, from enteric fermentations by ruminants and accounting for 39% of the total, meat production shares this polluting responsibility with dairy and marine products.

GHG emissions are possibly even higher, because more than half of all crops are used as animal feed in order to produce meat, dairy, and marine products (Bonnet et al., 2018; UNEP, 2010). Livestock farming was responsible for more than half of total anthropogenic agricultural N₂O (nitrous oxide) emissions in 2014 (IPCC, 2019). Also, more than half of agriculture's ammonia emissions is caused by livestock. Furthermore, "[t]hese emissions may further react with sulfuric acid, nitric acid, hydrochloric acid and water to form atmospheric particulate matter (Cambra- López *et al.* 2010; Hristov 2011)" (Sun et al., 2017, p.2950).

The same order applies to acidification. Concerning eutrophication, chicken and poultry are more polluting (Bonnet et al., 2018, p.54). Machovina and colleagues add: "[b]eef production also requires 6 times more reactive nitrogen to produce than dairy, poultry, pork, and eggs (Eshel et al., 2014)" (Machovina et al., 2015, p.424). Another major climate crisis-threat is nitrous oxide (N₂O), or laughing gas, resulting from manure production by livestock and intensive over-use of fertilizers for feed production (Machovina et al., 2015, p.424).

Besides these excessive emissions impairing the environment, livestock accounts for 80% of total anthropogenic land use, which makes it the single largest user of global land resources (FAO, 2013; Machovina et al., 2015; Sun et al., 2017; Stehfest et al., 2009). Some crops are directly grown for human consumption, but one-third of global arable land is used for growing feed for livestock (FAO, 2013). According to Machovina and colleagues (2015), over 70% of all grasslands have already been converted to croplands in the western hemisphere, while over 19% of grasslands have been converted to crops in Asia and Africa and over 37% in Oceania. This is, again, pressuring the climate as large amounts of CO₂ are released with such conversions (Machovina et al., 2015).

The quest for even more land for agricultural expansion is also, by far, the leading cause of tropical deforestation. The largest continuous tropical forest, the Amazon, is a key example of rapid biodiversity loss due to livestock production: more than three-quarters of all deforested Amazonian lands have been converted for either feed production or livestock pasture (Machovina et al., 2015). Deforestation, in turn, leads to disturbance of earthly ecosystems and severe biodiversity loss, especially since more and more of the production of both livestock and feedstock are established in biologically diverse settings, such as the Amazon. Changes in local and regional biodiversity can impact Earth System functioning and interfere with other planetary boundaries as well, for example by increasing the vulnerability of both terrestrial and aquatic ecosystems (Rockström et al., 2009a).

Intensive livestock could help reducing emissions and land use, especially for beef, but new problems would emerge such as "the routine use of antibiotics, localized pollution from manure lagoons, and animal welfare in confined animal feeding operations (CAFOs)" (Swain et al., 2018, p.1209). Transitioning towards a more plant-based food production and consumption system, however, could substantially reduce all environmental impacts and avoid creation of new problems or increasing existing issues, such as poor animal welfare (UNEP, 2010).

Animal products, such as different types of meat, fish, and dairy, have a significant higher impact on the environment than plant-based alternatives, in terms of GHG emissions and use of natural resources, such as land and freshwater use (figures 1.5 and 1.6) (Nijdam et al., 2012). Especially beef has a large carbon and land use footprint, while pork and dairy

proteins score medium (Nijdam et al., 2012). Plant-based foods, such as plant-based burgers from tofu, soy, nuts or legumes, are representing only 10% of the beef GHG emissions (Blonk et al., 2008, p.38; Bonnet et al., 2018; UNEP, 2010). Hence,

“[s]hifts in consumption from red meats and high impact seafood towards vegetal sources of protein, white meats, and sustainable seafood products, as well as improved management within production chains offer a large mitigation potential” (Nijdam et al., 2012, p.768).

While a classic vegetarian diet reduces the environmental impact, if more people transition to a classic vegetarian diet, consumption of milk, eggs and meat substitutes containing milk and eggs will rise. Consequently, the amount of calves and laying hens facing poor welfare and, ultimately, slaughter would increase up to 250% (Blonk et al., 2008, p.57).

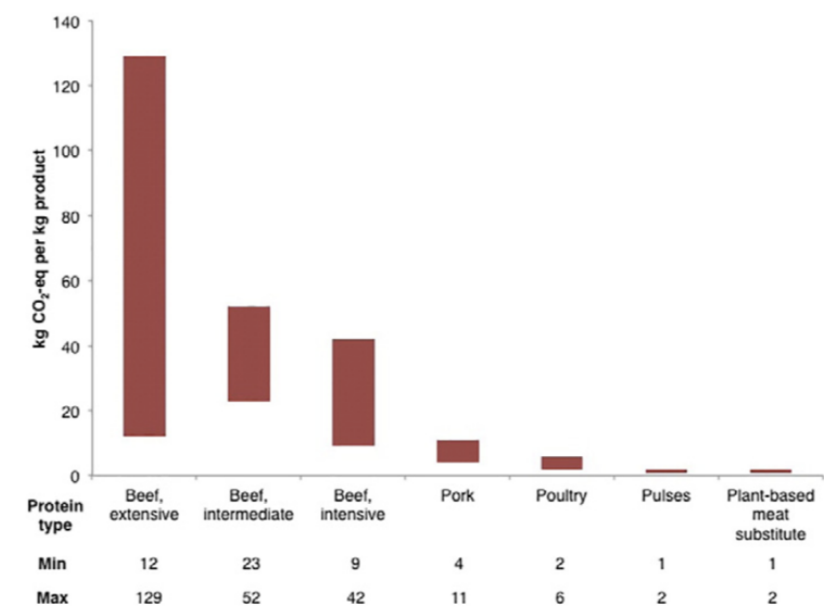


Figure 1.5 – GHG emissions for different agricultural products. Source: Swain et al. (2018). Original caption: “Greenhouse gas emissions intensity (kg CO₂-eq per kg of product) for different animals and plant-bases protein sources. Bars indicate the min/max range of results in a literature review of life cycle analysis studies (Nijdam et al., 2012).”

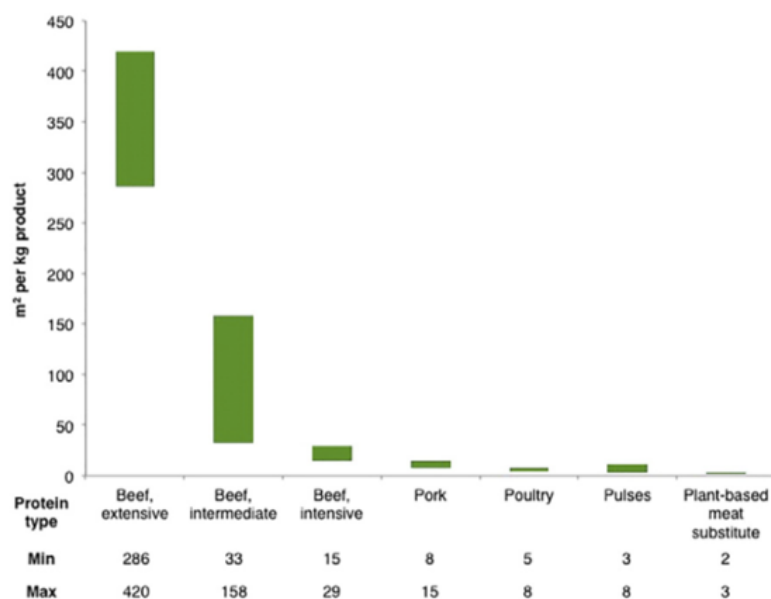


Figure 1.6 – “Land-use intensity (m^2 per kg of product) for different animal and plant-based protein sources. Bars indicate the min/max range of results in a literature review of life cycle analysis studies (Nijdam et al., 2012)” Source: Swain et al. (2018)

Consumers and producers of animal food: high-income countries

Consumption

It is expected that, between 2000 and 2030, the total meat consumption will increase by 72% globally, driven by population and income growth (Bonnet et al., 2018, p.48; IPCC, 2019, p.13). The largest share of both this growth in demand for meat, and other animal products, and expected population growth are likely to occur in South America, Africa and Asia – most notably in China and India.

However, at the moment, high income countries still have the largest share of animal-product consumption (figure 1.7), as animal-product consumption rates have been accounting for 40% or more of diets by mass in such countries since the 1960s (UNEP, 2010; Machovina et al., 2015). For instance, the EU15 average intake of proteins from animal-based products account for no less than 60% of total protein intake, leaving the EU in an awkward leading position on the world list of largest contributors of animal-based affairs (Bonnet et al., 2018).

One of the EU15 members, the Netherlands, seems to slightly lean away from consuming animal products. The share of vegetarians has remained stable for a while and is estimated between or 3 to 4,5 percent of the entire Dutch population, which accounts for 470.000 to 700.000 people, whereas groups of flexitarians and vegans are expected to continue growing tremendously (Natuur & Milieu, 2016; SCP, 2016). Vegans, who avoid use of any animal-based products, including meat, fish, dairy, eggs and non-edible by-products such as wool and leather as well, are the smallest of these groups but one of the quickest to grow. Less than 0.5 percent of the Dutch, or between 50.000 to 70.000 consider themselves vegans, compared to 16.000 two decades earlier (SCP, 2016). While consumption of various types of meat has declined somewhat over the last years (figure 1.9), meat consumption still forms the second-largest impact category of the average Dutch person’s annual consumption (figure 1.9).

In the current Dutch market, it is expected that about 6 Mt of CO_2 reduction can be saved annually, whereas land use could be reduced with 12,500 square kilometres, if all of Dutch consumers would transition to a fully plant-based diet (Blonk et al., 2008, p.1+61). Such a transition is not realistic in the short term. A more realistic scenario would be to avoid

consumption of meat, dairy, and eggs for one day a week, which would result in a CO₂ reduction of 1.1 Mt (Blonk et al., 2008, p.1). As for fossil energy use, a reduction of 50 to 70% could be reached when meat products are replaced with eggs, nuts, beans and legumes (Blonk et al., 2008, p.61).

Short term impacts can be made by replacing extensive-produced beef, that is imported from the other side of the globe, with innovative plant-based or hybrid meat substitutes to replace meat with (Blonk, 2008).

Transitioning to a diet including more ‘regular’ chicken meat and eggs would benefit the environment due to the relatively low environmental impact but would cause for even more dire animal welfare circumstances due to an increased broiler population. Laying hens and broilers are among the animals who suffer from the worst animal welfare conditions, alongside veal calves and fattening pigs (Blonk, 2008). Only by transitioning to a fully plant-based diet would overcome a growth of population and hence poor animal welfare of any type of animal (Blonk, 2008).

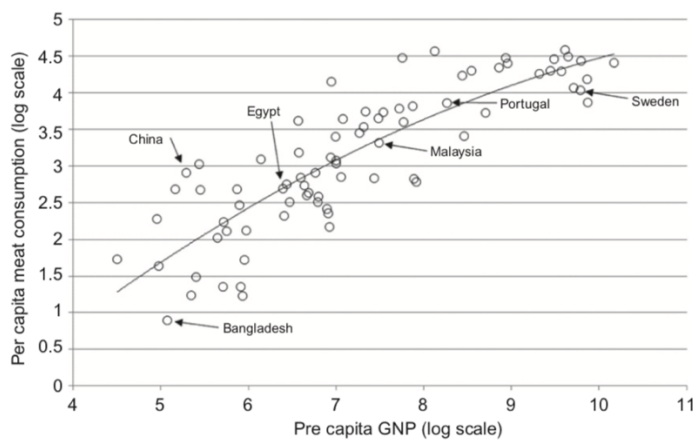


Figure 1.7 – Animal consumption rises when income does. Source: Msangi & Batka (2015b) in: Schmitz, A., Kennedy, P., & Schmitz, T. (Eds.). Original caption: “Animals- Sourced protein consumption per capita income. Source: Authors’ calculations with World Development Indicators (WDI) data.”

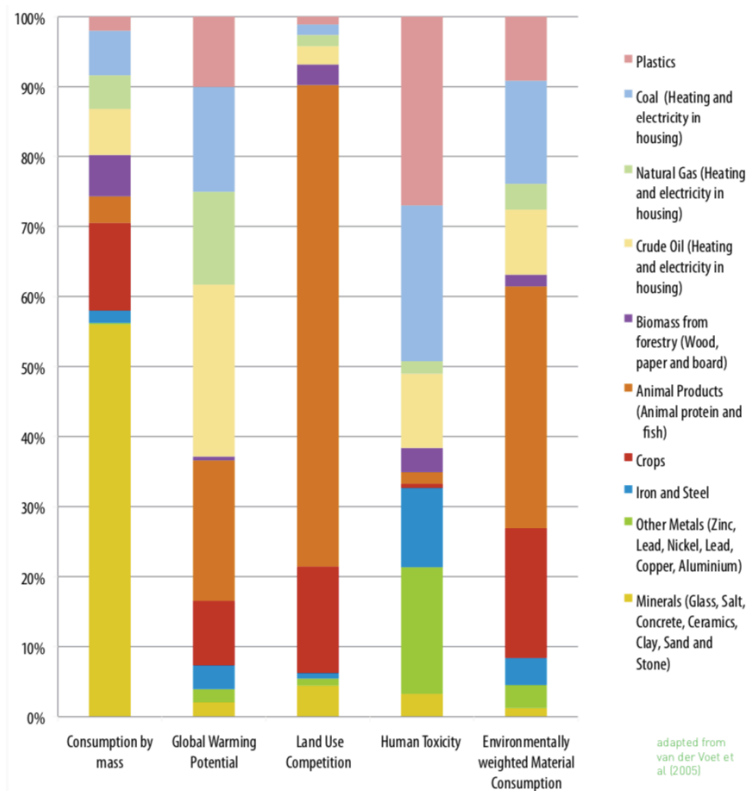


Figure 1.8 – Environmental problems of animal products in Europe. Source: UNEP (2010). Original caption: “More recent studies from the authors indicate that the results in the figure underestimate the contribution of Biomassa from Forestry (wood and paper and board products) to land use competition. Therefore the contribution of this material category to Land Use Competition may be higher than indicated in the Figure. For further information, see van der Voet et al (2009).”

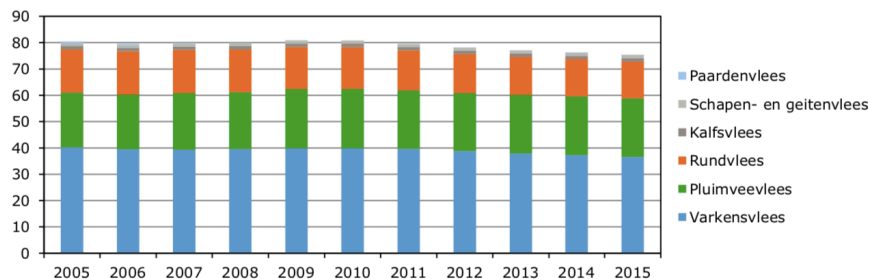


Figure 1.9 – Consumption of different types of meat in the Netherlands between 2005 and 2015. Source: Terluin et al. (2016). Original caption: “Vleesverbruik a) per hoofd van de bevolking in Nederland, 2005-2015 (kg). a) op basis van karkasgewicht (gewicht met been). Bron: CBS; berekening Wageningen Economic Research.”

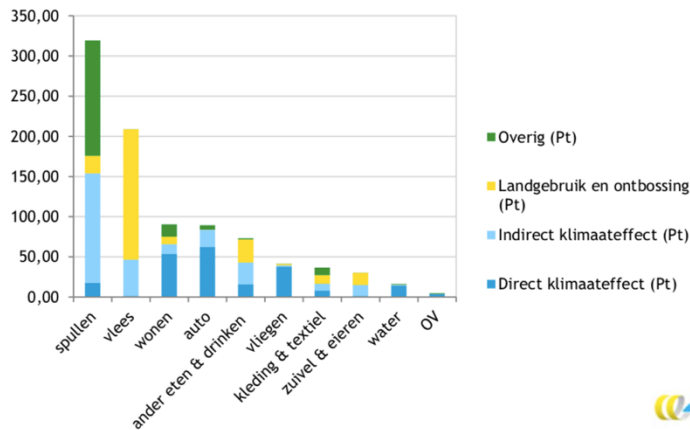


Figure 1.10 – Meat is the average Dutch consumer’s second-highest impact. Source: CE Delft (2016). Original caption: “Top 10 milieu-impact van gemiddelde consumptie van één persoon per jaar in Nederland”

Production

Production-wise, the Netherlands is one of the most important actors in the world too. As the world’s second-largest producer of agricultural products, the second and third most exported product categories include animal products: dairy and eggs (8,5 billion euro), and meat (8,1 billion euro) (Dolman et al., 2019). As a result, the country hosts billions of farmed animals and has one of the world’s highest livestock densities (table 1 and figures 1.10-1.11).

Dutch livestock production is characterized by high animal productivity and high stocking densities for all types of farm animals, including dairy cattle, pigs, and poultry (Vellinga et al., 2011). This goes hand in hand with high levels of fertilization, inputs and imports of agro-industrial by-products and other concentrates. Only India, Bangladesh, and Belgium know comparable combinations of such high numbers of livestock and human populations as the Netherlands (Vellinga et al., 2011). For a long time being, the highly productive dairy sector is the most important livestock sector.

A downside of the sector’s economic prosperity is found in multiple social and environmental externalities, such as poor water quality due to leaching of nitrate and phosphorus and poor air quality due to ammonia, odour, GHGs and particulate matter, having to do with the import of large quantities of feeds and by-products (Vellinga et al., 2011). One of the biggest recurring problems is the excessive amount of nitrogen emissions which is harmful for nature areas and is in conflict with European Natura 2000 guidelines. Approximately 70% of Dutch nitrogen emissions, in the form of ammonia or NH_3 , stem from agriculture (Candel, 2019). Other issues that are worsening because of intensification, growing farms and milking robots, include problems with nature and landscape conservation and animal welfare (Vellinga et al., 2011).

Land scarcity is being compensated with high dry matter yields of grass and maize due to high chemical and organic fertilizer inputs, and stimulated intensification. Vellinga and colleagues describe the system fairly: “The scarcity of land, the good infrastructure, the vicinity of the port of Rotterdam, and effective markets in the nearby hinterland, have stimulated intensification, as expressed in a strong reliance on external inputs, high stocking densities, and production levels exceeding national demand for dairy products. Increasing labor productivity and farm size, in terms of cow numbers, is ongoing (CBS, 2009a)” (Vellinga et al., 2011, p.122-123).

Characteristics of the ten countries in the world with the highest stocking density. The net production of livestock is expressed as \$ human head⁻¹.
Source: FAOSTAT.

Country	Cattle (km ⁻²)	Land (1000 ha)	Agricultural land (1000 ha)	Pigs (km ⁻²)	Chicken (km ⁻²)	Population (km ⁻²)	Netprod (1000\$· head ⁻¹)
Bangladesh	204	13,017	9050	0	1589	1212	12
The Netherlands	111	3376	1914	345	2748	488	389
Ireland	97	6889	4276	23	189	63	725
India	93	297,319	179,900	5	188	392	47
Belgium	87	3028	1370	207	1082	348	89
Nepal	80	14,335	4210	7	167	197	38
Pakistan	76	77,088	27,300	0	326	225	98
Uruguay	71	17,502	14,683	1	80	19	556
El Salvador	66	2072	1556	21	712	295	63
Dominican Republic	55	4832	2517	12	2080	203	90

Table 1 – World livestock density. Source: Vellinga et al. (2011)

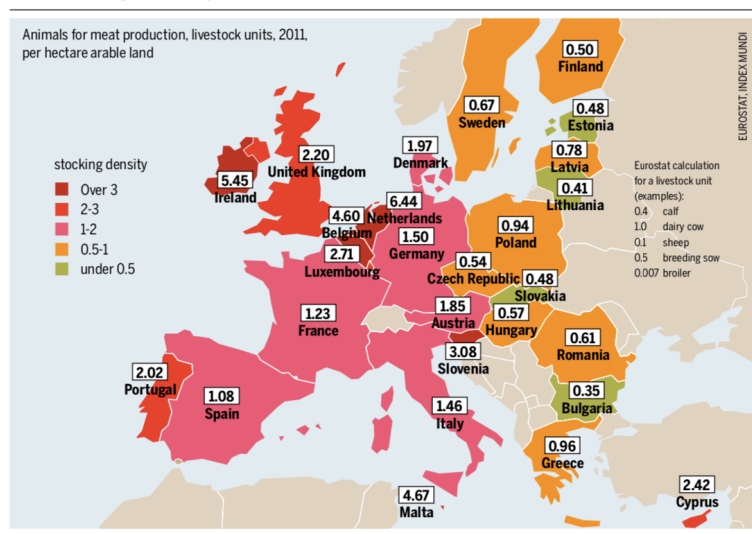
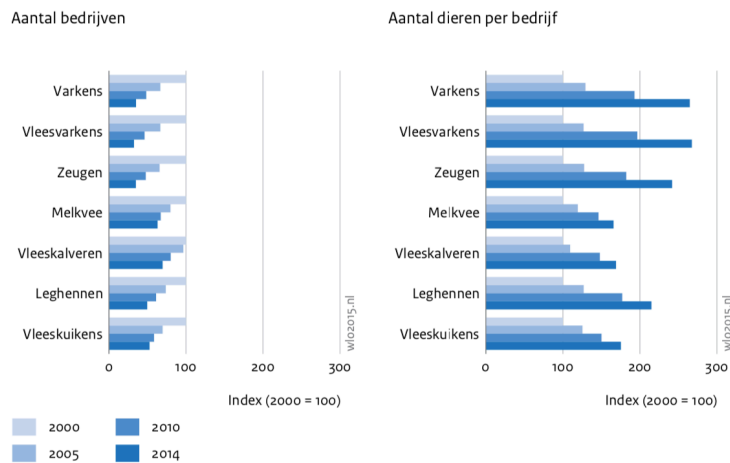


Figure 1.11 – Europe's livestock density. Source: Chemnitz, C. & Stanka, B. (Eds.) (2014)



Bron: LEI Agrimatie

Figure 1.12 – Numbers of livestock and livestock farms in the Netherlands. Source: CPB/PBL (2015).
Original caption: "Aantal en omvang veehouderijbedrijven"

	1950	2011	Growth factor
Pork meat production (per million kg)	240	1 840	7.6
Pork meat production per Dutch resident (in kg)	23.5	110.5	4.7
Number of pigs (x 1000)	1 860	12 429	6.7

Table 2 – Pork production in the Netherlands in 1950 and 2011. Source: CBS (2012)

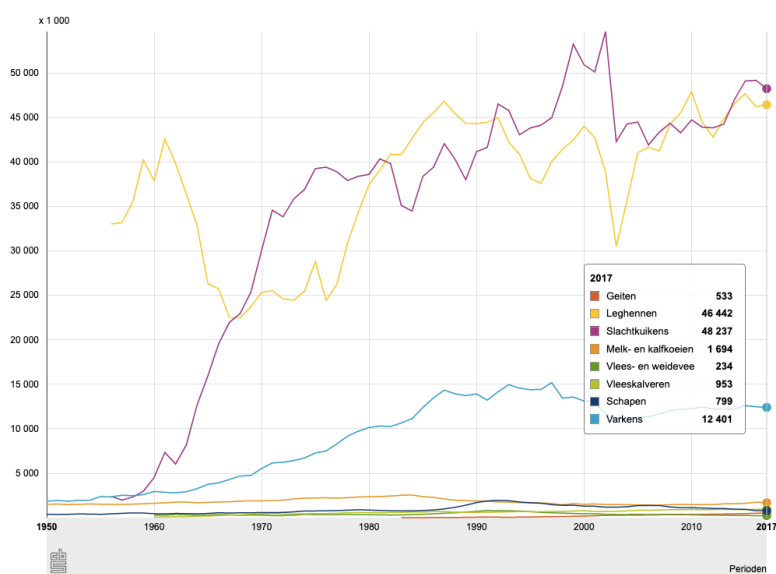


Figure 1.13 – Number of all livestock animals in the Netherlands from 1950 onwards. Source: CBS (2019).

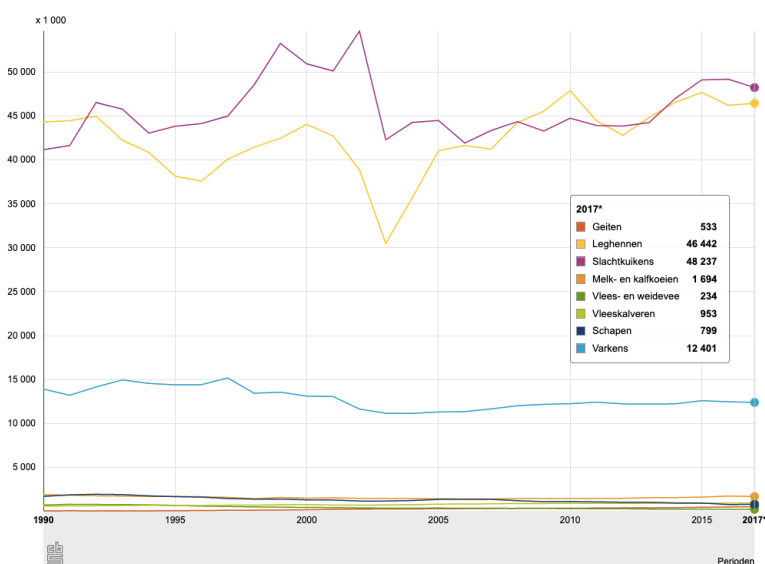


Figure 1.14 – Number of all livestock animals in the Netherlands from 1990 onwards. Source: CBS (2019).

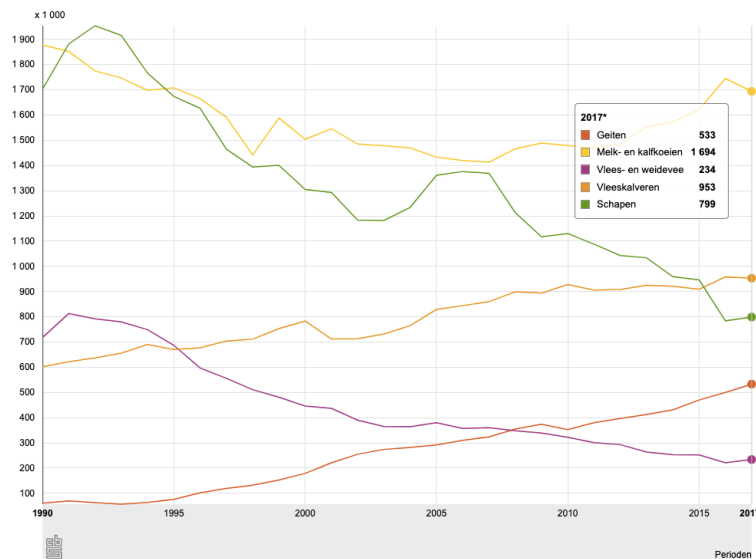


Figure 1.15 – Number of livestock animals in the Netherlands from 1990 onwards. Source: CBS (2019).

Besides all these climatic and environmental impacts of animal agriculture, there are health impacts for both animals and humans, as well as animal welfare and economic impacts. For decades, animal disease outbreaks have occurred, some of which transfer to humans: zoonoses. In total, 17% of infectious diseases is spread by animal vectors and causes for 700,000 human deaths annually (IPBES, 2019b).

Important animal and zoonotic diseases of the recent past included (NRC, 2017);

- 1989: 90% of all Dutch poultry farms are infected with salmonella.
- 1994: An outbreak of Avian Influenza is caused due to a lack of governmental inspection. 150 ratites were culled;
- BSE, or mad cow disease, (1995-2009); 170 people died of BSE in the UK;
- Classic swine fever (1997); a national outbreak threatens the pig population; 9.6 million pigs were culled in the Netherlands. The minister of agriculture had proposed to shrink pig farming but did not succeed due to farmer protests, leading to a record of number of pigs (more than 15 million);
- 1997: a Dutch cow was diagnosed with BSE; her and all the farm's other 110 cows were culled; 45.000€ worth of meat was destroyed;
- 2000: the *Rekenkamer*, or Netherlands Court of Audit (NCA), criticises governmental control of BSE as more cases are found in the Netherlands and finds ministers incapable of taking responsibility for public health and animal health;
- 2001: BSE-sensitive material found in Dutch meat;
- 2001: foot-and-mouth disease caused for the culling of 260,000 animals, including cows, pigs and other solipeds;
- 2003: due to poor supervision of the Avian Influenza culling process, the virus reemerges in 2003. Minister Veerman took measures to overcome further spreading of the virus but did so too late according to the Second Chamber. Many broiler farms would go out of business if the crisis would continue any longer. Cullers neglected hygiene instructions and mistreated the dead animals; they played football with the dead animals, threw cadavers on each other and stepped on the animals because they would still make noise;
- 2005: the first Dutch person, a 26-year-old girl, dies of BSE's Creutzfeldt-Jakob's disease.

Animal welfare incidents of the recent past include (NRC, 2017):

- 1992: A new law was established to secure animal health and welfare¹. It changed how humans can treat animals. Before, humans could do anything unless the law said they could not. With the new law, humans are now allowed to do anything, unless the law states they can.
- 1993: Animal transport causes poor animal welfare; animals are pushed upon each other since dividers are missing. Governmental inspection was failing;
- 2006: The Second Chamber is told by *Landelijke Inspectiedienst Dierenbescherming* (LID) that cows and chickens are structurally being mistreated by traders and butchers, practices that are being ignored by controllers. Knowledge of which, and reports on the issues of 2003 about such practices, are being structurally ignored too. Foundation *Dier & Recht* published videos of mistreatments on livestock markets.

Recent food quality, safety, and fraud incidents include (NRC, 2017):

- 1987: A Dutch company committed fraud in import of meat, the owner of which got away without serving his sentence;
- 1988: Growth promoting hormones are being used which is against the European law due to public health risks. In 1989, manufacturers of veterinary medicines and feed, livestock farmers, traders and veterinarians are caught for violating the law. Every year or so, the rules are tightened, as violations accumulate.
- 1988: Due to a lack of veterinarians at the government inspection service, Dutch companies and the inspection service collaborated to commit fraud by exporting unhealthy meat;
- 1990: Salmonella caused 16 cases of death and continues to cause 60,000 cases of infection annually;
- 1990: The animal production sector is now responsible for inspection, as was discussed with the government;
- 1993: Governmental failure to secure food safety of baby food including pork and beef;
- 1997: Dutch traders are caught for trading prohibited growth promoters and forgery;
- 1997: the *Rekenkamer*, or Netherlands Court of Audit (NCA), criticises governmental control over private agencies controlling growth promoters in calves;
- 1997: Dutch companies are suspected of illegal UK (BSE) beef export to Eastern Europe;
- 1998: The government's controlling organisation is thought to help reclassifying meat to increase exportation. Parliamentary questions were asked, and rules were improved;
- 1998: use of hormones in meat is not well controlled;
- 1999: contaminated fat, dioxin, is found in feed in Belgium but used in the Netherlands too. The agricultural state secretary waited a week before notifying VWS;
- 1999: sector self-control is not working appropriately;
- 2001: the government's controlling agency helps transporting animals sick with foot-and-mouth disease right before a ban on moving animals was implemented by the agricultural ministry; the organisation has a leak;
- 2001: the European Parliament holds an emergency debate on the poor compliance of BSE safety regulations in Dutch slaughterhouses. Consumption of BSE-infected beef can lead to the lethal Creutzfeldt-Jakob disease;
- 2002: Dutch meat, contaminated with prohibited substances, was sold in other European countries due to an 'administrative error';

¹ Gezondheids- en welzijnswet voor dieren

- 2002: the Netherlands awaits a European decision on the use of frying fat for feed and continues using the harmful substances. Due to contamination with the MPA hormone, 55,000 pigs needed be culled;
- 2004: a prohibited antibiotic was found in almost 100 Dutch pig farms and a few calf holdings;
- 2004: again, dioxin was found in feed. 162 farms are being closed in the Netherlands as their animals might contain a carcinogenic substance, causing a hazard for public health. After the farming sector's lobby practices, the *Voedsel- en Waren Autoriteit* (VWA) is accommodated with the agricultural ministry and not the ministry for public health;
- 2005: another case of food fraud emerges when NGO *Wakker Dier* reveals egg fraud; many barn and free-range eggs are in fact battery cage eggs. Part of the Second Chamber discusses and questions the control of certification marks;
- 2005: NCA publishes a report which questions if food quality can be secured if the controlling agency, VWA, is part of the agricultural ministry itself;
- 2005: VWA outsources part of its controlling activities to the meat sector.

There is an economic cost to animal disease too, as can be seen in table 3. European outbreaks between 1990 and 2007 have caused for between 19 million and 13 billion euros.

Ziekte	Land	Jaar	Aantal besmette bedrijven	Aantal geruimde dieren	Economische schade	Overdraagbaar op mensen?
Varkenspest	België	1990	113	Nb	€ 66 miljoen ¹	Nee
Varkenspest	België	1994	45	Nb	€ 19 miljoen ¹	Nee
Varkenspest	Nederland	1997	429	10 miljoen	€ 1,5 miljard ²	Nee
MKZ	Nederland	2001	26	270.000	€ 1 à € 1,3 miljard ³	Nee
MKZ	Verenigd Koninkrijk	2001	Ca 2.000	6,5 miljoen	€ 11,6 à € 13 miljard ⁴	Nee
Blauwtong	Nederland	2006	470	Geen	€ 32 miljoen ⁵	Nee
Blauwtong	Nederland	2007	Ca 110.000	Geen	€ 164 à € 175 miljoen ⁵	Nee
BSE	Verenigd Koninkrijk	1996	Nb	1,3 miljoen	€ 1,1 à 1,4 miljard ⁶	Ja (via besmet vlees)
Vogelgriep	Nederland	2003	255	31 miljoen	Nb	Ja (bij intensief contact)

Nb = niet bekend

¹ Alleen de schade voor de varkensboeren van de ruiming (en niet van hogere productiekosten en der gelijke) en uitgaven van de nationale overheid.

² Schade voor de gehele agrarische sector en de nationale overheid.

³ Eerste cijfer is na de uitbraak berekend, het tweede cijfer ten tijde van de uitbraak. Het eerste cijfer bestaat uit schade voor de agrarische sector en de schade voor overige sectoren (bv toerisme) en de extra uitgaven van de overheid.

⁴ Schade voor de Britse overheid, de agrarische sector en de toeristische sector

⁵ Alleen de schade voor de agrarische sector.

⁶ Het betreft hier alleen de schade voor agrariërs als gevolg van een dalende vraag naar en prijs van rundvleesproducten.

Table 3 – Economic damage of animal disease outbreaks. Source: SEO (2011).

Unsatisfactory Dutch animal food policy

The Netherlands has a history of supporting the animal industry despite all its negative connotations with various environmental disasters, individually and in EU context (figure 1.16). Already in 1896, the Dutch government involved itself with the agricultural sector when it requested an investigation of the entire sector and set up a collaboration between research, informing and education, to later also finance these agricultural institutions (Schot et al., 2000). In those years, the government also supported cooperative organisations to reduce labour costs. In the 1920s, policy was aimed at food sovereignty. In 1931, when farmers awaited a tough payment crisis, many measures were taken to save the entire sector from collapsing (Schot et al., 2000). After recovering from World War II's impacts, the sector could expand freely and evolve into Europe's most productive agricultural sector due to European collaboration and CAP's predecessor. Structural policy, often complemented by financial subsidies, was aimed at increasing productivity, mechanisation, and upscaling farms. Mixed

farms were increasingly replaced by specialized and intensive industrial animal farming. In the mid-1970s however, ongoing growth led to more crises and instability. Many problems surrounded the milk surpluses caused by the dairy industry. Nature, landscapes and the environment were pressured by highly intense production, which society did not approve of.

The entire Dutch animal sector still fails to live up to environmental goals. Low cost production has proven difficult to combine with taking proper care of the living environment and nature. Even though Dutch policy has attempted to reduce livestock numbers for a number of decades, the results are hardly visible (figures 1.13-1.15) (CPB/PBL, 2015, p.17). As production tends to grow and intensification tends to set forth, problems ought to worsen and solutions might be more difficult to find within the scope of standard farm practices, which in turn may lead to a reduction in both yields and income (Vellinga et al., 2011).

Dutch policy on reducing animal consumption is unsatisfactory too. Even though ambitious goals were formulated in 2009 on transitioning to a more plant-based food consumption, today no substantial change is observed (LNV, 2009).

Nevertheless, the urgency has been long known and change has been long argued for. In 2001, a report addressed to the government made clear why changing the sector is so difficult: it is not clear whether the government or market sector is responsible, rules are blurry and violations of rules is being condoned, the economic interest of the sector prevails, and a romanticized image of farming persists in society (Commissie Wijffels, 2001).

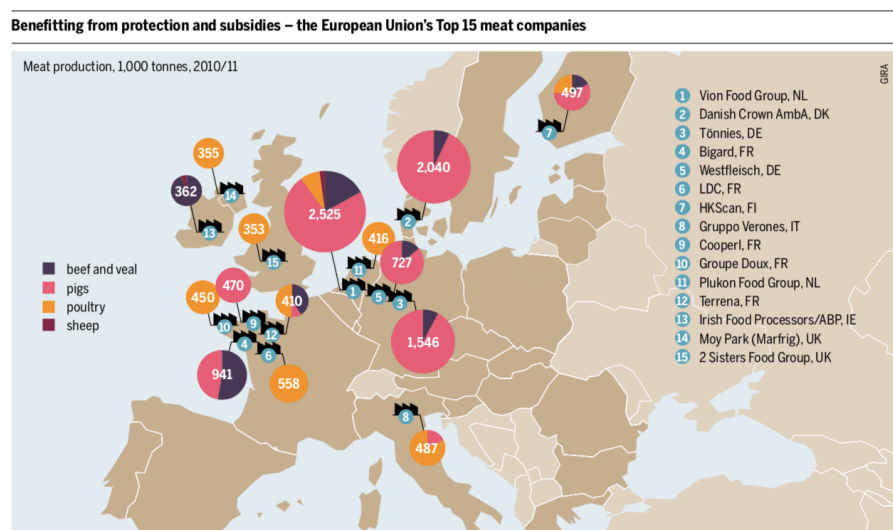


Figure 1.16 – EU livestock subsidies. Source: Chemnitz, C. & Stanka, B. (Eds.) (2014)

Unsatisfactory political and policy responses to climate crisis

Not only is the Netherlands failing to achieve environmental goals linked to the animal sector, it is likely not achieving national and international climate goals either. As member of the EU, the Netherlands is committed to achieving goal 13 of the 2015 United Nations' Sustainable Development Goals on combating climate crisis and United Nations Framework Convention on Climate Change (UNFCCC)'s 2015 Paris Agreement aim to limit global warming to a maximum of 2 degrees Celsius (UN, 2019).

To achieve these goals, present cabinet Rutte-III focuses on achieving an energy transition in which the Netherlands should become less dependent on finite natural resources such as gas and coal and move towards more sustainable or renewable energy sources, while limiting GHG emissions to 80 to 95% by 2050 in respect to 1990 levels (PBL, 2019). Consequently, a national climate law was introduced in 2018.

It is questionable, however, if this focus on reducing GHG emissions and an energy transition is enough to reach all (inter)national goals the Netherlands is committed to, as the latest calculations and prospects by the Netherlands Bureau for Economic Policy Analysis

(CPB) and Statistics Netherlands (CBS) doubt the feasibility of reaching the national goals in time with current policy measures (figure 1.17) (PBL, 2019).

Moreover, the civil society organisation (CSO) Urgenda successfully sued the Dutch national government to address its responsibility in reducing GHG emissions. In 2018, The Hague Court of Appeal reaffirmed the 2015 court decision that by the end of 2020, GHG emissions should be reduced to at least 1990 levels, and in 2030, emissions should be 49 per cent less than 1990 levels – targets for which the state is now held legally responsible (Gerechtshof Den Haag, 2018). Hence, the Dutch national government is now legally obligated to tackle the climate crisis.

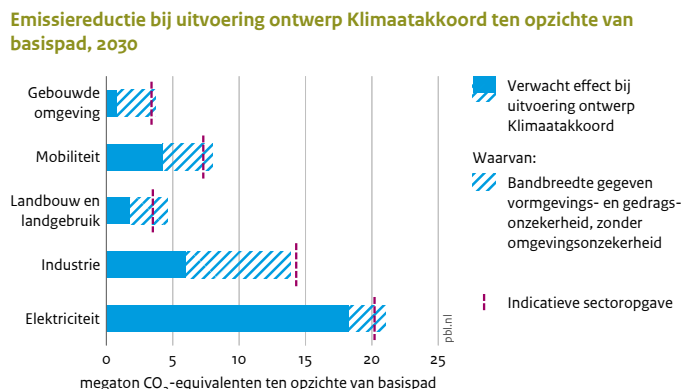


Figure 1.17 – Dutch Climate Agreement. Source: PBL (2019)

1.2 Research problem statement

Various groups in society have continuously expressed their concerns about climate and livestock problems through protests. Students from all over the world have been striking for stronger climate policy every Friday since August 2018 and continue to do so online in times of Covid-19 (FFF, 2020). In the Netherlands, both school and national strikes have occurred throughout 2019. In the fall of 2019, farmers started protesting too, as their farming practices are getting more and more difficult because of restricting nitrogen regulations.

The food system is scientifically regarded as one of the industries most responsible for human-induced climate change and is responsible for numerous other global and local disasters, in the fields of environment, animal welfare, and human health, amongst others. While the urgency for change is long known and more pressing than ever, concrete action is still falling short in one of the world's greatest producers of animal food: the Netherlands. Even though the tiny nation focuses increasingly on tackling the climate crisis by organising a national energy transition, participating in the international climate convention UNFCCC, and recently by adopting its first national Climate Law in May 2019, there is no nationally communicated policy plan for a sustainability transformation of its food system.

Considering, 1. the rapid deterioration of the planet and its resources, 2. the legally assigned role for the Dutch government in tackling the climate crisis, 3. the considerable role the government plays in sustaining both production and consumption of animal-based food, and 4. the gap between sustainability policy goals and unsatisfying results, questions that rise are what has happened in the field of sustainable food policy? And, why have more significant changes in the field of sustainable food production and consumption not been achieved?

Preliminary observations at the policy department responsible for sustainable food, the ministry of Agriculture, Nature and Food Quality (LNV)², show that the topic has been on and off of the agenda for decades. Central to the debates on agriculture were maintaining the agricultural sector, maximising its profits, securing farmer interests and resolving its negative

² Ministerie van Landbouw, Natuur en Voedselkwaliteit

externalities on the environment and animal welfare. However, a break with the past seems to have occurred in 2007, when agricultural policy was broadened to include more governmental and political attention for sustainability of both production and consumption (LNV, 2009). Hence, 2007 is chosen as starting point of a policy path reconstruction that focuses on the evolution of sustainable food policy in the Netherlands, against the backdrop of a governance perspective.

An overview of the periods researched is given in table 4.

<i>Period</i>	<i>Cabinet</i>	<i>Original name of ministry</i>	<i>Translation</i>	<i>Name of minister</i>	<i>Function</i>	<i>Political party</i>	<i>Term</i>
1	Balkenende-IV	Landbouw, Natuur en Voedselkwaliteit	Agriculture, Nature and Food Quality	G. (Gerda) Verburg	Minister	CDA	22/02/2007 to 14/10/2010
2	Rutte-I	Economische Zaken, Landbouw en Innovatie	Economic Affairs, Agriculture and Innovation	Dr. H. (Henk) Bleker	State Secretary	CDA	14/10/2010 to 5/11/2012
3	Rutte-II	Economische Zaken	Economic Affairs	S.A.M. (Sharon) Dijksma	State Secretary	PvdA	18/12/2012 to 03/11/2015
4	Rutte-II	Economische Zaken	Economic Affairs	Ir. M.H.P. (Martijn) van Dam	State Secretary	PvdA	03/11/2015 to 01/09/2017

Table 4 – Government cabinets and their agriculture and food ministers between 2007 and 2017

1.3 Research aim and research question(s)

The aim of this research is to gain more insight in the role of the Dutch national government in sustainable food policy between 2007 and 2017. One objective is to describe policy steps taken in this field during this time. Secondly, by looking at its societal and political context, an explanation is sought for how sustainable food policy evolved. Thirdly, possible changes in the role of government in this policy are reviewed.

The main question this research tries to answer is worded as follows:

“How has the role of the Dutch government in national sustainable food policy changed between 2007 and 2017 and why?”

1.4. Scientific and societal relevance of the proposed research

For “[e]nvironmental protection and sustainable development often require profound governance changes” (Steurer, 2013, p.390), this research tries to contribute to the understanding of sustainable development of the food system and its governance dynamics. Its societal relevance, then, is found in providing policy makers, politicians, and non-governmental actors with insights in the dynamics of policy change and changing governance roles in this field. In so doing, a contribution to the actual transition towards a more sustainable food system can hopefully be made.

The research finds its scientific relevance in connecting the literature on policy change and governance roles to create a larger understanding of the interactions between them, which seems to be a new approach for the field of sustainable food policy in the Netherlands.

While theories on policy change, such as Multiple Streams Framework, try to “... explain how particular environments and key actors shape and impact policy changes and are undergirded by several universal assumptions concerning the policy process (Cairney & Jones, 2016)” (Huber-Stearns et al., 2019, p.785), the significance of multi-sphere governance,

and what makes the combination of the two interesting, is well-captured in the quotation below:

“Interestingly, civil regulation, business self-regulation and private co-regulation are not simply alternatives or complements to but often-essential prerequisites for public policies: neither soft governmental regulation nor increasingly popular hybrids (such as regulation by information) could function without societal and/or business actors assuming significant regulatory roles (Gouldson 2004)” (Steurer, 2013, p.404).

Policy change theories can help to understand changes in the *content* of governmental policies while governance theories can help to understand changes in the *form* of how those policies were made and by whom. Hence, by combining policy change and governance theories, both questions of how and why the role of a government changes over time can be answered.

1.5 Reading guide

The introductory chapter has specified the problem, aims, questions, and relevance of this research. The literature review offered the latest scientific findings regarding the environmental, human and animal health and animal welfare impacts of the current food system and animal food in particular – and how to curb these impacts. Related societal impacts on human health, social equity and animal welfare issues are briefly touched upon as well. While global production and consumption trends are addressed, the role of the Netherlands is highlighted. Afterwards, the research problem is provided with more policy context, including a sketch of the historical relationship between the animal sector and the Dutch government, and national and international environmental policy agreements the Netherlands is tied to.

The following chapters will each contribute to answering the questions and achieving the aims in their own ways.

Chapter 2 forms the theoretical framework in which social-scientific discussions that are relevant to the research are shortly introduced. Governance change and policy change theories, and the application thereof for analysing the results, will be discussed and accompanied by a conceptual model.

Chapter 3, on methodology, presents the how and why of the empirical research. First, the qualitative research strategy will be delineated, after which the methods that are used will be outlined, including ways of data collection, processing and analysis. The chapter will conclude with some notes on the validity and reliability of the research.

In chapter 4, the results of the research are presented. The analysis follows the timeline of Dutch national sustainable food policy between 2007 and 2017 and is divided into four different periods, according to the timeslots of the different ministers and state secretaries that were responsible for agriculture and food in that time; Verburg, Bleker, Dijksma, and Van Dam. As the latter two state secretaries were both part of the same government cabinet, names of ministers are used instead of the names of cabinets. A fifth paragraph is added in which the results of all four periods are compared to explore whether policy change and governance change have occurred over the decade, and if so, what those changes looked like, where they came from and what impacts they had on the course of policy.

Chapter 5 forms the conclusive chapter. The conclusion will shortly summarise the results and answer the main research question. Thereafter, the discussion will revisit the results in light of other theoretical perspectives and reflect on the period under investigation from a 2020 perspective. The chapter will end with recommendations for future research and (policy) praxis.

Theoretical Framework

In this chapter relevant theoretical frameworks are introduced to further ground the research. It is explained why these frameworks are helpful in answering the research questions. The two theoretical debates this research is associated with, and tries to contribute to, are the social-scientific debates on [1] governance and [2] policy change. The first focuses on the larger context of Dutch national sustainable food policy and tries answering what the role of a national government is in times of changing governance roles. The second focuses on the details of how and why Dutch national sustainable food policy changed and what factors have influenced it to change – assuming that change has taken place – both in the role of the government and within the policy. The two theories are connected in a conceptual model which not only tries to answer the research questions of why and how policy and governance roles change but also how they interact.

2.1 Governance

A governance perspective is used to create an understanding of changing processes of governing and how governance can be organised (Stoker, 1998; Zuidema, 2016.). In its most basic definition, governance regards a change of the governing process, wherein the emphasis is taken off the role of a state government and spread over all three institutional spheres: state, market and civil society. Boundaries become unclear between private, public and voluntary sectors as they, together, invent a new structure or ordered rule for achieving public policy goals (Stoker, 1998; Rhodes, 2012; Steurer, 2013). This results in a shift of responsibilities too; as the state steps back, actors in other sectors become more responsible, which is visible in the rise of non-governmental organisations. Private and voluntary sectors are also increasingly addressed by government for strategic decision-making and service provision (Stoker, 1998).

According to Martens (2007), there are three prototypical, or straightforward, models of governance (figure 2.1). These theoretical models are extreme examples of how governance can be organised and will hardly be found in the real world but demonstrate the boundaries in which actual governance takes place. The coordinative, competitive and argumentative models vary in the roles, responsibilities and authority they ascribe to the different actors that are involved in the governance process (Martens, 2007, p.43). The names of the governance modes can be replaced with the actors that are typically playing those roles (figure 2.2). The ‘command and control’, or typical coordinative, models are, however, increasingly being replaced by ‘fuzzier’ or hybrid models that include all kinds of non-governmental actors – something that governance actors need to be aware of (Martens, 2007, p.44).

Coordinative governance has roots in ideas of rationality, bureaucracy and systems theory. It places ‘the governing body’ (government) above ‘the governed’ (society) (Martens, 2007, p.44). Government then acts as a single entity, steering society for its own good. In this classic top-down approach, only the governing body, with its elected officials, is able to express the public interest and is authorised to decide upon intervention. Roles and responsibilities of the governed are limited or even non-existent, if they are being “perceived as objects that have to be steered” (Martens, 2007, p.45).

Governance through competition, then, stemming from political theory, market economy and pluralist democracy, assumes governance a power struggle between diverging interests of different actors (Martens, 2007, p.45).

Power is found in the amount of resources an actor has and because it is inherently distributed unevenly, the most powerful actor is capable of doing whatever they wish – might is right. Cooperation is not required for governance and will only take place when all parties can benefit from it, as self-interest is the highest motivator in this governance mode.

The third model, communicative or argumentative model, is inspired by communicative planning and deliberative democracy and argues that “governance should be a process of argumentation between all involved ‘stakeholders’” (Martens, 2007, p.47). In this model reasoned dialogue defines the ‘level playing field’ rather than power. Communicative governance assumes representative democracy is not able to grasp or articulate the public interest accurately. Hence, all stakeholders are being equally included and can jointly examine which policy actions are needed, regardless of their resources or formal responsibilities. Instead, communicative governance focuses on “the knowledge, assumptions, arguments and solutions these actors bring to the table” (Martens, 2007, p.47). In a more extreme form, the roles of actors are not the starting point but the outcome of the argumentative debate, meaning the all-embracing debate will determine which actor plays which part.

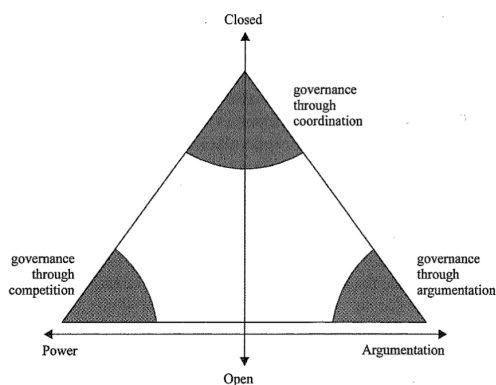


Figure 2.1 – The governance triangle by Martens (2007).

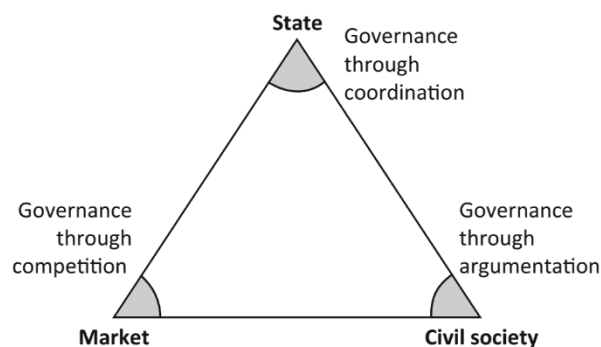


Figure 2.2 – The governance triangle by Zuidema (2016).

Various governance partnerships can be thought of. Systemic coordinated partnerships are more about ‘games *about* rules’ than ‘games *under* rules’, meaning well-thought-out governance structures are employed. Self-organised control systems, with little or no role for government, are deemed more beneficial than regulation imposed by government (Stoker, 1998). However, participators of such a governance structure could still follow their own interests rather than the larger public interest, or those outside of the governance structure (Stoker, 1998; Steurer, 2013). Enlarging the role of the government could address this accountability issue (Stoker, 1998).

Jessop (2011) argues for meta-governance, wherein governments are occupied with constitutional change, creating conditions for self-organisation, reshaping markets, and changing objectives and organisational forms juridically, but can also guide political stability and social cohesion in governance (Jessop, 2011). Main tasks would then be to network, negotiate, reduce noise and to coordinate in interactive partnerships (Jessop, 2011; Stoker, 1998).

However, other forms of regulation are possible in the governance era too, in which there is more room for private and voluntary actors, and partnerships between the three sectors. (Co-)regulators such as civil society organisations (CSOs) and other stakeholders from society add to the more traditional range of regulation: hard and soft governmental regulation and business self-regulation (Steurer, 2013). The various governance types and combinations possible are illustrated in the model below (figure 2.3). The conceptual model will elaborate on the use of the model.

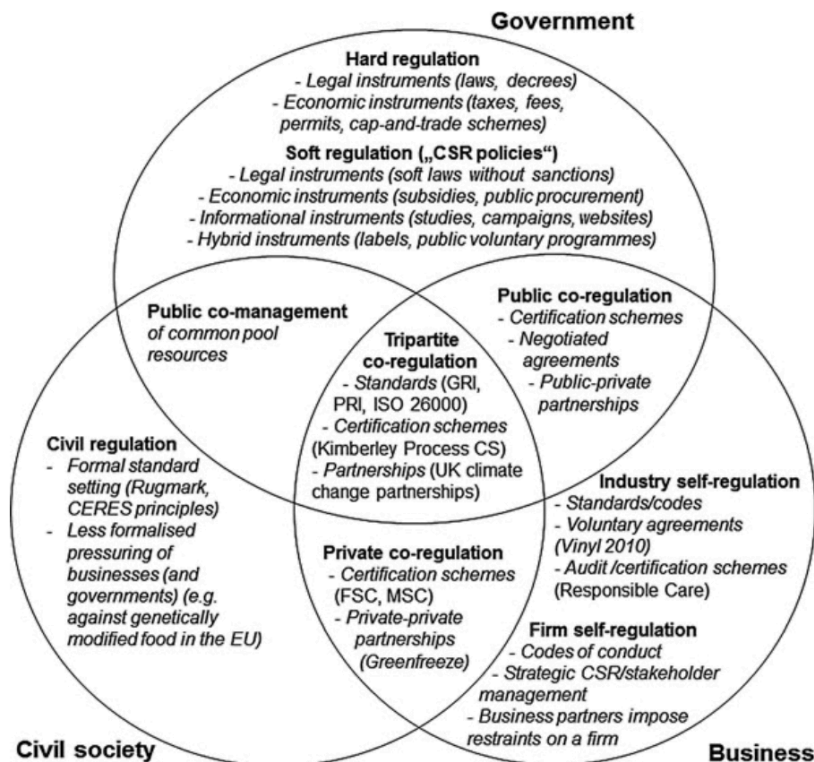


Figure 2.3 – Various modes and examples of governance. Source: Steurer (2013). Original caption: “Fig. 2 Adding four domain-spanning types of co-regulation (for similar heuristics that inspired the development of this figure, see van Marrewijk 2003, 100; Lemos and Agrawal 2006; Abbott and Snidal 2008; 7f; Delmas and Young 2009b).”

2.2 Policy change

Giddens (2013) argues that long-term policies are needed to solve sustainability issues, including climate change. It is, however, difficult to keep those issues at the forefront of political concern and firmly on the agenda. Another issue of establishing long-term policies, is that policy-making actors often lack the whole picture and only have access to so much information; “[p]olicymaking is not rational at all; rather, it is ambiguous, selective, biased and imperfect (Cairney and Jones, 2016)” (Soto Golcher et al., 2018, p.628). Therefore, the bigger share of policy process and policy change theories assume bounded or intended rationality for decision-making processes (Ley, 2015).

Agenda-setting theory can be examined to address fleeting political attention (Giddens, 2013, p.187), and help understanding policy outcomes:

“If one can specify what the initial conditions in a process are, and if one has good information about those conditions, then one can predict outcomes more reliably than if one does not know of the initial conditions” (Kingdon, 1995, p.224).

For this research, the Multiple Streams Framework (MSF) seems a good fit; the study is focused on a single policy field, in a set period of time, and tries to explain *how* political and governmental attention have shifted in this policy field. MSF agrees on a certain level of ambiguity in the policy making process, which resonates with this research.

The Multiple Streams Framework (MSF) is based on the Garbage Can Model, in which advocates throw their ‘pet solutions’, or garbage, at a mixture of existing problems, or the garbage can. It can be argued that government works exactly like that (Ley, 2015). Even though MSF stems from the 1980s, scholars still find it useful today for understanding complex and lengthy processes. MSF focuses on both agenda setting and alternative specification stages within the policy cycle but can be applied to all phases of the policy formation process (figure 2.4), including decision-making (Huber-Stearns et al., 2019; Rawat & Morris, 2016; Zahariadis, 1992).

MSF observes policy change through the eyes of policy makers in deciding to pay attention to some problems and solutions over others and seeks to explain how decision-making happens (Ley, 2015). The theory suggests that some topics or problems get more political attention than others, whereas some policy solutions or alternatives get more governmental consideration than others.

According to this theory, problems or solutions are only followed up after a window of opportunity is opened. This occurs when three separate, but coherent streams align and allow for a policy window to open, which only happens from time to time. Changes in the problem stream or political stream can cause for a change in policy outcome, “provided that a worked-out proposal is available in the policy stream” (Herweg, 2017, p.34) and so-called policy entrepreneurs successfully employ their resources to couple the streams. Policy entrepreneurs can act as change agents if they jump in at the right moment with the right ‘selling technique’. Hence, important aspects for actual policy change are the right framing of the problem, the readiness of a fitting policy solution and the timing of combining them when a window is still opened.

While Kingdon assumes large events and structures are at work that are beyond any individual’s control, he allows for agency in the form of policy entrepreneurs which he compares to ‘surfers waiting for the big wave’. Policy entrepreneurs can anticipate on and take advantage of events or crises and hence work their way through the system. They are change agents that seek to join the streams and create a window of opportunity, and, if they manage to do so, try to push their favoured problems and solutions on the government agenda (Howlett, McConnell & Perl, 2017).

Crises evoke uncertainty and a sense of threat which can dislocate a dominant discourse in society, politics or policy. This threat can however also be regarded an opportunity and open up policy windows to demand structural change (Boin et al., 2009). The aftermaths of crises are often hard to predict, possibly due to attempts to crisis exploitation by competing change agents trying to push their frame forward. Policy entrepreneurs can defend and strengthen their positions and authority, attract or deflect public attention, and try to get rid of old policies or sow the seeds of new ones (Boin et al., 2009). Framing can thus be used to bend a situation of crisis into an opportunity, and also to couple problems and policies and push a policy package forward.

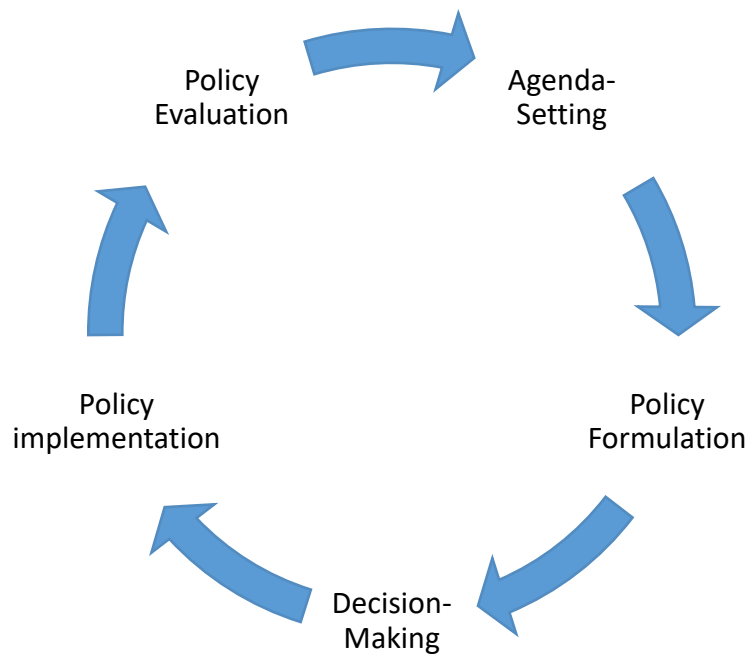


Figure 2.4 – Traditional policy cycle. Source: own compilation

Other actors play a role in defining problems, proposing solutions, and making political choices too. In his particular study on several US national policy subjects, Kingdon found the order of actor importance as described below:

- Kingdon states that “[n]o one set of actors dominates the process, but elected politicians and their political appointees come closer than any other” (Kingdon, 1995, p.47);
- After elected politicians and their political appointees, interest groups (IGs) have the most influence, which generally means lobbyists and the lobbied. IGs’ goal is to draw government’s attention to certain items so their agendas will include, boost, or block those items. If proposals are already on the agenda, IGs may seek to pressure for substitutions or amendments;
- After IGs, researchers, academics and consultants have the most influence, rather in affecting alternatives than governmental agendas. To do so, they have to be aware of where governmental attention flows and able to provide suitable analyses and proposals. In the long run, communication, diffusion and discussion of their notions and results are key for influence, even though they are not involved in final decision-making nor implementation;
- While media are often depicted as ‘powerful agenda-setters’, they are mostly influencing public opinion in broadcasting the importance of issues. As media’s attention for and coverage of problems can spike with sensational intensity, it typically fades as quickly as it came, hence only slightly influencing government and the policy community (Kingdon, 1995, p.61). An example of intense, sensational media coverage is when a crisis or focusing event occurs. Besides having ‘the world’s shortest attention span’, the media respond to events in policy and politics rather than affecting agendas. They are however important for communication within the policy community and drawing attention from government to public opinion shifts. Also, by sharing news on movements they can magnify and accelerate their impacts. Herein, their role lies more in shaping and structuring than creating;

- Political parties and election-related actors, people from within and around government, could interpret election outcomes as political shifts and hence translate them into certain policy choices or scenarios (Kingdon, 1995);
- Finally, mass public has the lowest direct impact on agenda-setting.

2.3 Conceptual model

Combining the theoretical perspectives described in the previous paragraph and applying it to the case of sustainable food policy in the Netherlands, results in the conceptual model below (figure 2.5).

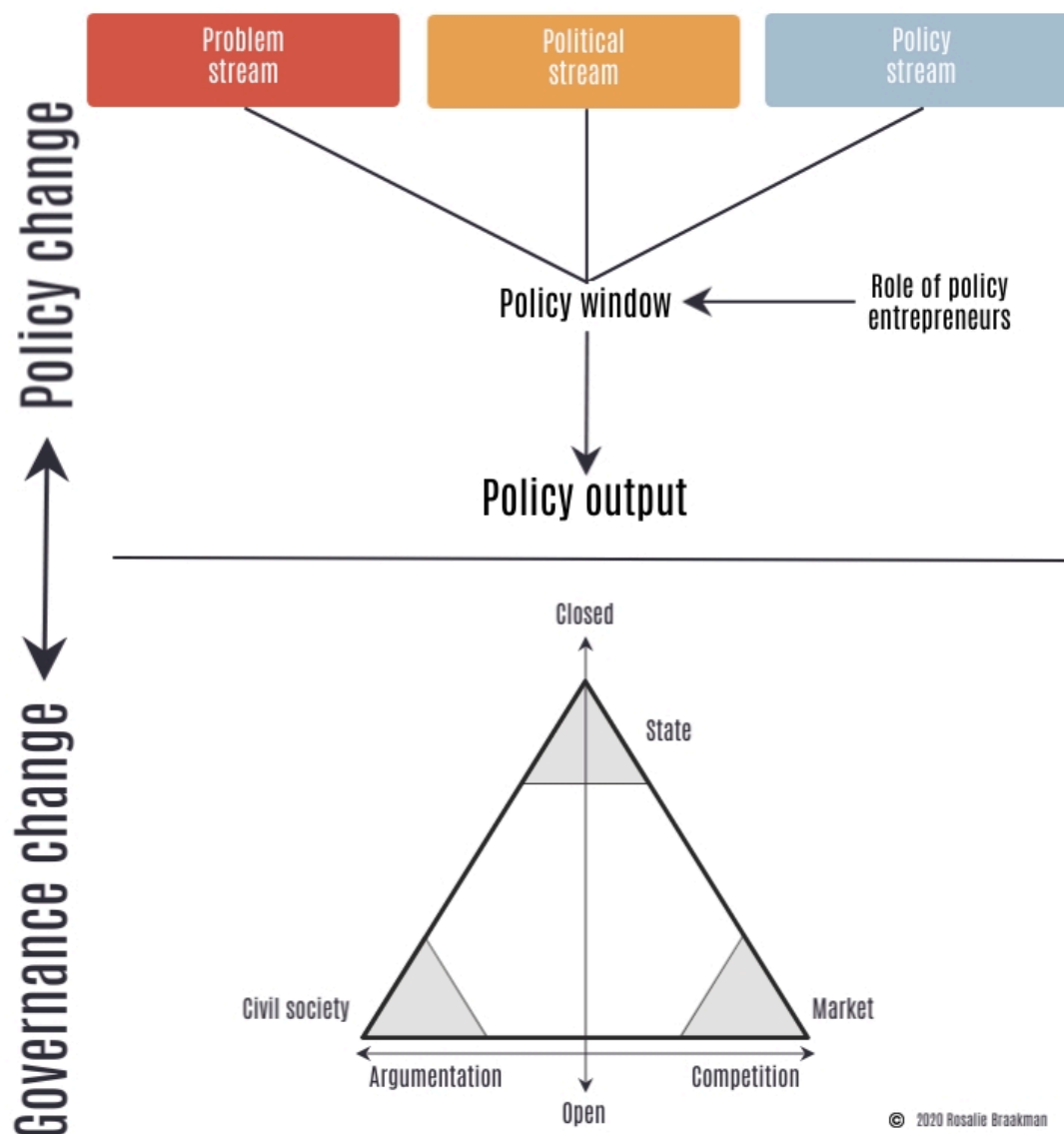


Figure 2.5 – Conceptual model connecting Multiple Streams Framework and the governance triangle. Source: own creation, influenced by Kingdon (1984; 1995), Martens (2007) and Zuidema (2016).

Problem stream

The problem stream consists of so-called problems, which are perceived and defined as such by society when an acceptable or ideal situation is (no longer) reached (Howlett, McConnell & Perl, 2017). The problem stream consists of perspectives, philosophies, opinions, and

attitudes of various members of public and policy communities, which contain an evaluation of problems to see whether they have a public nature and require governmental interference or if they are solvable on private initiative. Moreover, opinions on former governmental interference and related challenges are included in this stream.

For this research the terms feedback, indicators and focusing events are used to 'measure' problem definition. These mechanisms generate attention to conditions that deviate from what is conceived as 'ideal', or a problem (Herweg, 2017, p.26).

Indicators are singularly or repeatedly reporters that point out circumstances that are then regarded problematic situations, compared to others' or one's own past performances. Indicators allow for monitoring of a process so that change can be witnessed and problematised (Giddens, 2013). Shifts in indicators are more likely to affect agenda setting when combined with a focusing event which draws attention to the problem.

Focusing events include disasters, crises, symbols or personal experiences that can unveil problems when coinciding with other focusing events or reinforcing perceptions that already existed. According to Giddens (2013), they include 'anything that catches the headlines'. They are relatively rare, sudden and defined as harmful to a certain community or interest, now or in the future (Huber-Stearns, 2019).

Feedback includes mostly negative evaluation of certain data, policy programmes and more informal forms of feedback by different groups, or the public at large (Herweg, 2017; Giddens, 2013). Dissatisfaction with a situation, or the approach to dealing with the situation, is the incentive for negative feedback.

Political stream

The political stream is defined by political changes. It contains contextual characteristics such as a composition of ideas and values which are informed by national moods, political colours and power shifts. Such power shifts are caused by legislative or executive turmoil after elections and cabinet changeovers, which change the composition of policy makers and influence political and legislative timelines (Howlett, McConnell & Perl, 2017). A national mood can promote or impede problems getting on the agenda but not hinder new items from being considered (Herweg, 2017, p.28). According to Giddens (2013), the national mood has a considerable impact on how, when and where the streams meet.

Policy stream

The policy stream consists of the policy community and policy primeval soup, which are rather open to both actors and ideas; interaction with other members of the policy community is the precondition to partake (Herweg, 2017). In the policy primeval soup, ideas and proposals "...are floated, come into contact with one another, are revised and combined with one another, and floated again" (Kingdon, 1984, p.21). While the floating of solutions is continuous, only a few ideas are ever considered. Their availability is important, so that they can be linked with problems or political urgency whenever the chance presents itself (Giddens, 2013).

Prerequisites for ideas to be considered as eligible alternatives are listed in the conceptual model under 'policy stream'. "While technical feasibility and tolerable cost address the question of whether implementing an alternative is possible in principle, normative acceptance and receptivity among the decision-makers focus on obstacles that could complicate its passing in the decision-making process" (Herweg, 2017, p.28).

While political people are involved with many subjects and policy issues at once, are focused on mobilizing support, and promoting their parties for winning elections, the policy community is more focused on details, studies and analyses, and finetuning policy proposals, and therefore consists of specialists (Kingdon, 1995).

Policy entrepreneurs

Policy entrepreneurs can be found anywhere from policy departments, communities to organisations. A shared characteristic amongst these ‘change agents’, is that they are willing and able to commit their time and resources for pushing a specific issue (Rawat & Morris, 2016).

Policy window

When the three streams join, a ‘window of opportunity’, or policy window, is opened. Some windows, such as annual budgets, are predictable and can provide an opportunity for a new direction (Giddens, 2013). However, most windows come from unplanned events or crises and are hence not always predictable (Howlett, McConnell & Perl, 2017). Policy entrepreneurs have to be prepared in order to grasp the opportunity for policy change so they can either mobilise or block it (Giddens, 2013).

Two sorts of windows exist: problem windows and political windows. The first are mostly of short duration and vary considerably in predictability. When a window opens in the problem stream, a solution is sought to match the problem. Attention is focused on the problem first. When a political window opens, attention is given to the solution before the problem is yet clearly defined. Herein, it is more important for a solution to be adopted than a problem to be solved, which marks an ideological process (Zahariadis, 2007). For this research, the difference in policy windows will be applied by reviewing where agenda-setting came from: society appointing a problem, or politics pushing solutions forward.

Governance modes

For each cabinet between 2007 and 2017, it will be analysed what governance looked like, according the adapted governance triangle presented in the conceptual model. The triangle helps discovering how open or closed governance was, and whether there was an emphasis on competition or argumentation. Another figure of governance modes is used, as depicted in figure 2.3, to define the position of within the governance triangle for each cabinet.

Steurer (2013) distinguishes between seven modes of governance (figure 2.3). The following descriptions of the seven governance modes will be applied in this research for determining how sustainable food policy was governed during each time period or governmental cabinet:

1. Public regulation:
 - a. hard regulation by government:

Binding rules for all (members of a particular group) by ministries, public agencies or legislatures which are monitored and compliance to which is enforced by these bodies. Tools include ‘sticks’ or legal instruments: laws, decrees, directives. These tools are considered more hierarchical (Steurer, 2013). Steering through market forces and hierarchically occurs with ‘carrots’ or economic instruments, such as taxes and fees (Steurer, 2013, p.393).
 - b. soft regulation by government:

Non-binding rules are used to facilitate or suggest certain behaviours by persuasion rather than legally enforcing them. Tools include ‘nodality’, or access to and distribution of information; monitoring or benchmarking; and, fiscal means such as economic incentives for stimulating certain behaviours (Steurer, 2013).
2. Private regulation:
 - a. collective business self-regulation:

A group of major companies creates standards, agreements or codes of conduct to which all comply. Bindingness and levels of punishment for non-compliance vary.

b. individual business self-regulation:

Voluntary practices by single firms, such as corporate social responsibility (CSR) strategies.

3. Civil regulation:

Formal or more informal civil society regulation:

One form of this type of regulation is steering businesses by demanding compliance with aforementioned self-created standards. Another is to lobby for government regulation. Pressuring either businesses or governments can be done less formal too.

4. Public co-management:

Partnerships between governments and civil society actors.

5. Public co-regulation:

Partnerships between governments and market actors.

6. Private co-regulation:

Partnerships between market and civil society actors.

7. Tripartite co-regulation:

Partnerships between actors from all three institutional spheres.

Methodological Framework

This chapter focuses on the methodology of researching a decade of Dutch national sustainable food policy against the backdrop of a governance perspective. This chapter will hence cover the research strategy and design, which types of data were consulted, how data was collected and analysed, and the trustworthiness and validity of the research.

3.1 Research strategy and design

This research takes on a qualitative approach, as it tries to understand processes in society and seeks to investigate them profoundly, rather than measure certain variables. These societal processes have already been introduced, grounded in the academic literature and embedded in theoretical debates in the previous chapters and were defined as issues of policy change and governance change. The unresolved role of the Dutch national government in sustainable food policy and the unravelling of policy change influences require in-depth, constructive investigation. Hence, this research is not based on testing a certain theory. Instead, contributes to the theory by painting a picture of what policy change and governance change look like and how they interact in the real world. Of course, the research process knows both elements of deduction and induction and allows for iterative weaving back and forth between theory and data. However, the emphasis lies on field results, as “...order should emerge *from* the field rather than be imposed *on* the field (Silverman, 1985)” (Herbert, 2000, p.552).

One of the research aims is to indicate relationships between variables – influences of policy and governance change and their impact on transitioning to a sustainable food system –, rather than to discover their causality, which distinguishes it from experimental research (Bryman, 2012). As contextual characteristics are of great importance to the findings, but are not the actual object of interest, a cross-sectional research design seems a good fit. This means that the research is being performed at a specific site at a certain moment in time, namely at the ministry responsible for agriculture and food policy in The Hague, the Netherlands, from March 2017 through June 2017³. More specifically, data was gathered at the policy department concerned with food sustainability: *Plantaardige Agroketens en Voedselkwaliteit* (PAV)⁴.

As is the case with many cross-sectional studies, this research includes retrospective accounts of factors that influenced past societal and policy developments and trends besides offering insights in the current situation (Bryman, 2012). A close observation of the policy field and site is required to gain insights in the context of policymaking, policy change and governance change. The research will therefore use case study methodology on the site of the concerning policy department and the larger societal-political context of the Netherlands between 2007 and 2017.

3.2 Types of data and methods of collection

Choices for research methods stemmed from the research strategy and design described above. As this research focused on past and present policy and policy influences, it had a rather unstructured way of collecting data. This allowed for a constant influx of new information, so that theories and concepts could be derived from the data (Bryman, 2012).

While collection of most types of primary data occurred at a single point in place and time – roughly from February 2017 through June 2017, secondary data was gathered after the

³ At the time of data gathering, in 2017, the agriculture and food department was part of the ministry of Economic Affairs (EZ). At the moment of publishing, the ministry of Agriculture, Nature and Food Quality is responsible for the agriculture and food department.

⁴ Plant Supply Chain and Food Quality

official research period ended as well until June 2020. Data collection thus formed a combination of desk and field research. The first consisted of literature review, policy documents and media items, applying the snowballing technique to allow for specific and focused search of data. The latter consisted of observations, interviews and a focus group, most of which took place at the PAV policy department with civil servants.

A recurrent technique for collecting the variety of data was snowballing, which allowed for a constant influx of leads. The research came to its current form and found its final focus, due to the open approach and by following the 'let the data tell you' principle. Topics for all types of data included themes relevant for sustainable food policy between 2007 and 2017, relating to at least one of the MSF streams or governance perspective, according to the conceptual model described in the previous chapter. The interviews were semi-structured, and interviewees were allowed to contribute their own perspectives and expertise. Hence, the range of topics was broad. Some topics seemed off-topic at first, according to the conceptual model, but proved interesting concepts, nonetheless. Hence, they will not always be included in the analysis, but might be in the discussion instead. This applies to the other types of data too.

3.3 Desk research

The search for literature has continued throughout the research process, to be able to include the most recent findings and numbers as well. Most of the literature search has been performed at the Radboud University all-in-one search engine 'RuQuest' and the ScienceDirect online database. Titles were nominated based on titles and keywords, as well as dates of publication and peer-review status, to include the most recent findings and trustworthy sources. Searching terms included, but were not limited to: policy change; policy change theories; Multiple Streams analysis/framework; governance change; multi-actor governance; meta-governance; food sustainability; environmental impacts of food; dietary change/transition; plant-based diet/products/consumption/foods; animal-based diet/products/consumption/production; livestock production. Furthermore, the technique of snowballing was applied, especially while running through the Elsevier database, again minding relevance of title and keywords and publishing dates.

Policy documents were either named in interviews, the focus group, recommended by policy makers at EZ through more informal conversation, or found through snowballing. They included Government Letters, position papers, and official reports from the EZ department and were either generated within this time period, at EZ or a related ministry, or were of influence on sustainable food policy between 2007 and 2017. Documents generated in this period were analysed on sustainable food policy plans and action points.

Multiple (online) media sources were employed to provide the research of context and background information. Again, a relatively unstructured method using the snowballing technique was used throughout the field research period and afterwards, to include recent developments as well. Different media sources included news items, videos, and articles, books and documentaries both from public broadcasting and independent organisations, that were either found online or offline. Attention was paid to the publication date and origin of the item. Different media items were included to create a broader view of societal problem-definition and to better grasp what occupied society's attention.

3.5 Field research

Six semi-structured interviews were held with policy makers at EZ, The Hague and another was held at *Rijksdienst voor Ondernemend Nederland*⁵, Utrecht, with a civil servant working

⁵ RVO / Netherlands Enterprise Agency

in policy implementation, throughout May and June 2017 (Appendix A). All policy officers were involved with sustainable food policy at the time of interviewing, at some point between 2007 and 2017, or throughout that period of time, so that every time period under investigation was covered by at least one policy officer. Interview topics were attuned to the interviewee's knowledge and experience, but always included the development of national sustainable food policy and its interrelations with politics and developments in society around the theme. In contrast with rather inflexible structured interviewing, unstructured interviewing allows for "...an emphasis on greater generality in the formulation of initial research ideas and on interviewees' own perspectives" (Bryman, 2012, p.470). Instead of casting interview themes and questions in stone beforehand, the interviewer allowed for discussion of topics that were deemed important by the 'experts' concerned with the transitions on a daily basis – in this case, the policy makers. All interviews were recorded with permission of the interviewees and were transcribed afterwards. During the interviews, notes were taken as well. These served mostly as reminders for the interviewer to get back to certain topics and ask for elaboration, if necessary, and were used to provide context to the interviews. The interview transcriptions were coded in ATLAS.ti software (Version 1.5.4 (477)).

The focus group took place at EZ, The Hague on June 22, 2017. The nine participants included policy makers, policy officers and civil servants who worked for the sustainable food policy team at that time or earlier between 2007 and 2017, some of which were interviewed prior to the focus group. Starting at 2007, the timeline was filled in by pairs of policy employees following the MSF three-stream model. Time periods were divided by cabinet timeslots. After each pair worked through the entire timeline, up to the latest period '2017 and onwards', all contributions to the timeline were discussed by the whole group. Then, the group decided on which actors, events, happenings and documents were of the greatest importance for policy change, and why. Firstly, they highlighted these items by applying red stickers on the timeline. Secondly, another group discussion was held on the division of red stickers; on why some were more 'heavily stickered' than others and why some were left 'unstickered' altogether. Both rounds of discussion were recorded, with permission, and transcribed afterwards. Like the interviews, the focus group transcription was coded in ATLAS.ti software. The focus group results were digitalised in an updated version, complemented with results of other data sources, for the analysis of this research.

Observations of the policy-making site continued throughout the period of investigation; from February 2017 through June 2017. Various meetings and events were attended (Appendix B). Some were in-government actors only, while others included actors from market and civil society spheres too. Scales varied from weekly team meetings to a large-scale event with ministerial performances and big crowds. Most often, the location of observation would be the ministry of Economic Affairs (EZ). However, larger events would be elsewhere, often hosted by the ministry. When observing, Spradley's (1980) explanations of a social situation and observation matrices were of good use (see appendices). According to Spradley, every social situation contains three primary elements: a place, actors, and activities (figure 3.1). While most observations were largely unstructured, Spradley's model of social situations was always applied. On most occasions, the situation allowed for taking field notes immediately. Otherwise, the situation would be described directly afterwards, to include as many details as the researcher's mind would allow. Observation notes were not fully transcribed, as they were not used directly in the analysis but served as background information to 'how policy is made'.



Figure 3.1 – The three elements of every social situation. Source: Spradley (1980)

As mentioned, transcriptions of interviews and the focus group were coded in ATLAS.ti software. Codes of all interviews and the focus group were collectively categorised and clustered into code groups and later into networks, in which the codes were sorted for the different streams and different time periods according to the conceptual model described in the previous chapter. Each cabinet received their own coding tree, visualising important markers for change in each ministerial period of time – either beneficial or detrimental for the development of sustainable food policy. On top, coding trees were created for each policy stream; problem definition, politics and policy solutions, as to see who or what were important indicators for change. Per cabinet, an overview was thus created for policy change.

From these overviews, policy ‘stories’ of each time period would then be written down in the analysis, following the structure of the conceptual framework. For each time period, all interview and focus group transcripts were scanned on relevance by searching for specific words or codes, such as ‘Verburg’ for the time period of Verburg’s ministry. Relevant quotes were collected, sorted, translated and written into the policy ‘story’. Original quotes were referred to and included in footnotes when paraphrased, or endnotes when translated literally.

The policy stories were largely based on the official interviews and focus group but were complemented with on-site participatory observations and secondary data including policy documents and media items.

During interviews, names of ministers and state secretaries would be used more often than those of cabinets or ministries. Referring to cabinets, whose names are often only distinguished by the number at the end when lead by the same Prime Minister – for example Balkenende-I to Balkenende-IV, could be rather unclear and easily be mistaken. To assure clear-cut distinction of time periods, names of ministers and state secretaries were preferred for the analysis too, even though the entire cabinet was responsible for the department’s policy.

By comparing the time periods, or the ‘stories’ of sustainable food policy throughout the cabinets, policy change could be discovered. The same goes for governance change; even though this research covered only a limited timeframe.

By reviewing how policy changed and by discovering which problems and solutions attracted political and governmental attention, use or change of governance modes could be observed too.

3.6 Analysis

For organisational purposes, all data will be analysed according to the governmental cabinets between 2007 and 2017 and named after the minister or state secretary responsible for agriculture and food policy. Meaning that all events, documents, subjects and actors

important to one cabinet time period will be integrated within that part of the analysis. Terms that were frequently used at EZ were used for the analysis too; periods were referred to as 'Verburg' rather than 'cabinet Balkenende-IV'. Also, the two latter state secretaries, Dijksma and Van Dam, were part of the same government cabinet. Hence, it would be confusing to use the name of the cabinets for those two distinctive periods.

Within each described time period, all parts of the conceptual model will be employed to recreate the story of sustainable food policy during that time. If a certain subject will cover multiple time periods, the time period in which the subject is most important will be chosen to cover its full story – even though it might spread over multiple time periods. This might be the point of its emergence, or the time it is most expressed. The results of interviews and focus group will be key to this decision.

While the data gathering was rather open to perspectives of the policy making site, the analysis and interpretation of results were written from the researcher's perspective.

3.7 Methodological reflections

Access to the policy making site, policy makers and policy documents was sufficient, as the research was conducted from a government department. However, given the proximity of politics at a government department, participants might have been aware of some sort of political sensitivity, and answered the way they did because of this. The interviews were held at EZ regardless, for time and convenience purposes and to ensure a low threshold for participation. Anonymity was ensured, and, as far as possible, privacy was sought for conducting the interviews. Anonymity was applied by replacing participants' names with numbers.

It was not possible to find more participants that worked on sustainable food policy during the earlier cabinets this research investigates. Outreach to former ministerial personal assistants (PAs) failed to deliver. The rejecting letters confirmed that political sensitivity and proximity were reasons not to participate.

3.8 Trustworthiness and validity

Most definitions of concepts as research reliability, replicability, and validity are based on quantitative research strategies and designs. Hence, their applicability for qualitative designs is questionable. For example, reliability has to do with the repeatability of the results and "whether the measures that are devised for concepts in the social sciences [...] are consistent" (Bryman, 2012, p.46). In cross-sectional research, issues of reliability and measurement have more to do with the quality of measures employed in the research to test the concepts. Lincoln & Guba (1985) have proposed alternative terms for assessing qualitative designs, in parallel with quantitative research criteria, and grouped them under the overarching term 'trustworthiness'. Their equivalent of reliability is 'dependability', which asks whether the findings are likely to apply at other times. With this research, it is difficult to state whether findings are applicable at other times, as both timing and locational setting are characteristics that are of great importance to the findings and outcomes. Though, more general statements generated from the results of this research might be applicable at other times – when examining a different policy or governance change issue for example.

Another criterion is the replicability of research, which is concerned with the question whether the research can be copied and redone, to test the outcomes for example (Bryman, 2012). This research could be replicated to test whether the outcomes are objective and not influenced by the researcher's beliefs or values. Confirmability is the term used by Lincoln & Guba (1985) to see whether the investigator has allowed their values to intrude. Even though replication is not expected, the methodology is described to enable a do-over.

The criterion which is often considered most important is research validity, which can be parted in four main types according to Bryman (2012): measurement, internal, external and ecological validity. Measurement validity, or construct validity, is concerned with the question whether the concepts used are in fact measuring or reflecting the concepts that they are supposed to. In this research, a thorough study of both theoretical and methodological literature has led to the conceptual model found at the end of the previous chapter. This conceptual model forms the foundation for the analysis, to secure this type of validity.

Internal validity relates to the causality of variables, and whether its causal impacts between them can be acclaimed. As cross-sectional research typically produces associations between variables and tries not to denote causal links, the internal validity is often weaker than with other (quantitative) designs. Credibility is another term, paralleling internal validity, which asks the question of whether the findings are believable (Lincoln & Guba, 1985). To increase believability, this research employs a broad range of methods and data to cover many different aspects of policy and governance change.

Another relating concept is that of research relevance, "...is taken to be assessed from the vantage point of the importance of a topic within its substantive field or the contribution it makes to the literature on that field" (Bryman, 2012, p.49). The societal and scientific relevance of this research have already been discussed in the introductory chapter.

The external validity, which deals with generalisability of the results, is also weaker than with quantitative research designs. However, as with most qualitative case study designs, it is not the purpose of this research to make broad assumptions or test a general applicable theory but to better understand the contextuality of the matter. To ensure external validity in qualitative research, the question is more whether theory is generated out of the findings (Bryman, 2012). Lincoln & Guba's (1985) term 'transferability' parallels external validity and asks whether findings are applicable to other contexts. As with the criterion of reliability, or dependability, it is difficult to state whether the results of this research will be applicable to other contexts, as this research displays a contextual matter. However, it could be that other policy fields or other governmental bodies who are dealing with policy and governance change, find the results of this research helpful.

Ecological validity is concerned with whether the results of social studies are applicable to everyday life and natural social settings. Since this research adopts a rather conversational style in its interviews and takes on a close level of participant observation, the ecological validity must be guarded, as such methods might disrupt the 'natural habitat' (Bryman, 2012). On the other hand, the application of such methods allows for a close proximity to this 'natural habitat', which could offer useful insights. Therefore, this research chooses to observe policy and governance change from the policy site, to get as close as possible to the epicentre, following the 'end justifies the means' principle – of course, always keeping ecological validity and research ethics in mind.

Analysis

4.1. Period 1 – Verburg

22 February 2007 – 14 October 2010
(1330 days)

Summary

From the 1950s through 1990s, awareness of the persistence of agricultural problems increased. Measures were taken to overcome such problems and resume production. Gradually, around the 1990s, it became clear the agricultural sector needed to face the public and define its position in society.⁶

Around 2000, during minister Veerman's term, there was a careful shift in approach from traditional agricultural policy, which focused on securing farmer interests, to broader agricultural and food policy in which there was increasing attention for sustainable food production. This resulted mostly in an increased focus on sustainable development of production of animal-based food for human consumption.

From 2007 onwards, this shift gained more political momentum and was expanded to include attention for sustainable food consumption as well. The installation of Gerda Verburg, of CDA, as minister of Agriculture, Nature and Food Quality (LNV) was an important event, which could be regarded as the opening of a window of opportunity in terms of Multiple Streams Framework (MSF). The joining of the political stream, manifested by the swearing in of Verburg as minister of LNV, to societal worries (problem stream) and scientific reports, such as *Om Schone Zakelijkheid*, (policy stream) about intensifying agricultural production and increased societal interest in food, allowed for an expanded manifestation of the shift towards more sustainable agricultural and food policy from 2007 onwards.

The emergence of broader sustainable food policy resulted in (financial) support for and collaboration with various societal initiatives in the field of sustainable food production and consumption. Governance modes in this time hence included tripartite co-regulation.

While sustainable food policy seemingly moving forward in this period, it did not last long. Verburg sometimes seemed too radical for her own political party, its farmer support-background and the zeitgeist; she was ridiculed about her ideas of plant-based foods and insects for human consumption, her ministry and the rest of cabinet were criticized for not taking enough measures whilst the country abided in a major zoonotic crisis. Moreover, Verburg's communication department published an ill-timed and inconsiderate magazine which was, unjustly, received as campaigning activity. Hence, Verburg's enthusiasm drifted off nearing the end of her term as minister of agriculture. She became more careful and less outspoken about sustainable food.

The most important events of this period are shown in figure 4.1.1.

⁶ Interview #5

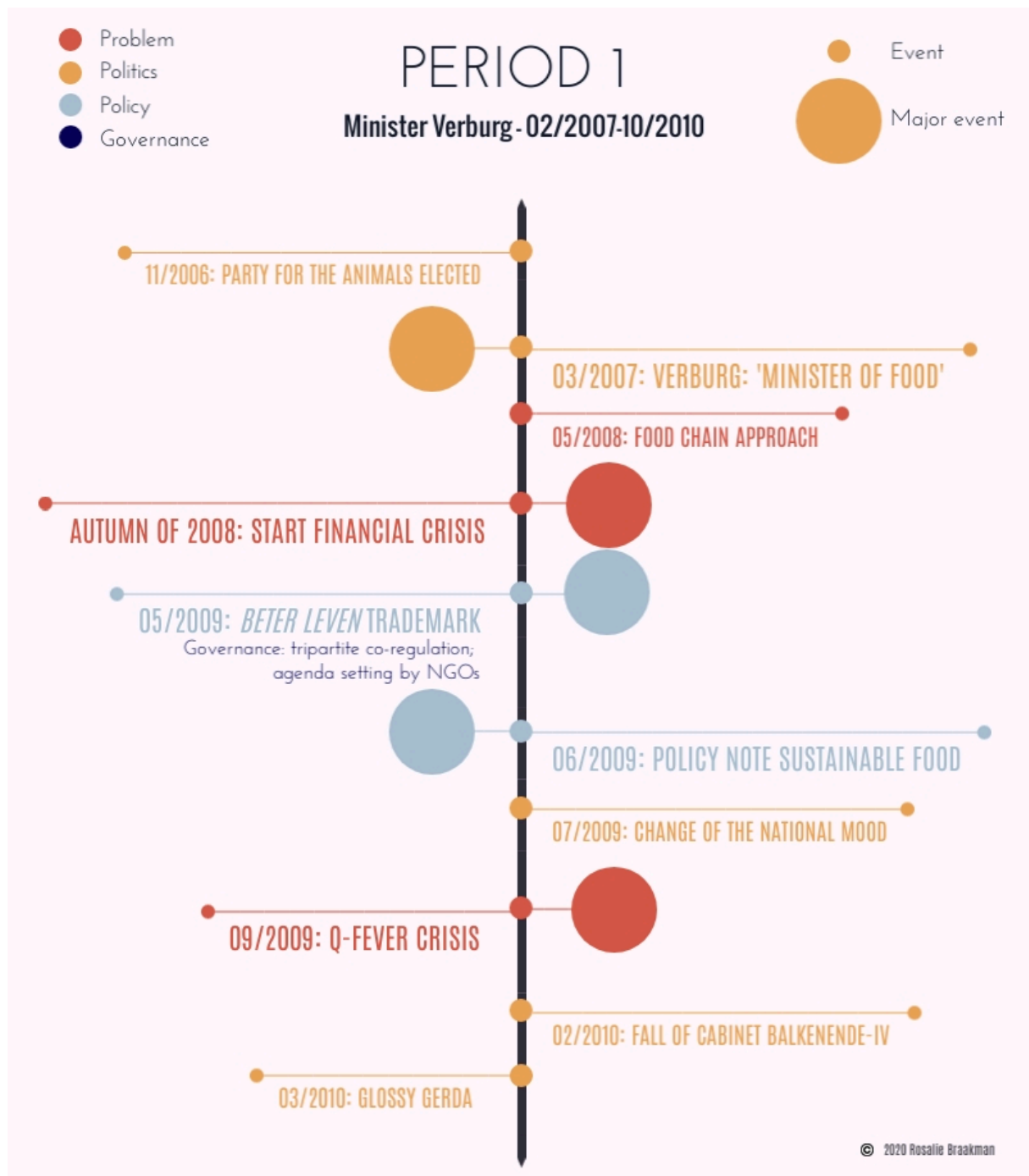


Figure 4.1.1 – A timeline of period 1: Verburg

Problem

Focusing events: food crises

Even though problems with animal food production, such as animal diseases and food fraud, were nothing new under the sun and had come and gone for decades (NRC, 2017), during Verburg's time as minister of LNV, they led to increased societal worries.⁷ Especially the national q-fever crisis in 2007 ignited larger concerns about factory farming practices and its consequences for animal welfare, but also for public and animal health, and the environment.

⁷ Interview #5

This crisis is elaborated on after summarising cases of animal disease, animal welfare incidents and food quality, safety and fraud incidents.

Important animal and zoonotic diseases of the recent past included (NRC, 2017);

- 2007: the Q-fever zoonotic disease was the biggest outbreak in the world. 4253 people become sick, 74 of which die. While goat farmers are being compensated for the mass culling of their income, human victims are not being compensated; they are angry about sluggish governmental response and poor information provision. In 2017, the national ombudsman requested an apology or gesture from the government for its poor policy action. This request was denied;
- 2010: Normally, patients in the Netherlands do not receive so much antibiotics but for our livestock, vast amounts are being used to prevent disease in animals; Dutch use of antibiotics for livestock has increased by 83% between 1999 and 2007 and is highest of Europe. Moreover, antibiotics are illegally used as growth promotor. Of the investigated farms, 35% of chicken farms, 68% of pig farms and 88% of calf farms in the Netherlands are infected with the MRSA bacteria, and so are farmers: one-third of farmers are infected. The bacteria are dangerous as they continue to grow stronger when stronger antidotes are being used. Every once in a while, the antibiotic-resistant MRSA bacteria, hailing from antibiotic-filled chicken, pigs or calves, spreads in hospitals and threatens the weak. Also, patients that could normally be saved from the infection could suffer seriously, or even die, because the bacteria cannot be beaten with regular antibiotics. The overuse of antibiotics is a political question according to RIVM but needs to be debated with the sector who is trying to produce for the lowest possible cost. 5% of veterinary clinics prescribe over 80% of all antibiotics and make a good living out of it. Disconnecting prescription and sale of medication is one of the suggested measures, but outgoing minister Verburg of LNV only reports to the Second Chamber that use of antibiotics should to be reduced for at least 20%. This should be done by the sector itself according to free market economy principles. Experts argue for more severe measures because of the public health hazards and failing private self-regulation. Because of the economic importance of the sector, no one seems to dare intervene adequately, while part of the sector is asking for more governmental control. Consequently, small and careful steps are taken but a discussion about how to responsibly solve issues in the animal food production sector for the long-term is being postponed (Radar, 2010).

Animal welfare incidents of the recent past include (NRC, 2017):

- 2007: animals are structurally mistreated while being transported through Europe; they are closely packed together, are not being fed, and die or get injured on the way. Minister Verburg of agriculture declares to sharpen supervision even though *Nederlandse Vereniging van Varkenshouders* claims singularity of the event;
- 2008: an inside VWA-report is published by foundation *Dier & Recht*, saying controllers often ignore mistreatment of animals in slaughterhouses; live animals end up in hot water or get sliced while they are still conscious. The report is being investigated at the request of minister Verburg, the results of which align with the report. A Belgian veterinary worries about the poor supervision and malpractices in animal transport. It becomes clear the problems are serious and structural;
- 2008: NCA's criticism persists; in June 2008, a report is published on intensive livestock farming, which questions the government's plans to increase its sustainability, animal welfare and innovation, and concludes that the minister is falling short in implementing sufficient measures. Moreover, evaluation of measures is insufficient;

Recent food quality, safety, and fraud incidents include (NRC, 2017):

- 2007-2008: Jan F., a Dutch meat trader has been selling horsemeat, unfit for human consumption, as halal beef (Omroep Brabant, 2013);
- 2008: VWA's controls, especially of livestock and meat, are under pressure and falling short due to money shortages and privatisation of controls;
- 2009: again, more prohibited substances are found in animal feed.

Q-fever epidemic

Concerns about animal welfare, and both human and animal health rose after the Q-fever epidemic: a bacterial infectious disease that can transfer from animals to humans, or a zoonosis. In this case, the *Coxiella burnettii* bacteria transfers from (milk) goats to humans, especially in farm-dense areas such as the province of Noord-Brabant (figure 4.1.2). In the Summer of 2007, the first cases of human sickness in the Netherlands were confirmed, followed by a national epidemic between 2007 and 2010. The Q-fever outbreak soon became a social disaster: mass culling of (pregnant) goats and sheep were ordered by the ministers of agriculture, Verburg, and VWS, Klink, to avoid further spreading of animal disease amongst other farms and especially onto humans. Since measures were not sufficient, culling of (pregnant) animals reoccurred every year of the epidemic (RIVM, 2018). As the approach of this policy was distrusted and caused turmoil in both society and politics (Boerderij, 2010), an independent research commission was employed to evaluate LNV and VWS's policy, taking human health, veterinary health, communication and agriculture into account. As the policy theme was not considered a priority until careful measures proved insufficient and the epidemic continued to grow, measures were only intensified in 2009 – two years after the first notification of human victims – from reporting requirement, strict farm visitor policy, voluntary vaccination, hygienic measures, bulk tank milk audits, to prohibition of transportation, visitors, breeding of animals and mucking stalls, and eventually compulsory vaccination and the culling of in total 62,500 (pregnant) animals on infected farms (Evaluatiecommissie Q-koorts, 2010, p.33, 106-107; RIVM, 2018).

Throughout the years, the government's response has been criticized. Nieuwsuur (2012), for example, claimed that the government had long known the epidemic's magnitude was beyond what taken measures could deal with. The Evaluatiecommissie Q-koorts (2010) affirms delay in implementation of measures due to LNV's doubts regarding proof of causality and its argument to secure privacy of farms, which should not have been prioritised above human health (p.110). In 2008, the government was said to neglect serious cases of infection, found in tank milk audits and by using the PCR test – which ministers Klink and Verburg claimed to have used from 2009 onwards only. The audits proved one-third of goat farms was infected while only farms with *abortusstormen*, or 'miscarriage storms' were officially infected. These outcomes were then kept from LNV-minister Verburg for six months. It is claimed that many cases of illness and possibly death could have been prevented if the government would have responded quicker.

Through all the failures and sluggishness by the government, the zoonosis was free to become a major irreversible public health threat that caused many human victims and fatalities throughout the country. With between 40,000 and 50,000 cases of human infection, causing for over 4,000 cases of sickness, and at least 74 deaths, the Netherlands faced the largest Q-fever outbreak in the world (Evaluatiecommissie Q-koorts, 2010; NRC, 2017; RIVM, 2019; Van Roeden, 2018).

Today, diagnosed chronic q-fever patients still struggle as no cure exists and the disease even tends to worsen. The illness undermines their quality of life severely and causes financial, relational and physical impacts, on top of an increased risk to death (Van Roeden, 2018; NOS, 2018d). Since the disease has disappeared from the agenda and receives less attention, new patients are hardly being recognized, acknowledged or diagnosed too late while cases of infection continue to appear (NOS, 2018c).

Victims are barely being compensated by the government, with a single compensation of maximum €15,000 and only if they were diagnosed before 2011, while tens of millions of euros were freed to aid goat farmers in creating a new life, new waves of turbulence continue to emerge in society, criticizing the government's sluggish response to the epidemic, lack of transparency, poor provision of information and persistent failure to control the situation which have caused even more social unrest (Evaluatiecommissie Q-koorts, 2010; NRC, 2017; NOS, 2018c+d). Society and politics still argue for larger and broader compensation.

In 2011, a mostly symbolic *motie van treurnis* was submitted to address the sluggish government response to the crisis, since responsible minister of VWS Klink was already replaced by Schippers. The idea that q-fever responsibility would be fully placed at VWS was considered politically sensitive, as it would place one minister above the other (NRC, 2011). However, it was also argued that economic benefits and farmers' interests had been elevated above human health, possibly due to the close ties the government and ruling party CDA have always had with the sector (NOS, 2012). Paradoxically, the Evaluatiecommissie Q-koorts (2010) claims actors from the sector, including individual goat farmers and LTO chairman of dairy goat holdings, were bypassed during the entire epidemic and implementation of measures, hereby undermining a role for the sector in finding possible solutions but neglects its responsibility as well (p.108-111).

At the time, this human and animal health crisis ignited larger concerns about industrial farming practices and its consequences for animal welfare, but also for human and animal health, and the environment.

Important lessons for the government, stated by de Evaluatiecommissie Q-koorts (2010), include that a crisis such as the q-fever crisis should be solved together *with* and not *for* parties involved, and communicate openly about what is known and unknown early on (p.112). Also, one ministry is to be held responsible for dealing with a crisis. In case of zoonosis, VWS should be in charge, according to the Evaluatiecommissie Q-koorts (2010, p.113).

Notably, in 2010, the Evaluatiecommissie Q-koorts suggested NVWA to become an expert authority that should be able to act as crisis manager independent from both LNV and VWS ministries. From 2012 on, state secretary Bleker of ELI was responsible for the q-fever dossier.

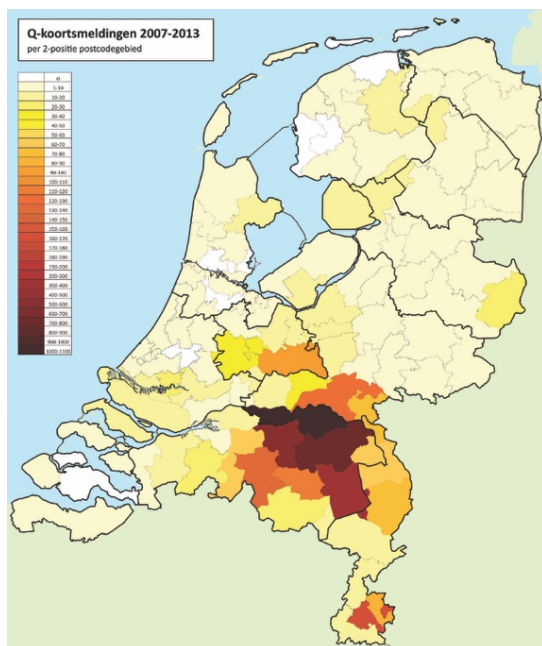


Figure 4.1.2 – Dissemination of q-fever among humans between 2007 and 2013. Darker areas are impacted the most. Source: Q-koorts.nl (2019)

Agenda setting by NGOs

Civil society organisations such as *Wakker Dier* foundation, *Dierenbescherming*, and *Stichting Natuur en Milieu* were rather active in agenda setting and encouraging public debate on changing the food system.⁸ In their own ways, these organisations stated, ‘it all needed changing’ and were involved in discussions with the government. *Wakker Dier* had rather activist ideas, whereas *Dierenbescherming* was more conservative.⁹

Societal occupation with food

While agenda setting was mainly done by NGOs, society was getting more occupied with food in general; there was a growing collective consciousness about the (health) impacts of food. Critical consumers united and started organising platforms to share about and discuss food problems, such as online platform *Foodlog* and an annual series of public debates on the future of food at the *Rode Hoed* in Amsterdam.¹⁰ Parts of society worried not only about food production but also included consumption-related issues such as health impacts and nutritional values of food choices.^{11,12}

Politics

National mood: divided

Politics were divided in this time period.¹³ An important political change occurred when the Party for the Animals (PvdD) gained two seats in the Second Chamber. The party caused for a lot of policy work by asking many parliamentary questions.¹⁴ Mainly CDA – mostly regarded advocates for the agricultural sector – seemed unhappy with their new colleagues (NPO Focus, 2020).

The Dutch Party for the Animals was the first of their kind in the world; no political party had stood up for animal rights before. While long considered a one-issue party in the political city of The Hague, the Party for the Animals can be viewed as a policy entrepreneur as they changed the (international) political environment drastically. In 2020, PvdD has 20 sister parties worldwide (NRC, 2018).

Planned elections

Cabinet Balkenende-IV was installed in February 2007 after elections to the House of Representatives were held in November 2006. The new cabinet consisted of political parties CDA, PvdA and CU. Its main goals were to increase social cohesion, safety and respect, innovation, sustainability and an active position in international and European decision-making. Balkenende-IV’s motto was *samen werken, samen leven*, or working together, living together. During this cabinet, a period of heavy economic malaise started, that would last for 10 years. In 2008, the cabinet took measures to support the financial sector but was hesitant to further shrink the economy (Parlement.com, 2019b).

At the start of Balkenende-IV, the cabinet intended not to take unpopular budgetary measures. However, when the wave of economic crises set in, were such resolutions unusable.

⁸ Focus group

⁹ Focus group

¹⁰ Focus group

¹¹ Focus group

¹² Interview #6

¹³ Focus group

¹⁴ Focus group

Minister Bos of Finances needed to employ dozens of billion euros to save financial institutions from bankruptcy (Parlement.com, 2019b).

Changes of government: Balkenende-IV/Verburg

Gerda Verburg became minister of LNV, for coalition party CDA. She announced herself to be minister of food and minister of 16 million Dutch people.¹⁵ She wanted to connect with the Dutch – what she did at the agricultural department had to be relevant for 16 million Dutch people. It was her slogan and a rather new approach.¹⁶ Verburg was immediately focused on food and preferred to rename the ministry VNL – *Voedsel, Natuur en Landbouw*¹⁷ – instead of LNV, putting food and consumers first.^{18,19,20} She wanted not only to inform but also change consumer behaviour.²¹ While her predecessor, minister Veerman, had a public interest perspective too, in practice, he was more focused on securing farmer interests and rural areas. Verburg's new approach really changed the discussion on extending agricultural policy to include food policy and create room for topics such as consumption of plant-based food on the agenda.²² There was enough political commitment to seriously consider problems of food production concerning limited natural resources and climate impacts – mostly of the animal sector – which was in line with the trend of political attention for sustainability, environment, fair trade, and animal welfare.^{23,24} A transition to more plant-based food was being politically endorsed.²⁵

Political upheaval

Cabinet Balkenende-IV fell in February 2010, due to disagreements over the continuation of the Dutch mission in the Afghan war. When the cabinet, and minister Verburg, were departing, LNV published a magazine; the 'Gerda'. The timing and content were a little bit off according to critical media; not only were elections approaching and were political motives thus suspected, the q-fever epidemic was peaking and not adequately addressed according to the public. It was regarded unsuitable to publish this type of magazine in times of national crisis.²⁶

As a result, Verburg's progressive approach to food policy diminished,^{27,28} due to a combination of criticism by the media. Besides the magazine, Verburg was mocked for her plant-based and insect policy ideas and plans.²⁹

¹⁵ Focus group

¹⁶ Interview #5

¹⁷ Food, Nature and Agriculture

¹⁸ Interview #6

¹⁹ Interview #7

²⁰ Focus group

²¹ Interview #7

²² Interview #5

²³ Interview #3

²⁴ Focus group

²⁵ Interview #3

²⁶ Focus group

²⁷ Interview #1

²⁸ Interview #6

²⁹ Focus group

Policy

Policy note *Duurzaam voedsel*

Sustainable food policy focused on (LNV, 2009):

- Strengthening sustainable and healthy food production and consumption;
- Connecting supply and demand better by including all stakeholders, from producer to consumer;
- Creating a more transparent/visible production process;
- Respecting biodiversity, the environment, nature, well-being of humans and animals;
- Maintaining a leading position regarding innovative production both in Europe and beyond;
- Remaining a large exporter of both food products and knowledge;
- Influencing sustainability of world chains, such as soy;
- Benefiting economically from the agricultural sector;
- On a national level, empowering consumers with knowledge and awareness to seduce them into making better food choices;
- Focusing on learning how to choose, cook, eat and appreciate healthy food, by learning it at a young age

All ambitious policy goals and plans for sustainable development of the food system in all its facets – on both national and international level – were announced in the policy note *Duurzaam voedsel*, which was published in June 2009.³⁰ The government had never published a plan for sustainable food policy like this before: the government was now responsible for both agenda setting and taking the lead.³¹ Various projects and instruments of traditional as well as transitional character were introduced in the note.³²

One of the main focus points of Verburg's policy was the attention she paid to youth and their connection to food. Various policy notes and projects stress the importance she gave to informing, educating and enthusing/energizing students of secondary and higher education about the background and experience of food. For example, social internships connected to food, and 'tasting lessons' were introduced.³³ Moreover, the Netherlands Nutrition Centre (VCN)³⁴ was employed to educate the public and create more consumer awareness.³⁵ Another instrument, which received 10 million euro from the state, used to reach out to and include consumers, was the *Platform Verduurzaming Voedsel*.³⁶ The platform included various but interlinked themes in the field of sustainability.³⁷ Both research and NGOs received government funding for addressing food sustainability.³⁸ Businesses were invited in a competition to create the best plant-based product. The government allocated about 3 million euros for the programme (Tweede Kamer, 2019).³⁹

Verburg organised various meetings with companies and organisations working in those fields to promote them. All stakeholders of the food chain were included, according to the 'chain approach'.⁴⁰ The government reached out to societal actors to co-regulate.

³⁰ Sustainable Food

³¹ Interview #7

³² Focus group

³³ Focus group

³⁴ Voedingscentrum Nederland

³⁵ Interview #3

³⁶ Sustainable Food Platform

³⁷ Interview #7

³⁸ Interview #6

³⁹ Interview #6

⁴⁰ Interview #7

Verburg also paid attention to food policy and new, innovative ideas such as insects (grasshoppers) for food and plant-based proteins. One of the policy programmes to promote consumption was the SBIR.⁴¹ The SBIR was not carried out because Verburg's 'momentum' had passed.⁴²

The future of intensive livestock farming

Another important theme in this period was the vision for the future of livestock farming. The *Toekomstvisie Veehouderij* was presented in January 2008. Its core message was the aim to create a vision that includes all aspects of sustainable livestock farming and is aligned with societal wishes of a production process that respects humans, animals and the environment all over the world (Tweede Kamer, 2009). A covenant was created to increase animal welfare.

A public-private partnership, the covenant *Tussensegment*, was created to offer more animal-friendly meat but more affordable than organically produced meat. Housing of animals would be improved to enhance better animal welfare. So-called 'comfort class' meat, hailing from those improved stalls, would be labelled with Dierenbescherming⁴³'s *Beter Leven* trademark. The big question was; will the consumer be willing to pay more for merely improved animal welfare instead of improved taste or better personal health benefits? And, will the timing be right to implement such a certification label? Some NGOs collaborated on creating the label, together with LNV. The timing turned out quite right; the label would be successful as consumers would choose differently en masse.⁴⁴ In 2020, the *Beter Leven* trademark is 13 years into being and still successful.

A major change occurred after the opening of a policy window that led to the creation the *Beter Leven* trademark. A key actor, which could be regarded a policy entrepreneur in MSF terms, was NGO *Dierenbescherming*⁴⁵. The *Beter Leven* trademark a form of tripartite co-regulation according to Steurer's (2013) model of governance modes.

Minister Verburg of LNV could be regarded policy entrepreneur because of her progressive approach by extending agricultural policy to food policy and include the consumer perspective, long-term sustainability and initiating co-regulation with CSOs and business parties.⁴⁶

4.2 Period 2 – Bleker

14 October 2010 – 5 November 2012
(753 days)

Summary

After cabinet Balkenende-IV fell, on February 20, 2010, due to disagreements over the continuation of the Dutch mission in the Afghan war, pre-term elections were held that year. In October 2010, cabinet Rutte-I, supported by Geert Wilders' populist right-wing Freedom Party (PVV) was sworn in. In this government, the ministerial departments of Economic Affairs (EZ) and Agriculture (LNV) and were merged into a combined department: EL&I – *ministerie van Economische Zaken, Landbouw en Innovatie*.⁴⁷ Herewith, the position of

⁴¹ Small Business Innovation Research

⁴² Interview #7

⁴³ NGO; Animal Protection

⁴⁴ Focus group

⁴⁵ NGO; Animal Protection

⁴⁶ Interview #7

⁴⁷ Ministry of Economic Affairs, Agriculture and Innovation

minister of agriculture was being replaced with the position of state secretary, which was now being occupied by Henk Bleker of CDA.

While the global financial crisis had begun in 2009, the results for the Netherlands and Dutch policy, including sustainable food policy, were merely introducing themselves during cabinet Balkenende-IV and only came into full being during cabinet Rutte-I. More severe austerity measures were taken to limit the economic damage, including downsizing of government.

The withdrawing of government resulted in increased responsibility for companies and consumers. Also, the government tried to reduce the regulatory burden and eliminated gold plating of EU legislation. The national mood seemed to support the withdrawal of government, as it was rather neo-liberal of character. Right-wing populist party PVV gained much after the 2010 elections. PVV party leader Wilders invented the term 'left-wing hobbies' to diminish the importance of certain policy fields, including nature and (sustainable) food policy.

While the entire government executed many budget cuts and pulled back on active policy action and responsibility, food and nature policy got hit exceptionally hard.

The most important events of this period are shown in figure 4.2.1.

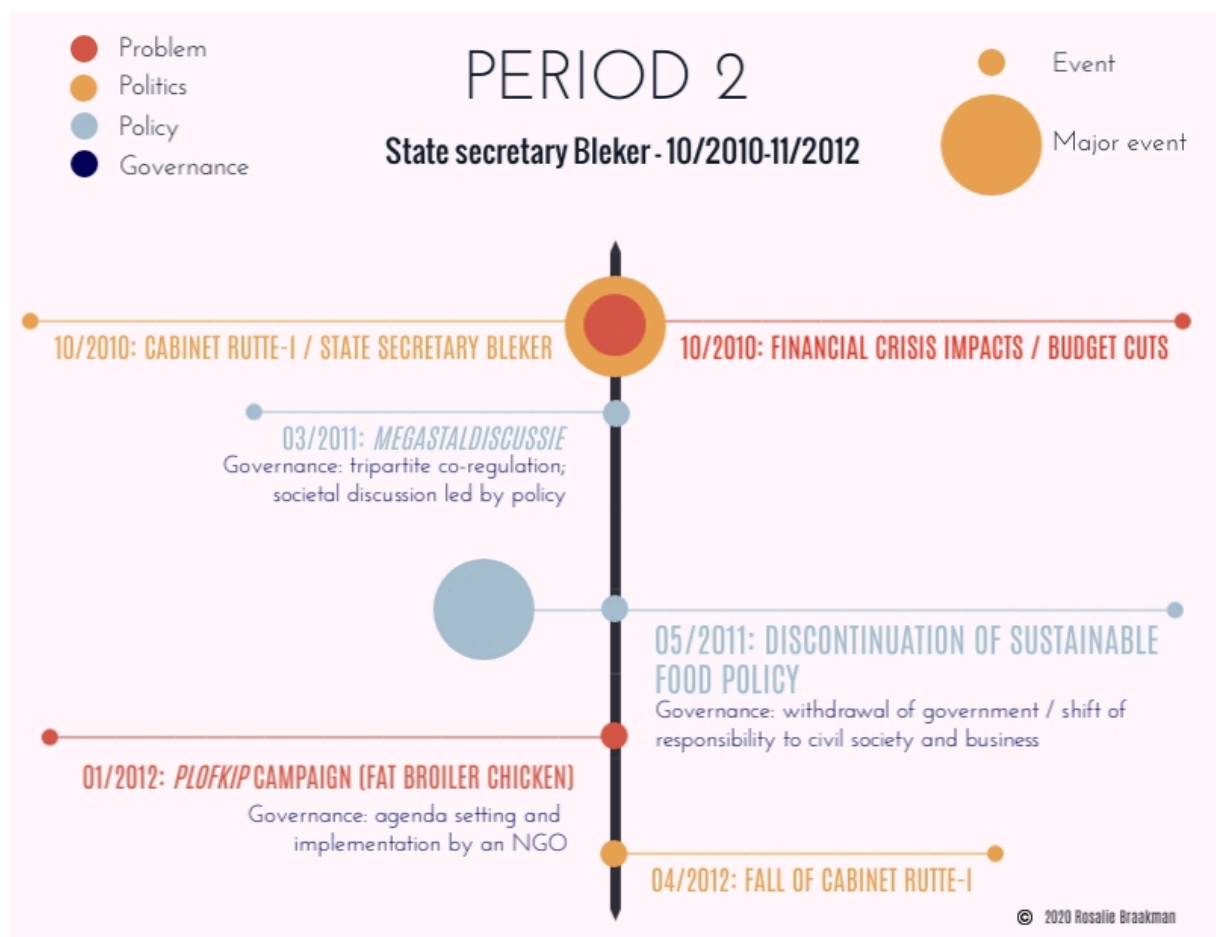


Figure 4.2.1 – A timeline of period 2: Bleker

Problem

Focusing event: financial crisis

A major focusing event in this period was the start of the financial crisis.⁴⁸ The timeline of the crisis and its impacts is as follows (NOS, 2017a; NOS 2018a+b; NOS op 3, 2017):

- On September 15, 2008, American business bank Lehman Brothers fell, which marks the start of the global economic crisis. As the US government plans to rescue banks with a 700-billion-dollar plan did not include rescuing Lehman Brothers, the problems spread like wildfire and the international crisis of credit begun as banks from all corners of the world had investments in the US;
- In 2008, minister of finances, Bos claimed the Dutch economy could handle the global financial misery. This message was repeated in September's annual *troonrede*. Consumers were not yet affected by the crises: there was plenty of work, houses were being sold and bought easily – rather as investment than for housing purposes. A few weeks later, however, the Dutch economy did not prove immune to the increasingly global crisis;
- Dutch banks started to feel it too and a deep recession emerged. The economy shrunk, leading to risen unemployment rates, countless bankruptcies, and decreased world trade. As the ABN-Amro takeover negotiations took too much time and resources to close the deal fell short, ABN-Amro was the first in need of governmental saving and was partly nationalised for 17 billion euros, along with Fortis Nederland and insurer ASR. Other banks followed, for another 15 billion euros of state support. The mortgage crisis smoothly switched over into a crisis of credit, a financial crisis and a banking crisis in which many banks reports losses of billions;
- In 2009, the economy fell further into the recession, calling for more government action than saving banks from collapsing as the transport, steel industry, auto industry, construction, and the housing market crashed down as well. The cabinet worked on a crisis plan with firm measures from February onwards as the crisis threatened to worsen and reach the depths of the 1930s' Great Depression with stock exchange plummeting and a looming rise in unemployment rates – especially for construction. Internationally, bankers are held accountable and are summoned to make a statement on the far-reaching consequences. In the Netherlands, an accord is reached on limiting rewards and bonuses for bank directors;
- In 2010, the worst part of the economic recession was over, although unemployment still rose considerably. However, the fall of banks led to another recession in 2011, in which unemployment rose to 700.000 and the housing market collapsed in its entirety;
- In 2012, after a short revival in 2010-2011, another recession emerged. Many companies were affected and were forced to cut down on personnel. While some individuals and companies were affected harshly, those who were able to keep jobs and houses did not suffer much. While the government received less taxes due to decreases in consumption, company revenue, and income tax, more was spent on unemployment and social assistance benefits, but also on rescuing banks;
- In 2013, another Dutch bank, SNS, was nationalised as the European crisis continues, while DSB Bank fell – leaving only the Rabobank to survive without state support;
- In 2014, after losing billions of euros, the Dutch economy started to slowly crawl from the dark and showed careful growth. From then, gradual improvements were observed. However, effects of the manifold crises are a shrunk economy and risen state debt, from 267 billion euro in 2007 to 457 billion euro in 2014. Many sectors suffered, including banking, construction, stores, auto-industry, workshops and car dealers. In the financial sector, bankers and advisors lost their jobs on a massive scale

⁴⁸ Focus group

through downsizes and reorganisations. Construction hardly got new projects and only half the number of new houses is requested than usual, leading to many bankruptcies (see figure 4.2.2);

- In 2017, the biggest growth since the crisis was measured by CBS. Consumer confidence and means rose as well, to the highest level in ten years' time. Other countries' economies showed growth as well. IMF announced improvement of the world economy and growth in international trade.

To stimulate the economy and to limit the recession's impacts, a number of measures was taken by the Dutch government, including support of business investments, measures to maintain and restore employment, investments in construction and infrastructure, and investments in sustainable and innovative economy. Government expenditure rose due to increased unemployment assistance and steering measures, whereas income declined because of shrunk income taxes amongst others, resulting in a significant growth of the budget gap. In October 2009, the cabinet enforced 20 workgroups on different policy themes to explore budget cut possibilities without paying attention to any limitations such as legislation, regulations, cabinet agreements or ministerial boundaries. In April 2010, cabinet presented the results to the Second Chamber. One year later, in October 2010, *Brede Heroverwegingen*, or a package of measures to reduce the budget gap was presented by the cabinet.

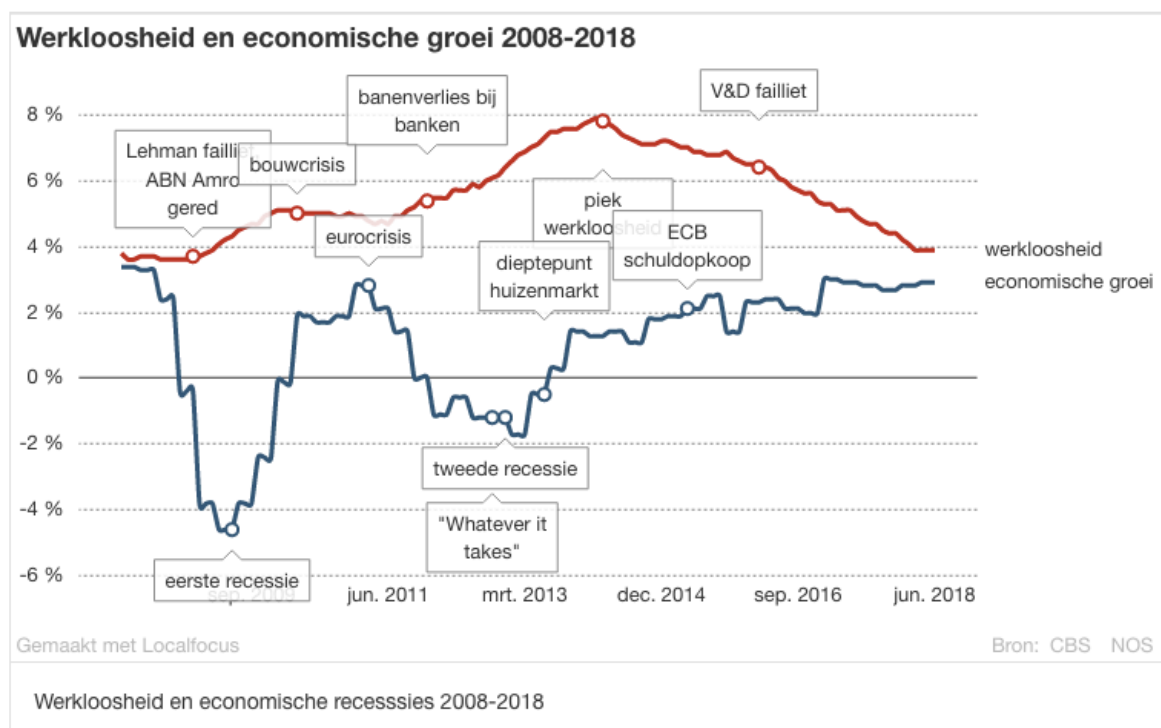


Figure 4.2.2 – Development of Dutch unemployment (red) and economic growth (blue). Source: NOS (2018a).

Focusing events: food crises

As described in the previous chapter, about Verburg's period as minister of LNV, there have been various cases of animal and zoonotic diseases, animal welfare incidents, and issues with food quality, safety and fraud in the past. During Bleker's time as state secretary of EL&I, this was no different.

Important animal and zoonotic diseases (NRC, 2017);

- In 2012, RIVM⁴⁹ rang the alarm about one of the biggest outbreaks of food contamination in the Netherlands; the outbreak of salmonellosis in the Netherlands – an infectious intestinal disease. Hundreds of people got infected with the *Salmonella* Thompson bacteria through eating infected smoked salmon. Four people died (prematurely) due to the infection. At the end of 2012, 1,200 cases of infection had been registered, while 23,000 consumers were estimated to suffer from diarrhoea, abdominal cramps or fever for at least a few days (OVV, 2013). Both the producer of said salmon and the NVWA⁵⁰ were unprepared for food safety issues of this scope and lacked proper coordination, resulting in confusion amongst consumers. NVWA was criticised for inadequate supervision. The responsible salmon producer received a fine of a total of €4,200.
- In 2012, RIVM claimed it is hard to calculate a safe living distance away from livestock farms, in relation to infective diseases (RIVM, 2012).

Food quality, safety, and fraud incidents included (NRC, 2017):

- In 2011, a second report by a Belgian veterinary was published (for the first report, see Analysis part I – Verburg: 2008). There are still problems with NVWA controlling slaughterhouses and export assembly locations (NRC, 2017). Chances of malpractices and fraud are still high, mainly at small and medium-sized slaughterhouses due to lack of supervision. In three years, improvements are hardly visible. The slaughtering of animals, infrastructure and hygiene are not acceptable. The report functioned as an indicator in terms of MSF.
- In 2011, the most important food safety issue was formed by the EHEC crisis. EHEC prevailed from May to July 2011, in Germany, where *E. coli*-infected vegetables, such as raw tomatoes, cucumbers and lettuce, caused for 4,321 cases of infection, and 52 deaths (NOS, 2011; Van der Meulen et al., 2012). The so-called ‘cucumber crisis’⁵¹ did not impact the Netherlands much, even though Dutch vegetables were investigated too (Van der Meulen et al., 2012). Besides 8 cases of infection, the largest impact in the Netherlands was the closing of EU-borders with Russia, even though research led to a single sprouts farm in Germany and Dutch vegetables proved harmless (Volkskrant, 2011).

Plofkippen campaign by Wakker Dier

In 2012, a major campaign had been commenced by NGO Wakker Dier.⁵² It addressed the issue of over-fed chickens, *plofkippen* (fat broiler chickens), which were sold for little money against a high cost for the animals themselves. Within six weeks, *plofkippen* are being pumped up into a chunk of meat of more than 2 kilos, ready for slaughter. In their six weeks of life, they never got to see daylight and resided in a tiny cage smaller than an A4 paper (Wakker Dier, 2020), they likely stood in their own faeces all day and suffered from foot ulcers or collapsed legs. For reference, a normal life expectancy for chicken is up to 8 years (RTL Z, 2018). The campaign aimed to end this unethical practice for good. In 2018, all Dutch supermarket chains refrained from using *plofkippen*, a leap forward for the sector, according to researchers (RTL Z, 2018).

⁴⁹ National Institute for Public Health and the Environment

⁵⁰ Netherlands Food and Consumer Product Safety Authority

⁵¹ Focus group

⁵² Focus group

Politics

National mood: neo-liberal

Somewhere around the Summer of 2009, the political climate and national mood changed.⁵³ Due to the financial crisis and consequent budget cuts, the government shrunk and withdrew, which was reflected in the neoliberal national mood.⁵⁴ Right-wing populist party PVV gained much after the 2010 elections. PVV party leader Wilders invented the term 'left-wing hobbies' to diminish the importance of certain policy fields.⁵⁵ Policy subjects such as 'nature management' and 'sustainable food policy' were dismissed as 'left hobbies' – unnecessary luxuries of the left. All so-called national add-ons, or 'extras' to national or European legally obligatory policy, were repealed.⁵⁶

Political upheaval and pre-term elections

Cabinet Balkenende-IV fell in February 2010 after coalition disagreements about the continuation of a military mission in Afghanistan. After the 2010 elections, including considerable losses for CDA, minority cabinet Rutte-I was installed, including VVD and CDA, supported by PVV in the form of a parliamentary support agreement. CDA struggled with major internal division on the decision to include PVV (Parlement.com, 2020c). The new cabinet's duty was all about reducing costs and shrinking the government.

Changes of government: Rutte-I/Bleker

Main targets of Rutte-I were reducing government expenditure, increasing safety, and shrinking the government, on top of fighting economic crises and limiting immigration. Rutte-I's motto was Freedom and Responsibility, suiting the liberal character of VVD's first ever prime minister (Parlement.com, 2019a+2020c).

Major changes occurred after the elections and formation of a new cabinet; Rutte-I. The ministry of Agriculture, Nature and Food Quality (LNV) was being discontinued and merged with the ministry of Economic Affairs (EZ). Its new name was the ministry of Economic Affairs, Agriculture and Innovation (EL&I). The agricultural department was now run by a state secretary instead of a minister; CDA's Henk Bleker filled this position. For the first time in 75 years, there was no longer a minister of agriculture (Boerderij, 2010). This change represents the shrinking of government and a shift of responsibility to societal actors, in terms of governance.

Political upheaval

There was a political twist around the time of the changeover from Verburg to Bleker, which coincided with the financial crisis and change of national mood. While the entire government executed many budget cuts and pulled back on active policy action and responsibility, food and nature policy got hit exceptionally hard.⁵⁷ Due to a combination of budget cuts and Bleker's personal opinions, almost all food policy that was built up by Verburg was being ended abruptly by their successor state secretary Bleker.⁵⁸ However, the consumer perspective was not discontinued altogether since Bleker was not completely focused on farmer

⁵³ Focus group

⁵⁴ Interview #6

⁵⁵ Focus group

⁵⁶ Focus group

⁵⁷ Focus group

⁵⁸ Focus group

interests.⁵⁹ In the policy community, diverging views on this sudden change exist. Some say the budget cuts and end of national gold plating were the main reason for the sudden end of sustainable food policy.⁶⁰ Others, however, claim that Bleker was not personally interested in food and did not communicate with the policy department about his choices.⁶¹ In fact, Bleker threw aside his speech at a public event and announced the end of sustainable food policy without any notice.⁶²

In Spring 2012, the cabinet could not find an agreement for more budget cuts. When PVV withdrew its support, the cabinet fell. The other coalition parties, VVD and CDA, did not take this decision lightly and did not intend on collaborating with PVV in the future (Parlement.com, 2020c).

Policy

Factory farming discussions

Society was worried about the existence and emergence of *megastallen* and *varkensflats*^{63,64}. Various issues surround these forms of factory farming; worries about animal welfare and animals not being able to go outside. While the need for far-reaching changes in livestock farming has been argued for oftentimes – both by politicians and research committees –, little changes have occurred over the past years (NRC, 2010).

In 2001, think-tank *Toekomst van de veehouderij*⁶⁵, or commission Wijffels, problematised and articulated societal worries about the boundaries of livestock farming. Dominant developments in livestock farming as described by the commission included: interaction with living animals rather than animals as means for production; environmental consequences of mineral emissions; lack of ‘robustness’ – meaning failure of human attempts in overpowering and undermining natural self-sufficiency and resilient systems; internationalisation overruling local safety; food scandals and animal disease outbreaks causing for public health hazards and trust issues; society paying monetary, and other, costs for holding up the sector while simultaneously being impacted by its negative consequences – and paying for their undoing; the Dutch romanticized image of ‘the farmer’ possibly allowing for, and partly explaining, the long-term governmental support of the sector; lacking a balance of succeeding greatly in producing for international export within its preconditions, and failing to meet production standards set by Dutch society (Commissie Wijffels, 2001, p.3-5).

In 2010, Commissie Wijffels’ recommendations were still not (fully) addressed. In fact, the sector has scaled up and has intensified further. Pricing of animal products has not changed either; buying an egg in the supermarket in 2011 cost the same as 60 years before – the true price of which is paid for by animals, nature and the environment, and (future generations of) humans as well (NRC, 2010).

In April 2011, a ‘plea for sustainable livestock farming’ was published by over a hundred professors, led by professor Roos Vonk, of Radboud University Nijmegen, in a response to governmental inaction on changing the livestock sector. The ignoring of Commissie Wijffels report led Vonk to speak up:

⁵⁹ Interview #5

⁶⁰ Interview #5

⁶¹ Interview #6; Interview #7

⁶² Interview #7

⁶³ Dutch terms for factory farming; including (multi-storey) pig flats and livestock sheds housing up to 250 dairy cows, 7,500 fattening pigs, 1,200 breeding pigs, 120,000 laying hens, 220,000 broilers, or 2,500 veal calves (Alterra, 2007).

⁶⁴ Focus group

⁶⁵ Future of livestock farming

“Vonk: „*Het negeren van Wijffels was de aanleiding voor het manifest. Minister Verburg van LNV en met haar het flutkabinet Balkenende heeft het er lelijk bij laten zitten. De tijd is rijp voor verandering, want de maatschappelijke weerstand tegen de vleesindustrie neemt zienderogen toe.*”” (Brabants Dagblad, 2010).

Former minister Hans Alders was assigned the task of leading the broad societal discussion as requested by state secretary Bleker due to strong societal opposition. The discussion should answer whether *megastallen* are more animal-unfriendly, more harmful to the environment and less attractive to the eyes. Alders’ research made use of so-called ‘*burgerpanels*’, or citizens’ panels, in which small groups of citizens would visit mega-farms (to be) to see it with their own eyes (NOS, 2011b). However, the extent of citizen inclusion was criticized. Even though 7,000 signatures against *megastallen* were collected through citizens’ initiatives in a heavy-resistance municipality, most of them coming from farmer-oriented political parties CDA and CU (RTV Oost, 2011a), citizens and local governments from municipalities with heavy resistance would still have to make themselves heard and did not feel equally represented sometimes, as the research focused more on sector representation, according to a local government’s councillor (RTV Oost, 2011b).

In terms of MSF, the discussion on factory farming can be regarded a policy window. All streams were coupled: *varkensflats* were regarded undesirable by society, which formed enough political pressure to cause for a policy solution. Professor Roos Vonk played a central role in the process of coupling the streams: her plea represented societal disapproval.

In terms of governance, actors from all spheres took part in the societal discussion. However, they did not necessarily collaborate but were rather opposing each other.

Nitrogen measures: PAS

Negotiations on the PAS⁶⁶ regulation to address the problem of nitrogen emissions had begun in 2008. The regulation came into force in 2011, even though it was heavily criticized as it conflicted with European nature policy (Trouw, 2019).

The end of sustainable food policy

The financial crisis and consequent budget cuts impacted sustainable food policy heavily.⁶⁷ Budget cuts, and Bleker’s unusual governing style, resulted in the end of the consumer platform, the *Eiwitdialoog*, all policy action on changing food consumption behaviour, and the end of governmental support of NGOs. Most of the policy money that was left went to research and the start of the *Topsectoren* programme; financial support of the nine most important economic sectors. Even the department’s ‘own’ executive agency, *Voedingscentrum*, was threatened by the budget cuts, a controversial matter which was eventually settled by lawyers. The *Platform Verduurzaming Voedsel* was not being extended despite its success. National add-ons to EU policy, or gold-plating, was discontinued. All focus, money and policy work on sustainable food consumption was gone. Once again, income and interests of farmers and horticulturists were top priority on the governmental agenda. The only other agricultural topics that received public attention were issues relating to food safety and factory farming due to continuing food crises.⁶⁸

Both the team and budget were minimized by about 50%, and public-private partnerships needed to be cancelled.⁶⁹ As a consequence, the policy department was careful

⁶⁶ Programma Aanpak Stikstof

⁶⁷ Focus group

⁶⁸ Focus group

⁶⁹ Interview #7

when it came to food sustainability.⁷⁰ The Second Chamber asked Bleker repeatedly about the missing plan of action for sustainable food policy. Bleker repeatedly postponed creating or presenting one until the fall of the cabinet.⁷¹

The discontinuation of sustainable food policy forms a policy window – even though it could be perceived as a standstill or even step back instead of a step forward in terms of sustainable development. The combination of a shift in national mood towards neoliberalism and society not caring too much about ‘left hobbies’ or governmental interference, and politics needing to heavily reduce costs due to the financial crisis easily allowed for removal of national add-ons, such as sustainable food policy, and governmental attention for consumer behaviour.

4.3. Period 3 – Dijkssma

18 December 2012 – 3 November 2015
(1050 days)

Summary

Cabinet Rutte-I fell in April 2012 due to failed negotiations on further budget cuts to overcome the financial crisis of 2008 and the subsequent European debt crisis. Pre-term elections resulted in a new cabinet; Rutte-II.

The agricultural and food department was still incorporated in the *ministerie van Economische Zaken*⁷² and was directed by state secretary Sharon Dijkssma of political party PvdA. Politics and policy were focused on addressing food sustainability through reducing food waste of both at home and out-of-home food consumption. The consumer focus was maintained, and the protein transition slowly remerged on the agenda. A changeover of political staff allowed for new forms of collaboration with societal actors.

Dijkssma’s policy approach was rather conversational; many ‘green deals’ were agreed upon between the government and private parties. Herewith, the government facilitated and stimulated sustainable development, but responsibility remained with private actors. Legislation was an instrument uncalled for in this time.

In the meantime, in society, major problems with animal agriculture emerged. Focusing events included a large-scale, international case of food fraud with Dutch origins, large-scale violations of animal health and welfare, and the outbreak of Avian Influenza. A new plan was created for inspection within the animal production chain, as NVWA failed time and time again. Indicators and feedback influencing sustainable food policy included publications that focused on health consequences of animal-based production and consumption, the need for integrative food policy, and the UN Sustainable Development Goals.

Both government and society attention for food impacts increased, including health, animal welfare and environmental impacts of food. New businesses and NGOs played a role in this renewed focus on food. Major themes were food waste and plant-based products. A political actor was responsible for getting food waste on the agenda again.

The most important events of this period are shown in figure 4.3.1

⁷⁰ Focus group

⁷¹ Interview #7

⁷² Ministry of Economic Affairs

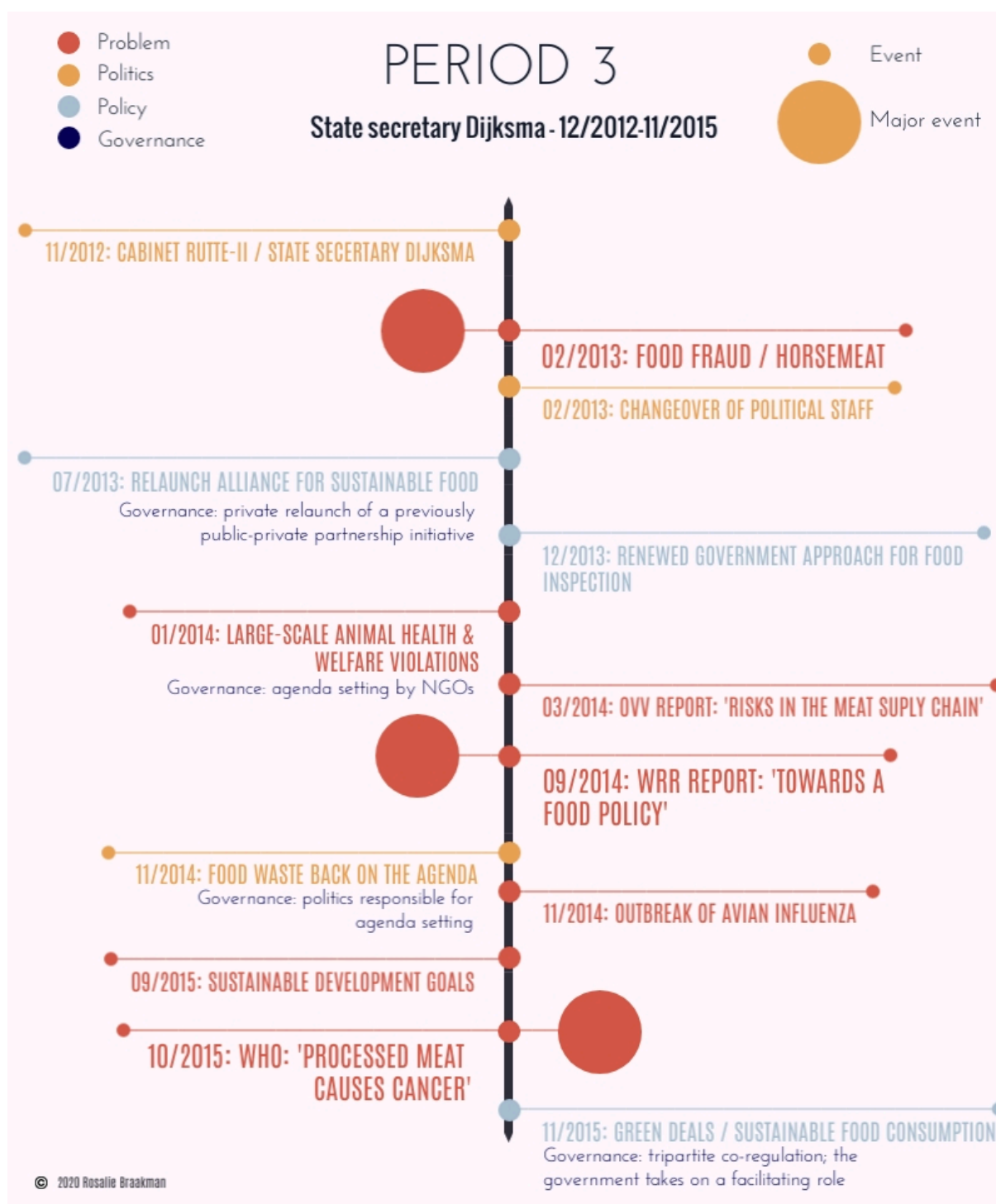


Figure 4.3.1 – A timeline of period 3: Dijksma

Problem

Focusing events: food crises

Important animal and zoonotic diseases;

- In 2014, a major focusing event was yet another animal disease crisis; the outbreak of avian influenza. Over 300 thousand birds were killed by either the virus or out of preventative measures (NVWA, 2020; Berenschot, 2015). Total direct costs of the outbreak are estimated between 49 to 56 million euros (Berenschot, 2015).

Food quality, safety, and fraud incidents included (NRC, 2017):

- In 2013, there was a large international case of meat fraud with horsemeat. Police investigation in seven European countries led back to a Dutch trader, who was also found guilty of meat fraud in 2007 (NOS, 2017b+c). The farmer from the province of North Brabant successfully managed to sell horsemeat that was unfit for human consumption to companies and food producers throughout Europe where it would be relabelled and sold as ‘cow beef’, or even kosher meat. He was able to continue this shady but lucrative business for years on end. While the news shook Europe, a food expert was not surprised as “the EU legislation is defective” (NOS, 2017b+c). Because of the various food fraud scandals of the past years and failing inspection, a taskforce was installed to address consumer trust in food. The 2013 case of horsemeat was one of the focusing events that contributed to the establishment of the taskforce.⁷³ Ideas of the Taskforce *Voedselvertrouwen*⁷⁴ included shortening of the food chain, improving business quality systems and enhancing the exchange of information between the government and business (AgriHolland, 2018).
- Another case of food fraud was uncovered in 2013. Between 2009 and 2011, ‘regular’ eggs were sold as more expensive ‘barn’ or ‘free-range’ eggs, resulting in a profit of about one million euros. Four Dutch companies in the laying hen business were persecuted.
- In September 2013, NVWA admitted having problems with inspections. A report was published in which structural shortcomings in inspection and implementation are described – both in small and midsized as well as in larger slaughterhouses. Violations of rules are not acted upon quickly enough, if at all seen or acknowledged;
- As of 2010, three governmental food inspection organisations had been working together: VWA, AID and PD (NRC, 2017). They were officially merged into NVWA.⁷⁵ The idea behind the merge was to save €50 million annually from 2012 onwards and was decided upon by cabinet Balkenende-IV in 2007. This goal, however, was not achieved and the merger was declared to have failed (Algemene Rekenkamer, 2013). In December 2013, the government recognized NVWA’s inadequacy and presented a renewed approach for drastic improvement (Tweede Kamer 2013-2014, 2014). A month later, in January 2014, two civil society organisations, Dier & Recht⁷⁶ and Varkens in Nood⁷⁷, claimed nearly all farmers were violating animal welfare and animal health rules and regulations (Stichting Dier&Recht & Stichting Varkens in Nood, 2014). According to their report, rules were violated between 2.7 and 3.4 billion times in 2013, hereby harming animal welfare of 500 billion animals (ibid, p.4). In 2015, NVWA announced to intensify inspections and adopt a risk-based approach to monitoring (NRC, 2017);
- In March 2015, a Dutch Safety Board report was published to address “a number of recent incidents in the meat sector” and food safety, as was requested by state secretary Dijksma of Economic Affairs. Its conclusions were in line with previous reports. Neither market nor government succeed in securing meat safety. The slaughter process in the Netherlands cannot ensure food safety to consumers nor can imported meat be trusted fully, also because few instruments to uncover fraud (OVV, 2014);
- Since 2015, many Dutch supermarket chains only sold pork with at least one *Beter Leven* star (see Analysis part 1 – Verburg). However, two-thirds of Dutch pork

⁷³ Focus group

⁷⁴ Taskforce trust in food

⁷⁵ Netherlands food and consumer product safety authority

⁷⁶ Animal & Rights / ‘Advocate of the animals’

⁷⁷ Pigs in Distress

- production is being exported and not included in the trademark system. Most pork production is hence lacking animal welfare certification and has more malpractices;
- In April 2015, television show *Keuringsdienst van Waarde* revealed another case of food fraud, in which cheaper sheep meat and turkey meat were sold as lamb – a case supposedly known by NVWA. A top executive admits NVWA's control system is vulnerable. Traceability of products and ingredients is falling short; one hamburger may contain meat from up to ten different slaughterhouses.

Societal occupation with food

There was a lot of attention for food in general in Dutch society. As for environmental impacts of food, attention for local and seasonal food, and sustainable and plant-based food were important in this time. Both chefs and consumers became more aware of benefits of eating plant-based and food sustainability.⁷⁸ The Youth Food Movement (YFM)⁷⁹ was established as part of Slow Food International, which works on creating a fair and healthy food system. Human health awareness was manifested in a renewed attention for obesity and other food-related diseases.

From 2012 on, society increasingly started worrying about bread, carbohydrates and food in general due to the publication of Kris Verburgh's book 'the Food Hourglass'.⁸⁰ 91,000 copies of the book were sold within 5 months after its publication (De Morgen, 2012). In September 2012, University of Antwerp (UA), where Verburgh was still enrolled as a student at the time, distanced itself from his 'food hourglass' because it is said to reverse all national and international nutritional advice (De Morgen, 2012). The book lacks convincing scientific sources and contains faulty and imprecise information, such as the advice to avoid milk or bread, which makes it dangerous for public health, according to UA professor of food. Especially Verburgh's claim that patients can be cured from diabetes when avoiding consumption of bread, potatoes, rice and pasta alarmed not only UA's professor but, Domus Medica, a Belgian association of general practitioners, and the *Vlaams Instituut Gezond Leven*⁸¹ too (Domus Medica, 2012). Verburgh, in turn, criticizes the Belgian equivalent of the *Voedingscentrum* (VCN)⁸² the Wheel of Five.⁸³ VCN seems less outspoken about the hourglass method to increase longevity and a healthier life but informs about the scientific defects, impracticality and risk of developing nutritional shortages (Voedingscentrum, 2020). Nevertheless, in 2013, the Food Hourglass was nominated for a public choice award; the *NS Publieksprijs*,⁸⁴ the winner of which not only receives the title 'book of the year' but also a cash reward of €7,500 amongst others (NOS, 2013; NS Publieksprijs, 2020).

International developments

Important international developments included the adoption of the UN 2030 Agenda for Sustainable Development and the publication of a WHO report on health impacts of meat.

In September 2015, the Agenda was signed by 193 countries, including the Netherlands. It was an important event for increasing societal and political attention.⁸⁵ SDGs related to food sustainability include (SOCISDG, 2018):

1. End poverty in all its forms everywhere;

⁷⁸ Focus group

⁷⁹ The movement is now called Slow Food Youth Network (SFYN)

⁸⁰ Focus group

⁸¹ Flemish Institute Healthy Living

⁸² Netherlands Nutrition Centre

⁸³ Schijf van Vijf

⁸⁴ Dutch Railways public award

⁸⁵ Focus group

2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture;
3. Ensure healthy lives and promote well-being for all at all ages;
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all;
10. Reduce inequality within and among countries;
12. Ensure sustainable consumption and production patterns;
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development;
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

In October 2015, the World Health Organization published a report which “advised people to moderate consumption of preserved meat to reduce the risk of cancer” (WHO, 2015). The statement created a lot of societal attention and media coverage. Hence, it added to the increased societal attention for food and its health impacts.⁸⁶

WRR report ‘Towards a food policy’

In September 2014, the Netherlands Scientific Council for Government Policy, or WRR,⁸⁷ published a report important to food policy.⁸⁸ Whenever WRR publishes a report, the government has to reply.⁸⁹ In its 2014 report ‘Towards a Food Policy’,⁹⁰ WRR advised the Dutch government to implement an ‘explicit’ and ‘comprehensive’ food policy, which is in line with the diverging values around food, which acknowledges the interconnectedness of food production and consumption, and keeps in mind the changing power structures within the food system (WRR, 2014a, p.5). As the world of food is expected to become more volatile and uncertain, WRR recommends adopting policies that increase the food system’s resilience too (WRR, 2014b, p.13).

Main points of the report include (WRR, 2014a):

- The Dutch agri-food sector is both important to the Dutch economy and plays a large role internationally, in terms of export of agricultural products and knowledge;
- Governmental policy has contributed to the current prominent position of the Dutch agri-food sector in the world. For a long time, policy was focused on increasing productivity, facilitating export and securing food safety. Accompanying policies emerged in the fields of public health, animal welfare, environmental issues, and rural affairs;
- Because of the many diverging values as well as both public and private interests involved with food, it has been a recurrent theme of controversial debates. A variety of incidents, mainly in animal food production, have added to discussions on agricultural production and policy, including factory farming, animal welfare, and health effects of food. Food has increasingly become a subject of public concern;
- As “[t]he issues that induce public concern often exceed the local, national and even EU level” (WRR, 2014b, p.7), international developments for the Netherlands are taken into account in the advice to adopt a comprehensive food policy, in which three major global challenges are addressed:

⁸⁶ Focus group

⁸⁷ Wetenschappelijke Raad voor het Regeringsbeleid

⁸⁸ Focus group

⁸⁹ Interview #1

⁹⁰ ‘Naar een voedselbeleid’

- Ecological sustainability is concerned with both food production's demands on natural resources and its contribution to environmental degradation, with current levels of production and in the light of a growing world population and hence growing demand for food in the future;
 - Public health covers both health hazards of food production, such as the use of anti-biotics causing for multi-resistant bacteria and spread of zoonoses, and risks of food consumption, including rising levels of diet-related diseases, overweight and obesity, due to increased processed and animal-food consumption and decreased plant-based food consumption;
 - Robustness is about the food system's ability to cope with shocks and its adaptability to more extreme weather conditions that are expected, on the one hand, and scarcity of natural resources and consequential geopolitical developments on the other.
- In addressing these global challenges, four developments in the food system of the past decades are kept in mind. These include industrialisation of agriculture and fisheries, globalisation of the food supply system and increasing complexity of food chains, shifting of power relations within the food chain from production to actors throughout the chain, and lastly, changing consumption patterns that include more animal products and processed foods.

The WRR publishing its report on the need for integration of agricultural and food policy pushed politics into answering.⁹¹ In October 2015, state secretary Dijksma of EZ and minister Edith Schippers (VVD) of Health, Welfare and Sport⁹² replied to the WRR report in a governmental letter, also on behalf of the minister of Minister for Foreign Trade and Development Cooperation and state secretary for Infrastructure and Water Management. The cabinet proposed an agenda for food which acknowledged the developments and challenges proposed by WRR and aimed to address them ambitiously and collectively.

Public health was the cabinet's main priority. Topics to secure public health listed by cabinet included:

- A focus on healthy and sustainable consumption besides regular food safety regulation. NVWA was responsible for decisive enforcement;
- An international One Health approach is needed, including collaboration of human and animal healthcare, to better combat antibiotic resistance and zoonoses;
- A stricter approach to detect and deal with fraudulent activities will be employed nationally and internationally;
- Concerning healthy consumption, an agreement between the government and private food actors was created to ensure improvement of product composition and simplify making healthier choices for consumers. Especially levels of salt, saturated fats and calories were to be addressed. A public campaign and the renewed *Schijf van Vijf*⁹³ were other national efforts. Efforts were to be made on EU-level as well;
- According to the principle 'a healthy food choice, is a sustainable food choice', consumption of more vegetables and fruits and less animal products, the cabinet supports innovations in product and market development through its *Topsectoren* policy and through information by governmental agencies Voedingscentrum and Milieu Centraal.

⁹¹ Focus group

⁹² Ministerie van Volksgezondheid, Welzijn en Sport

⁹³ Wheel of Five – instrument of *Voedingscentrum* / Netherlands Nutrition Centre

There was some societal and political fuss about the WRR report and its government response, claiming something would change. However, most of the goals were actually not new but in line with already existing policy goals.⁹⁴

Politics

Political upheaval and pre-term elections

Because of political upheaval, cabinet Rutte-I fell in Spring of 2012. PVV withdrew its support in the minority cabinet due to failed negotiations on further budget cuts (Parlement, 2020c). Pre-term elections led to the formation of a the second VVD-led cabinet. Together, VVD and PvdA formed cabinet Rutte-II.

National mood: fragmented but steady

The national mood is fragmented but steady. Sustainability, human health and food are important themes for both society and politics.⁹⁵ After a decade of falling cabinets, in this period, no political upheaval or event was big enough to cause for another fall and pre-term elections (Parlement.com, 2020b). Rutte-II was the first cabinet meeting its term since Kok-I (1994-1998) and the longest-sitting cabinet since World War II (Parlement.com, 2020a).

Changes of government: Rutte-II/Dijkssma

In February 2013, the changeover of a political assistant (PA) resulted in a new focus in the field of sustainable food policy. The new PA had new ideas on public-private collaboration with ‘unusual suspects’, or stakeholders that were not usually included in such partnerships, such as the Youth Food Movement and De Vegetarische Slager.^{96,97}

Policy

Relaunch *Alliantie Verduurzaming Voedsel*

The public-private *Platform Verduurzaming Voedsel*⁹⁸ was discontinued after three years, during Bleker’s term. However, due to the platform’s success, it was relaunched privately and named *Alliantie Verduurzaming Voedsel*.⁹⁹ The alliance created an agenda for the upcoming years and asked the government for collaboration, which represents the shift of responsibility from government to society.¹⁰⁰ The agenda was sent to the Second Chamber with the policy note in 2013. The government decided to fund only individual projects.¹⁰¹

Food waste

Carla Dik-Faber, member of the Second Chamber for political party CU, showed interest in food sustainability by putting food waste on the political agenda. Attention for this topic was in line with the overall political tendency during this time, passed its neoliberal peak. Sustainability and the environment were important topics in general, alongside fair trade and

⁹⁴ Interview #4

⁹⁵ Focus group

⁹⁶ The Vegetarian Butcher

⁹⁷ Focus group

⁹⁸ Sustainable Food Platform

⁹⁹ Alliance for Sustainable Food

¹⁰⁰ Interview #7

¹⁰¹ Interview #7

animal welfare.¹⁰² Carefully, food consumption and sustainability remerged on both political and governmental agendas. The reemerging of sustainable food policy on the political and policy agendas could be regarded as windows of opportunity, which were translated into food waste policy and a number of 'Green Deals'.

Green deals

Dijkma (co-)produced a number of green deals, which are a form of co-regulation between government and societal actors. Themes of the green deals included: insects for food consumption, food waste, sustainable food consumption and the roles of cities in food sustainability.¹⁰³ The role of the government includes the removal of legislative barriers, setting an example in governance, usage of its own experiences and insights in sustainable development of its policies, applying the Health Council's report for improved food information to consumers, and providing information on new protein sources for consumption (Green Deals, 2018). The City Deal suggests a shift from central to decentral governance.

4.4. Period 4 – Van Dam

3 November 2015 – 1 September 2017
(668 days)

Summary

Cabinet Rutte-II had 9 changeovers of ministers and state secretaries. When Sharon Dijkma, state secretary for Agriculture, switched departments and moved from Economic Affairs to Infrastructure and the Environment, Martijn van Dam (also PvdA) took over in November 2015.

In this time, societal and political attention for sustainability and health impacts of food increased further, which was reflected by the increase in food influencers. The UNFCCC¹⁰⁴'s Summit of December 2015, leading to the signing of the Paris Climate Agreement was a major international development. On the national level, the Health Council¹⁰⁵'s advice to decrease consumption of meat and increase consumption of plant-based food made a societal, political and policy impact. It led to a revision of a consumer information instrument; the Wheel of Five¹⁰⁶.

Halfway through the term, a changeover of top government staff allowed for more room in the policy department. In the policy stream, awareness increased about the need for a long-term strategy and resources for sustainable food policy, which conflicts with politics' short-term focus. Scenarios for a new minister or state secretary were being prepared.

In January 2017, the first national Food Summit was organised to publicly announce governmental plans for food sustainability. Four ministries were involved with the Food Summit and its policy plans. Nearing the end of the cabinet term, there seemed to be a more open or courageous approach towards sustainable food policy. The government fulfilled its term and general elections were held as planned in March 2017.

Meanwhile, in the problem stream, a short video clip was leaked which showed severe animal abuse in a Belgian slaughterhouse. The incident was frequently covered by the media

¹⁰² Focus group

¹⁰³ Focus group

¹⁰⁴ United Nations Framework Convention on Climate Change

¹⁰⁵ Health Council of the Netherlands

¹⁰⁶ Schijf van Vijf

and led to renewed attention for reviewing slaughterhouse practices and transparency in the Netherlands too.

In August 2017, a prohibited pesticide was found in eggs.

The most important events of this period are shown in figure 4.4.1

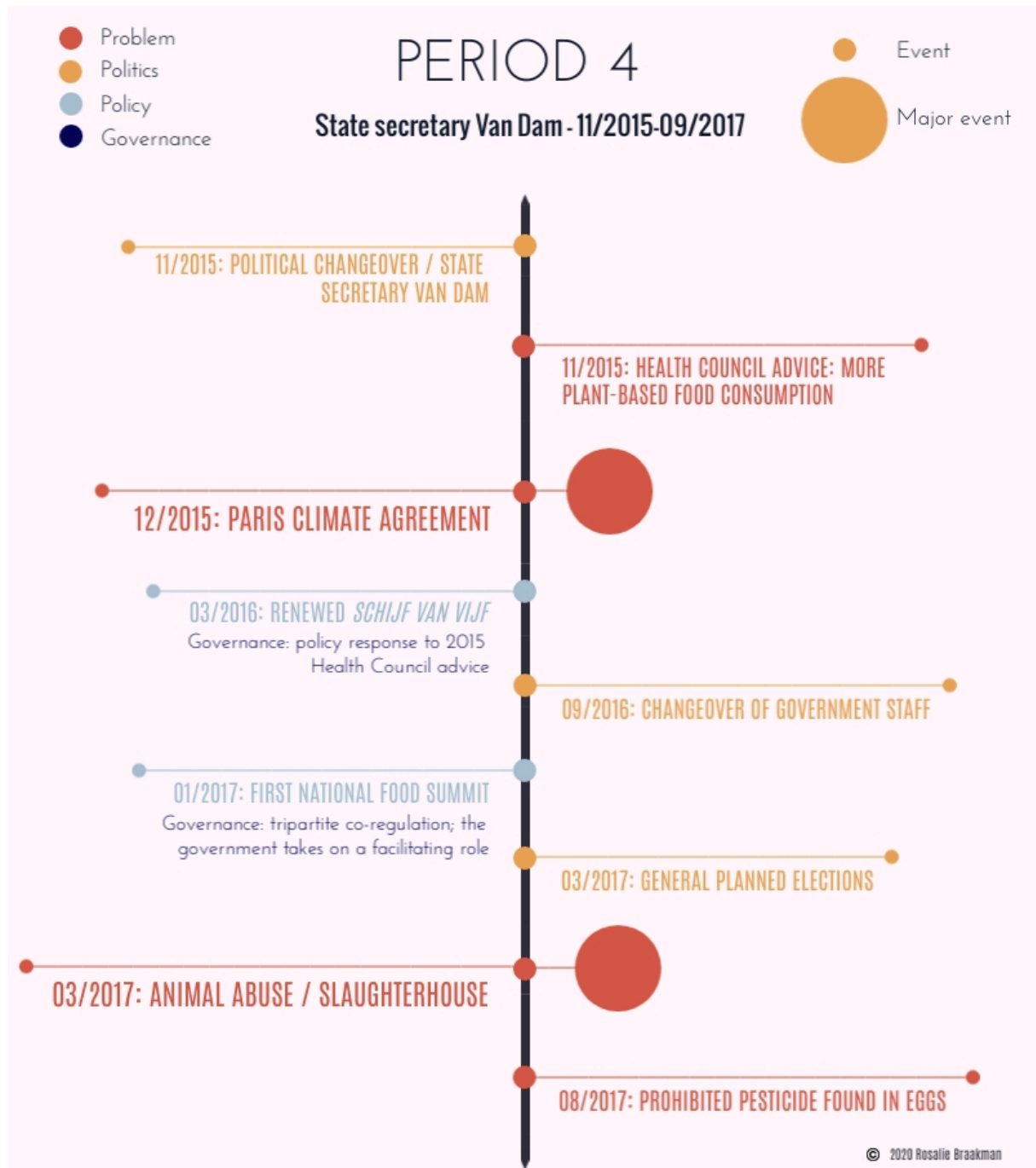


Figure 4.4.1 – A timeline of period 4: Van Dam

Problem

Focusing events: food crises

Animal welfare incidents of the recent past include (NRC, 2017; BNNVARA, 2017):

- In April 2017, a video clip is leaked by civil society organisation Animal Rights which shows heavy abuse of pigs in a Belgian slaughterhouse. This incident caused for the reemerging of animal welfare on the political agenda¹⁰⁷. Outgoing state secretary Van Dam demands camera supervision in Dutch slaughterhouses that government inspection service NVWA can access at any point. VION, the Netherlands' biggest slaughterhouse, published its own movie in an effort to create more transparency of the slaughter process. Civil society organisation *Varkens in Nood*¹⁰⁸ claims the movie is incomplete and publishes another video that shows the stunning process which is painful and highly traumatising for pigs.

Food quality, safety and fraud incidents included (NRC, 2017):

- In September 2016, three years after the horsemeat food fraud incident (Analysis part 3 – Dijkma), the Dutch Consumer Association¹⁰⁹ discovered that one out of five products did not contain what it should, including lamb meat which was sometimes mixed with turkey, beef or pork. 20 per cent of tested products did not contain lamb at all;
- In 2017, NVWA researched its renewed slaughter rules. 16 per cent of all red meat is contaminated in the slaughter process, whereas hygiene issues occur in nearly half of all poultry slaughterhouses. In the latter category, animal welfare is often neglected, and animals are stunned inadequately;
- In February 2017, a monitoring report is published by NVWA. Several tens of millions of Euros were invested for renewing rules to improve animal welfare and hygiene in the poultry slaughter process. One poultry slaughterhouse was shut down due to structural violations of the new rules;
- In May 2017, NVWA publishes data from 2014 and 2015 on the contamination of animal feed production chains. At nearly half of inspected companies, high medication residues were found in regular feed which is fed to livestock. The consequential antibiotic resistance forms a public and animal health hazard;
- In August 2017, NVWA was criticized again for its approach to the fipronil crisis. Both Dutch and German supermarkets recalled eggs that were possibly contaminated with a prohibited pesticide: fipronil. Consumer information was poorly communicated.

International developments: Paris Agreement

The UNFCCC Summit of December 2015 led to the signing of the Paris Agreement, which aims to limit global warming to a maximum of 2 degrees Celsius (UN, 2019). It was the “first-ever universal, legally binding global climate change agreement”, signed by 190 parties (European Commission, 2020). The Netherlands signed as EU-member. Hence, there are consequences for politics and policy. Besides, the Paris Agreement served as an indicator which triggered societal problem definition, together with the SDGs, which were agreed upon only a few months prior.¹¹⁰

¹⁰⁷ Focus group

¹⁰⁸ Pigs in Distress

¹⁰⁹ Consumentenbond

¹¹⁰ Focus group

Societal occupation with food

Digital communication by new social media played a role in further increasing societal attention for food impacts, such as on human health and environmental sustainability. This trend was witnessed first during Verburg's term and slowly remerged in a new form during Dijksma's term. New communication forms include 'food vloggers' and other social media influencers, such as The Green Happiness. Other easy-access information channels include television programmes and documentaries, such as Cowspiracy.¹¹¹

Health impacts of food consumption were considered important too. There was a slight shift from animal-based to plant-based food consumption noticeable, which was partially induced by an accumulation of negative feedback on the consumption of meat. After WHO's statement that consumption of processed meat can cause cancer, the Health Council of the Netherlands advised to consume less meat and more plant-based foods too.¹¹² In the market sphere, a supermarket published a fully plant-based edition of its magazine, full of free recipe inspiration.¹¹³

To consumers, the experience of food consumption became more important, including enjoying the taste and paying attention to the origin of food. This trend possibly stems from new economic prosperity after the financial crisis.¹¹⁴

Politics

National mood

The national mood was fragmented but steady. Sustainability, human health and food continued to be important themes for both society and politics.¹¹⁵ After a decade of falling cabinets, in this period, no political upheaval or event was big enough to cause for another fall and pre-term elections (Parlement.com, 2020b).

Changes of government

Van Dam approached sustainable food policy from a personal perspective, as consumer and father-figure.¹¹⁶ He was freer to leave his personal and PvdA mark than his predecessor Dijksma as elections were approaching.¹¹⁷ In the policy community, there was more room and renewed energy for sustainable food policy after changeover of a top civil servant who was responsible for blocking policy notes and ideas, especially during Dijksma's term.¹¹⁸ Despite the sense of renewed energy, the policy community questioned how much governmental power truly is being executed to achieve food sustainability, since means such as money and workforce were limited for sustainable food policy and strong measures are only used in the case of a food crisis.¹¹⁹

¹¹¹ Focus group

¹¹² Focus group

¹¹³ Interview #2

¹¹⁴ Focus group

¹¹⁵ Focus group

¹¹⁶ Focus group

¹¹⁷ Focus group

¹¹⁸ Interview #7

¹¹⁹ Focus group

Policy

Societal initiatives ‘towards plant-based food’

To create a more integrative food policy, as was requested by WRR in 2014 (Analysis part 3 – Dijksema), collaboration was sought between four different ministers and their departments who each play a role in food¹²⁰: state secretaries of Economic Affairs, and Infrastructure and Environment, and ministers of Health, Welfare and Sport, and Foreign Affairs. At the first national Food Summit, Van Dam announced that 20 million Euro was allocated for sustainable food policy and to support three main societal initiatives in specific. However, most of the money was allocated long before Van Dam’s statement.¹²¹

The Green Protein Alliance (GPA) is an alliance of stakeholders throughout the plant-based food chain, including mostly actors from the market sphere. Its goal is to make a shift in consumption from 70% animal-based proteins and 30% plant-based proteins to a 50-50 balance by producing more and better plant-based products and to promote them better. All stakeholders play their own part, according to their role in the chain.¹²² RVO¹²³, an executive government agency, collaborated with GPA in an early stage, in the policy programme *Duurzaam Door*.¹²⁴

Another societal initiative financially supported by the government is Dutch Cuisine (DC), which is part of a Green Deal. Its goal is somewhat similar to GPA’s, namely, to change the ratio of animal-based and plant-based consumption. However, DC aims to change out-of-home food consumption. DC tries to create a new vision of food by inspiring consumers through a restaurant menu,¹²⁵ dishes on which contain a ratio of 80%-20% for plant-based versus animal-based foods.¹²⁶

A third societal initiative is *Nationaal Actieplan Groenten en Fruit* (NAGF).¹²⁷ Its goal is to increase consumption of fruits and vegetables in the Netherlands, for example through campaigns.¹²⁸ NAGF inspired supermarket Albert Heijn to publish the first fully vegan edition of its magazine *Allerhande*.¹²⁹ The magazine is free and widely accessible at the supermarket. Hence, consumers can choose for themselves whether or not to consume this information, which aimed to inspire. Whereas for the Wheel of Five¹³⁰ and other instruments by the Netherlands Nutrition Centre (VCN)¹³¹ have a rather different approach to informing consumers about food consumption. In a smartphone application, consumers could see the nutritional value of the food they consumed and how the food scored in terms of the Wheel of Five. In the experience of one of the interviewees, this approach worked rather depressing as red bars would show up immediately if the food.¹³²

The SBIR¹³³ competition was another instrument to increase availability of tasteful products made of plant-based proteins.¹³⁴

¹²⁰ Interview #1

¹²¹ Focus group

¹²² Interview #1

¹²³ Netherlands Enterprise Agency

¹²⁴ Interview #3

¹²⁵ Interview #3

¹²⁶ Interview #2

¹²⁷ National Action Plan Vegetables and Fruit

¹²⁸ Interview #2

¹²⁹ Focus group

¹³⁰ Schijf van Vijf

¹³¹ Voedingscentrum

¹³² Interview #2

¹³³ Small Business Innovation Research

¹³⁴ Interview #6

Renewed *Schijf van Vijf*

One of VCN's most important, and probably best-known instruments, is the Wheel of Five.¹³⁵ It was renewed to include more plant-based foods and less red meat, as was advised by the Health Council in November 2015.¹³⁶

Food scenarios

Nearing the end of Van Dam's term, around the time planned elections were held, the policy department prepared itself for a new cabinet and new minister or state secretary for agriculture and food. Different scenarios were created from which Van Dam's predecessor would be able to choose.¹³⁷ The scenarios each had a different focus and stemmed from the WRR report (Analysis part 3 – Dijksma). Key elements included: public health, ecological sustainability and robustness of the food system. Different approaches included focuses on responding to climate change, an economic perspective, societal acceptance of production systems, and food circularity, amongst others.¹³⁸

4.5. A decade of sustainable food policy

When looking at the entire decade, from 2007 to 2017, some interesting insights arise which will be discussed in this paragraph.

Timelines for all four periods discussed earlier are combined into the shortened version below (figure 4.5.1). The events most important for policy and governance change remain visible in this shortened version and are grouped in different colours according to the different streams they stem from. Decisions on which events were most important followed from the interviews and focus group, as was described in the methodological chapter and elaborated upon in the previous analytical paragraphs. Here, all events are reflected upon within the stream of their origin but linked with other streams and governance.

¹³⁵ Schijf van Vijf

¹³⁶ Interview #6

¹³⁷ Interview #4

¹³⁸ Interview #4

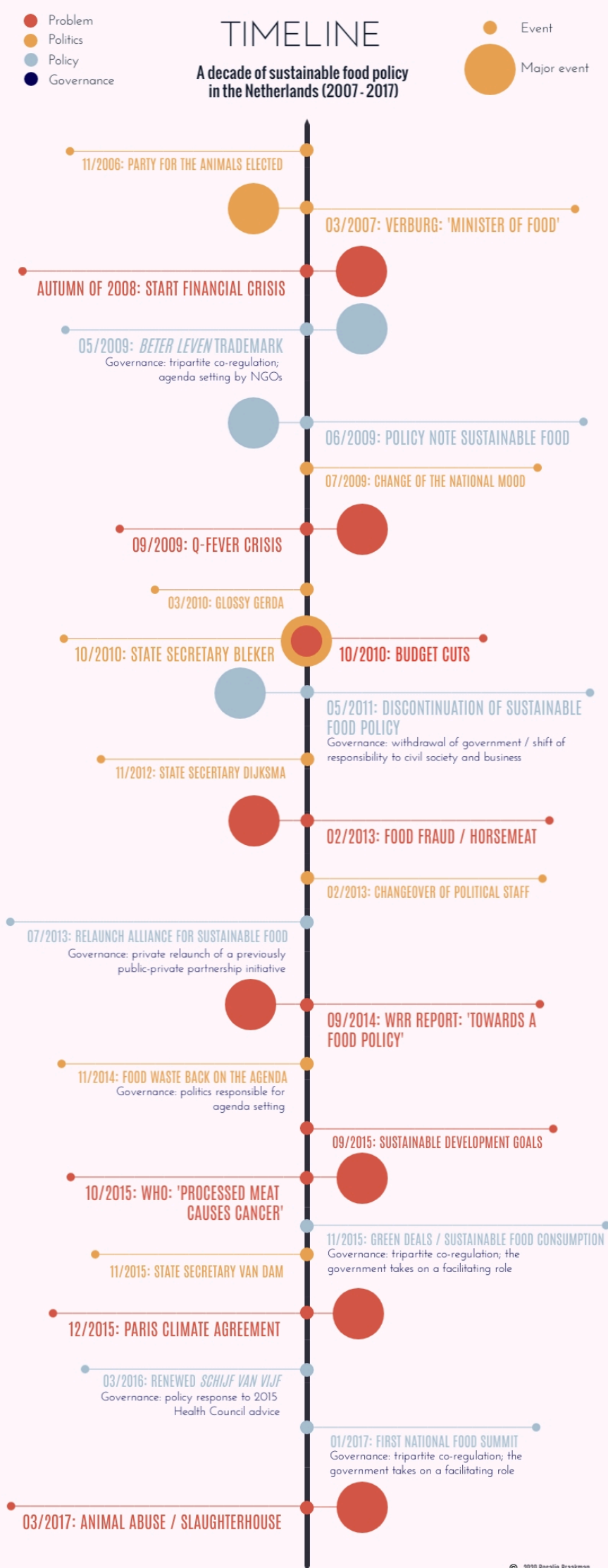


Figure 4.5.1 – Timeline of a decade of Dutch national sustainable food policy from 2007 to 2017

Problem stream

In the problem stream, five out of nine events are a crisis of some type and fall within the category of focusing events. They are; the q-fever zoonotic crisis, the financial crisis and consequential budget cuts, an international case of Dutch origins of food fraud with horsemeat, and the exposure of large-scale animal abuse in a slaughterhouse in neighbouring country Belgium.

The outbreak of the q-fever zoonosis resulted in a national crisis that caused for tens of thousands of both human and animal victims. The outbreak embodied multiple crises in one: human health, animal health and welfare, and an economic crisis for the affected farmers. The government was heavily criticized for not dealing with the crisis appropriately. One of the most important governance lessons for the government was to not create policy *for* but *with* those involved.

The financial crisis led to forced budget cuts and political decisions to withdraw budget and policy staff from sustainable food policy, which was accompanied by a neoliberal change in the national mood supporting the political decisions for government withdrawal. This resulted in a discontinuation of the role of government in food policy and other so-called 'left-wing hobby' policies, and hence, to a shrinking role of the government in general. Consequently, there was a shift in responsibility from government to private actors in terms of governance.

The international case of food fraud with horsemeat started with a Dutch trader who had committed food fraud before. Food quality and safety could not be assured due to a lack of traceability. By reclassifying one type of meat such as horsemeat as kosher meat from another animal, ethics were undermined too. The internationalisation of food chains complicates food safety inspections and allows for criminal activity to slip through the cracks, which seems especially true for the animal production sector. The horsemeat fraud scandal symbolises decades of inadequate food quality and safety inspection on a national scale.

While the leaked footage of animal abuse in a major slaughterhouse was not of Dutch but of Belgian origin, it had a considerable impact on Dutch society and awareness of animal welfare in the animal food production chain. Worries about animal welfare add up to the increased attention to food sustainability and a careful shift towards consumption of more plant-based foods, which is typical for the end of the decade. Also, it created a policy window that resulted in camera supervision in slaughterhouses.

The other four events in the problem stream all are publications or agreements of major institutions; a national report on the need for an integrative food policy by WRR, the UN Sustainable Development Goals (SDGs), the WHO statement that processed and red meats cause cancer, and the signing of the Paris Climate Agreement. While these events affected policy in the sense that politics and policy have to respond to them, they affected societal occupation with food too and hence function as changemakers for the national mood and problem-perception. Hence, the institutions could be regarded as policy entrepreneurs in terms of MSF.

Political stream

In the political stream, the two most important events were both political changeovers. Minister Verburg and state secretary Bleker could both be regarded policy entrepreneurs because of what they said and did for sustainable food policy. Seven other events in the political stream include the election of the Party for the Animals, a change of the national mood, the ill-timed publication of a ministerial glossy, the changeovers of state secretaries Dijksma and Van Dam and a senior political staff member within the agriculture and food ministry, and reemerging of food waste on the agenda by a member of parliament.

The election of the Party for the Animals in the House of Representatives¹³⁹ marked a changing political environment. The Party, and its supporters, put animal interests on the political agenda and was responsible for tabling many motions regarding animal welfare, like no other political party had done before.

Verburg announced herself as minister of all 16 million Dutch people and as minister of Food rather than minister of Agriculture. These statements were succeeded with a strategy for sustainable food policy, a new focus on food consumption and new (plant-based) protein sources, and a variety of policy programmes that included collaboration with several societal actors. In the policy community, Verburg was regarded rather progressive due to her approach to food policy, especially given her political background (farmer-oriented party CDA). Due to a combination of events, including a changing national mood, an ill-timed and poorly received magazine named after the minister, the progressive approach to food policy dissolved.

Her successor Bleker, also CDA, abruptly discontinued almost all sustainable food policy. His main task was to implement budget cuts due to the financial crisis, like the rest of the cabinet. However, in the policy community, it was believed that his personal view of food policy was important for the abrupt twist too. The end of sustainable food policy was in line with the changed national mood that was not supportive of much governmental interference and policy add-ons. All 'extras', or policy goals beyond legal requirements were being cancelled.

With each changeover of state secretaries, the focus of (sustainable food) policy would shift somewhat. Each state secretary placed their own mark on sustainable food policy. Verburg focused on new collaborations with various societal actors, consumption and sustainability in all stages of the food chain, whereas Dijksma focused mainly on (consumer) food waste and Van Dam concentrated on innovation, market competition and availability in creating new protein sources for more sustainable food consumption. Actors such as high-placed civil servants or political assistants can play a role in either stimulating or blocking communication between the minister or state secretary and the policy department, without knowledge of either side of the 'line'. The lack of internal discussion¹⁴⁰ causing for policy fragmentation and a lack of policy coherence, or integrative governance. This could be the result of the political instability of the period under investigation.

In Dijksma's period as state secretary, one member of parliament¹⁴¹ was responsible for setting food waste on the agenda in particular. Food waste had been addressed before but had disappeared when all food policy ended in the time of Bleker. The reemerging of food waste on the agenda symbolises the reemerging of sustainable food policy, be it in a careful manner, nonetheless. In terms of governance, the instruments employed were less far-reaching than in period 1 – Verburg.

Changeover of political and governmental staff changed relations and communication within the ministry, which hints to a role of policy entrepreneur for certain actors within the policy community.

Policy stream

In the policy stream, the most important events were the establishment of the *Beter Leven*¹⁴²-trademark, and the policy plan the trademark was part of, as was written down in the policy note Sustainable Food¹⁴³. Other important events include the sudden discontinuation of food

¹³⁹ Tweede Kamer der Staten-Generaal

¹⁴⁰ Focus group

¹⁴¹ Tweede Kamer-lid

¹⁴² Better Life trademark

¹⁴³ Nota Duurzaam Voedsel

policy, the relaunch of a sustainable food initiative, the signing of a number of Green Deals, the renewed *Schijf van Vijf*¹⁴⁴, and the first national food summit.

The *Beter Leven*-trademark was a progressive collaboration between actors from all governance spheres, which ranks animal products in terms of animal welfare. Both the content and form of collaboration were unprecedented as was felt in the policy community. Even though society was not deemed ready, the initiative was pushed forward and well-received by the public. The positive outcome symbolises a shift in the government mindset towards multi-actor governance and proactive policymaking.

The policy note Sustainable Food contained a variety of goals and programmes aiming for more food sustainability in a number of ways. From a governance perspective, many of the programmes included multi-actor or tripartite co-regulation plans in a broad sense.

Because of the sudden end of sustainable food policy, a number of policy programmes that had only just started were being discontinued, cancelled, or phased out. As government withdrew, responsibility shifted towards societal actors: in a rare case, a previously public-private partnership, the *Platform Verduurzaming Voedse*¹⁴⁵, was relaunched privately and renamed *Alliantie Verduurzaming Voedse*¹⁴⁶.

The careful return of food sustainability on the agenda involved new forms of policy action. The most used instrument was the so-called 'Green Deal', in which the government collaborates with private actors in a relatively open manner. While agreements are made in such a deal, the government mostly plays a facilitating and accelerating role by eliminating bottlenecks in laws and regulations and addressing lack of market incentives, innovation and networking.

The *Schijf van Vijf*, a government instrument that informs consumers about healthy food consumption, was renewed based on a report by the national Health Council¹⁴⁷. The report suggested a reduction of animal protein intake and increase of plant-based protein consumption, amongst others. The Health Council could be regarded a policy entrepreneur, for indicating new insights on health impacts of food. In this time, health impacts were of equivalent importance as sustainability impacts of food by society and as part of the same puzzle.

Governance

Throughout the decade, the role of the government changed (figure 4.5.2). In period 1 (Verburg), the government was rather proactive. Collaboration was sought with both market and civil society actors. Then, in period 2 (Bleker), there was a withdrawal of government and shift of responsibility to private actors. Nonetheless, market actors would receive more attention than civil society actors, due to a neoliberal turn of the national mood. Hence, the slight tendency to the competitive corner of the triangle. Slowly but carefully, the government retook some responsibilities nearing the end of the decade, in periods 3 (Dijkma) and 4 (Van Dam). The latter two differ slightly in their approach; both have a competition or market-oriented tendency but period 4 even more so than period 3. The role of the government increased in periods 3 and 4 but was not as far-reaching in period 1.

¹⁴⁴ Wheel of Five

¹⁴⁵ Sustainable Food Platform

¹⁴⁶ Alliance for Sustainable Food

¹⁴⁷ Gezondheidsraad

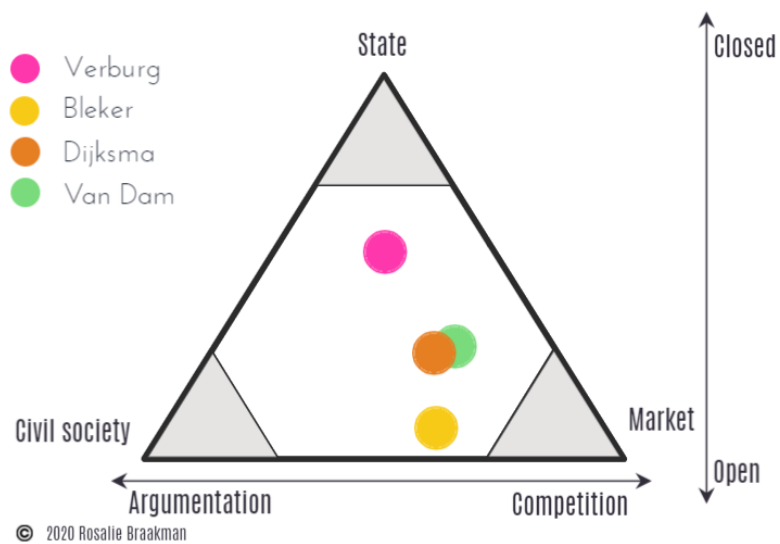


Figure 4.5.2 – Shifts in governance modes for Dutch sustainable food policy between 2007 and 2017

Conclusion

This conclusive chapter will first answer the main question. A discussion of the main results will follow. After reflecting on the research, the chapter will conclude with recommendations for future research and policy practice.

Considering, 1. the rapid deterioration of the planet and its resources, 2. the legally assigned role for the Dutch government in tackling the climate crisis, 3. the considerable role the government plays in maintaining one of the most unsustainable sectors: animal agriculture, and 4. the gap between sustainability policy goals and unsatisfying results, this qualitative research tried to answer the question of how the role of the Dutch government in national sustainable food policy has changed between 2007 and 2017 and why. To do so, the Multiple Streams Framework and governance approaches were combined. The analysis of results gave detailed accounts of developments in societal problem definition, politics and policy for all four ministerial terms over the decade and explained how sustainable food policy evolved over the years. Also, changes in the role of government and governance roles were reviewed.

Why has the role of the government changed?

The role of the Dutch national government in sustainable food policy has mainly changed because of political instability, shifts in national mood, a number of focusing events, and societal problem definition. Political instability has caused for the fall of two out of three cabinets over the decade: Balkenende-IV and Rutte-I. Pre-term elections resulted in establishing new cabinets and a subsequent changeover of government. With each new agriculture and food minister or state secretary, the approach to sustainable food policy shifted. Consequently, policy outcomes changed.

Change of the national mood, which has occurred twice over the decade, informed the approach to sustainable food policy too. The first shift happened around the first changeover of ministers; from minister Verburg (period 1) to state secretary Bleker (period 2). This shift was most important for changing the approach to sustainable food policy and the policy outcomes. It involved a neoliberal turn, which resulted in an abrupt end of almost all governmental sustainable food policy funding and programmes, and a shift of responsibility from government to societal actors. The second shift happened halfway through Dijksma's term as state secretary. As the consequences of the financial crisis ended and economic prosperity and stability returned, there was more room for sustainability in general, and for the sustainability of food in specific, both in society and politics. The government carefully took on a facilitating role in sustainable food policy and co-regulated mainly with actors from the market sphere. Hence, responsibility was shared with societal actors.

Focusing events have caused for, or at least contributed to, political instability and change of the national mood, and societal problem definition. However, they would not always cause for structural policy change. An accumulation of crises in – mainly animal – food production sometimes caused for an immediate policy response. This was the case for the Q-fever crisis and the financial crisis, for example. At other times, however, attention for the focusing event would fleet before a true change of policy outcome could be achieved. This happened with other types of crises in the animal food chain too, including crises in the stages of food production, food inspection and food trading. Repetitive food fraud with horsemeat is one of the many examples for which no true policy change occurred.

Societal definitions indicating which situations are problematic, in the Dutch agriculture and food system or in general, have contributed to the governmental approach sustainable food policy in a few ways. Throughout the decade, consumers organised themselves in NGOs and other (online) platforms to discuss food production and consumption issues. NGOs have often been responsible for setting sustainability or animal welfare issues on the agenda. They have also been responsible for achieving different policy

outcomes through co-regulation. The *Beter Leven*¹⁴⁸ trademark is an example of which. Another way in which societal problem definition played a role in changing the approach to food policy is by expressing worries about the future of livestock farming in the Netherlands, which received a lot of public attention. The government could not ignore the national worries about *varkensflats*¹⁴⁹, and therefore organised a societal discussion in which numerous stakeholders were involved.

How has sustainable food policy changed?

In period 1, when Verburg was minister of *Landbouw, Natuur en Voedselkwaliteit*, sustainable food policy included an active role for the government. A variety of (co-)regulation programmes was set up, in which numerous societal actors were included. The new focus to consumers and consumption was regarded progressive. Policy goals included eliminating food waste, stimulating plant-based food production and consumption, and creating sustainable development for all stages of the food chain.

In period 2, when Bleker was state secretary for the ministry for *Economische Zaken, Innovatie en Landbouw*, almost all sustainable food policy was discontinued, including the programmes that were established a few years earlier during Verburg's term. The most important event in for sustainable food policy seemed to be the somewhat 'forced' societal discussion on factory farming.

In period 3, during Dijksma's term as state secretary for *Economische Zaken*, the most important policy goals in the field of food sustainability included addressing consumer food waste, and health and environmental impacts of food. The most important policy instruments during this period were covenants and other forms of co-regulation.

Van Dam was state secretary for *Economische Zaken* in the last period that was included in this research: period 4. In policy, the increased attention for health and environmental impacts of food was continued. The most important instruments included co-regulation programmes in which the government funded societal initiatives. These were mostly aimed at the market sphere with the goal of changing Dutch food consumption patterns from animal-based towards more plant-based foods.

¹⁴⁸ Better Life trademark

¹⁴⁹ Factory farming

5.1 Discussion

Policy coherence

Political instability and shifts in the national mood resulted in a changeover of government and change of the role of the government. As a result, the approach to sustainable food policy changed every few years or so. Besides, none of the four agriculture and food ministers between 2007 and 2017 addressed the diverging goals of supporting the animal industry on the one hand and stimulating plant-based food production and consumption on the other.¹⁵⁰ Not only has the government been pursuing diverging policy goals, there appears to be either no general knowledge thereof within the department, or reluctance towards discussing it¹⁵¹ – even though the teams working on those diverging goals are part of the same ministry and are located in neighbouring corridors. A classic example of ‘the left hand knows not what the right hand is doing’. Therefore, the research suggests that there is lack of policy coherence when it comes to sustainable food policy, which resonates with literature on environmental policy.

When it comes to the environment, governments are likely to present different, conflicting interests – both within different ministries or departments and among a department’s own units (Steurer, 2013). Policymaking in general “...is not rational at all; rather, it is ambiguous, selective, biased and imperfect (Cairney and Jones, 2016)” (Soto Golcher et al., 2018, p.628). And, at the same time, policymakers are expected to stay away from possible controversiality and favour addressing short-term issues over long-term issues to satisfy political actors looking to get elected again (Zahariadis, 2016). A question that rises is; how can policy coherence and more integrative governance be ensured in the future?

The Organisation for Economic Cooperation and Development (OECD), which has a long history in promoting policy coherence, offers institutional mechanisms, or building blocks, which help increasing policy coherence and integrative governance for sustainable development (OECD, 2019). While the building blocks are designed for better reaching the Sustainable Development Goals, they offer some interesting insights in how to address policy coherence in general. The eight building blocks are listed below (OECD, 2019, p.71-85).

1. Policy commitment and leadership, the first block, is lacking in sustainable food policy. This is worrying, as it is prerequisite for policy coherence. For all levels of government and concerned sectors to pursue policy goals coherently, there is a need for “... strategies, action plans, policies, legislation, instructions and incentives” (OECD, 2019, p.73);
2. To ensure current and future generations’ future, there is a fundamental need for long-term visions and planning horizons to overcome interference of elections and cabinet formations;
3. To overcome diverging policy goals, such as economic and environmental goals, policy integration is key. Minimising trade-offs and increasing synergies is important in all stages of the policymaking cycle, from agenda setting through policy evaluation;
4. Fourthly, policy and institutional co-ordination mechanisms are needed to allow for sharing of information, resources and assigning responsibilities amongst the key actors, including governments and private actors;
5. Involvement of regional and local governments is a precondition for achieving national and international policy goals, as they are responsible for many public services and changes thereof;

¹⁵⁰ Focus group

¹⁵¹ Interview #4

6. Dialogue and engagement between all concerned actors, both public and private, is necessary to overcome the barrier of diverging perceptions of what sustainability looks like and how to achieve it. Dialogue can help to “...identify common challenges, set priorities, contribute to the development of laws and regulations, align policies and actions, and mobilise resources for sustainable development”, while “...effective stakeholder engagement implies that all stakeholders should have fair and equitable access to the decision-making process in order to balance policy debates and avoid capture of public policies by narrow interest groups” (OECD, 2019, p.83);
7. In our globalised society, policy action in one country will have consequences for other countries, which must be anticipated and addressed. Therefore, analysis and assessment mechanisms must be established to measure such impacts;
8. The final critical element of increasing policy coherence is to create a constant influx and communication of reliable and appropriate policy feedback, including scientific data, to track progress, assess and possibly adjust the policy objectives and instruments in place.

Responsibility

In the field of sustainable food, it is interesting to find out who is responsible and who is being held responsible for the negative externalities on the environment, human and animal health and animal welfare. The logical approach for addressing this question is to look at either producers or consumers, as they supposedly define supply and demand. However, the government plays a role too, since protecting the environment is considered a public good (Mol & Jänicke, 2009). Since the state fails to protect it appropriately, Ecological Modernisation suggests that market actors should take on a central role in environmental protection too. Nevertheless, market parties are likely to fail too, as capitalism plays an important role in environmental deterioration (Mol & Jänicke, 2009).

In theory, consumers could boycott certain products and effect a discontinuation production of specific products. In exceptional cases, entire forms of production could be discontinued (Gould et al., 2004). In practice, however, decisions about the production process “are made outside the realm of consumer decision making”, by the owners and managers of production facilities (Gould et al., 2004, p.300). Hence, consumers are limited in the options that are presented by production, whether they are individual consumers, communities, corporations or states. According to the treadmill of production logic, “it is within the production process where the initial interaction of social systems with ecosystems occurs” (Gould et al., 2004, p.300). Consumption takes place within the system pre-set by production and can hence only exercise so much influence. To achieve true change of the food system, a government policy focus on changing food consumption is not enough: “it is almost always the easy path: It generally absolves industry and the state of responsibility for a host of problems:

- it leaves production largely undisturbed;
- it fails to challenge the fundamental structure of the industry in question; and
- it often blames poor populations for not engaging in “enlightened,” “responsible,” and “conscious” consumer practices” (Gould et al., 2004, p.303-304).

While consumers lack power to make true change happen, market parties cannot be fully blamed for how the current system spoils the environment, human and animal health and animal welfare either. Farmers are trapped in the system too. Individual farmers cannot choose to produce less because prices per animal are too low. As a result, Dutch farmers received income support of the EU which accounts for one billion euros annually (NRC, 2010). The government has been playing a significant role in maintaining animal food production whenever the market could not sustain itself. One of the reasons why changing the livestock industry appears so unmanageable is due to the lengthy close cooperation between the sector

and government and confusion of who is responsible. Due to government regulation of markets, prices and incomes, (funding of) research and education, as well as protecting the sector against its negative externalities, such as (manure) surpluses, it is unclear which responsibilities are whose (Commissie Wijffels, 2001, p.6). To deal with meat and dairy surpluses, the government has played a role in stimulating consumption of animal products too (NRC, 2010).

At this point, production, consumption, and the state are caught in the web of the system they have been creating together. Both production and the state are trapped in the treadmill of animal food production and cannot seem to find a sustainable way out. All the same, “[t]he Netherlands’ prominent position in the world of food brings with it vulnerabilities, opportunities and responsibilities” (WRR, 2014b, p.10). To better approach long term environmental protection and food sustainability, there is not only a need for “ecological modernisation and structural change of industrial societies, but also implies a modernisation of the political action system” (Jänicke, 1993, p.30).

Steering / 2020 perspective

According to agenda setting theory, one reason no structural change is taking place, is lack of societal and political attention. Giddens (2013) claims that the public is not able to stay interested in a problem if it is ever growing more complicated. However, climate change policy, and sustainability policy in general, should receive public attention continuously and not be dependent on “whether or not there has been a focusing incident of some kind” (Giddens, 2013, p.191), which seems to be the case for agriculture and food policy.¹⁵² While crises in animal agriculture and the broader food system have been recognised by the government since at least the 1990s, they have not contributed to substantial steering of policy (Candel, 2019). Right now, policy is reactive and only sticking plasters to cover the wounds, rather than actually resolving them and prevent new wounds from emerging.

Therefore, there is a need for leadership and active policy instead of reactive policy. This can be done by steering or transition management. While the drive and need for creating a long-term transition strategy exist in the sustainable food policy community, political actors are still mainly focused on achieving short-term goals.¹⁵³ Hence, different food policy scenarios are being created in whenever a new minister or state secretary is anticipated. This means that the theme might disappear from the agenda again entirely, depending on who will be in charge of the ministry and decision-making.

One possibility to turn things around can be found in the Multiple Streams Framework. Both societal and political attention for focusing events can be reclaimed by lengthening of the policy window (Huber-Stearns et al., 2019). Societal attention is needed to create support and help setting the political agenda, while political attention is needed to set the governmental agenda. Media can play a role in framing and frequency of issue coverage (Giddens, 2013).

Focusing events of 2020 point out the importance of steering once more. Currently, there is a nitrogen emission crisis, that started with poor regulation decisions of adopting the PAS system in 2011. In September 2019, a research committee advised to remediate farms around Natura 2000 areas. When one of the cabinet parties, D66, suggested to reduce the amount of pigs and broilers by 50%, farmers were overwhelmed. Multiple protests occurred since and resulted in concessions. No long-term solution, that is reasonable for all parties, has been formulated to date (Candel, 2019).

Another major focusing event that has taken over the world is the outbreak of Covid-19 zoonosis. The virus spread from a wet market in Wuhan, China and has caused for a global

¹⁵² Focus group

¹⁵³ Focus group

health pandemic. The virus hit especially hard in slaughterhouses around the world. Its many immigrant workers endure poor working and living conditions, which might contribute to the spreading of the virus. If not, they complicate quarantining. American research suggests that the virus is better able to survive due to the cool and humid climate within slaughterhouses (Trouw, 2020). Whatever the cause, some of the Dutch slaughterhouses have closed down due to the outbreaks. The postponement of the slaughter process is being postponed for many pigs, which causes for poor animal welfare due to overfeeding and increase in the amounts of pigs per farm (AD, 2020). Suggesting that 23% of Dutch meat consumers worries about getting infected through meat consumption but only 50% would be prepared to pay more for improved working conditions in slaughterhouses (Hart van Nederland, 2020), underlines that no structural change will occur if it were up to consumers only. The fact that not only livestock animals suffer from poor conditions but humans that work in the slaughter industry too, suggests that the market is more interested in low-cost production and cannot be looked to achieve structural change.

Therefore, legal boundaries have to be put in place to overcome everything that is wrong with the current system. An actor that traditionally has the ideal position to establish such boundaries and legally control them, is the state (Jänicke, 1993). The need for steering is well-captured in the following quotation:

“The longer industrial societies are engaged in environmental politics, the clearer it becomes that the current style of reactive environmental politics is inadequate. When considered from a long-term and global perspective, the more obvious it becomes that huge steering efforts must be made: nothing less than the transformation of the entire industrial mode of production is at stake, and this should be organised in a permanent way” (Jänicke, 1993, p.32).

Animal welfare

In our anthropocentric approach to food sustainability, the interests of billions of animals are mostly being ignored. The lack of animal welfare and animal rights in animal agriculture are some of the most underexposed problems, which are in great need of more strict legal boundaries. The livestock industry involves reification of animals, meaning they are being mutilated for the needs – or wants – of humans, which means maximising financial return while minimising financial investment (Cohen & Regan, 2001, p.138; NRC, 2010). Some animals never see daylight. Some collapse due the circumstances they are put in. Others die the day they are born. Livestock animals live and die on humans’ terms:

“These animals are not well, not in body, not in mind. When the day arrives for them to go to their foreordained slaughter, not as the frolicsome creatures they might have been but as the stunted “fancy” meat machines their producers and consumers have made them, death arguably offers these forlorn animals a better bargain than the life they have known” (Cohen & Regan, 2001, p.137).

Visseren-Hamakers (2020) argues that “the definition of sustainable development must be broadened to include the interest of the individual animal” and animal concerns are a sustainable development goal in their own right (p.3). Animals are, after all, not mere objects that serve the purpose of feeding humans, but are sentient beings with cognitive, attitudinal, emotional, and volitional capacities, that deserve to be treated respectfully like humans (Cohen & Regan, 2001, p.208). Since the Netherlands is one of the most livestock dense countries in the world, it needs to take the lead in structural animal welfare change (NRC, 2010).

Governance

Nearly all stakeholders agree on the need for a transition, but no one knows who is responsible to act first (Candel, 2019). In terms of governance, the neoliberal turn involves the chance of market failure, while the coordinative turn involves the chance of state failure. Hence, there is a need for multi-actor governance that includes the voices of the 'less powerful' as well.

However the fundamental change of governing processes and shifts in tasks and responsibility, there seems to be a consensus that governments still play strong roles "...as the ultimate (although sometimes disoriented) regulators of society and businesses, in particular in the context of environmental and sustainable development policy making at national and sub-national levels" (Steurer, 2013, p.393), or as the 'main political power containers', regardless of processes of privatisation, globalisation and decentralisation (Lagendijk et al., 2009, p.6).

The role of the government has come to include new tools and techniques for steering and guiding, beyond traditional use of authority or commanding (Stoker, 1998). The state's role has developed from managing to a more interactive, mobilising, entrepreneurial role (Lagendijk et al., 2009). The range of tasks include to "...provide the ground rules for governance and the regulatory order in and through which governance partners can pursue their aims; ensure the compatibility or coherence of different governance mechanisms and regimes; act as the primary organizer of the dialogue among policy communities...; and assume political responsibility in the event of governance failure" amongst others (Jessop, 2011, p.13).

The role of the state can be restructured and move from a hierarchical and reactive towards a more flexible and preventive institution that guides society towards sustainability (Mol & Jänicke, 2009, p.19). It should depart from a command-and-control style and instead create networks with societal actors. Suggesting that "[c]ollaborative governance has often been a strategy of last resort prompted by the recognition that conflicts have become "intractable" or that public problems are "wicked"", there is a way out of the current agriculture and food system with all its sustainability problems.

5.2 Reflecting on the research

Theoretical reflections

This research combined Multiple Streams Framework (MSF) with a governance perspective to investigate how policy changes and why. The conceptual model presented in chapter 2 suggested an interrelation between policy change and governance change, considering that:

“[S]ustainable development is not only concerned with first-order policy issues of “what to do”, but also with second-order governance issues of “how to do it”” (Steurer, 2013, p.390).

Figure 5.1 shows an effort to denote how MSF and governance interrelated in researching sustainable food policy in the Netherlands. The four factors that have caused for a change of policy outcome mostly are societal problem definition, focusing events, political instability and subsequent changeovers of government, and shifts in the national mood. Together, these factors changed either the approach to the content or form of sustainable food policy, which seem to be interrelating inherently. For example, when the government withdrew its role and responsibilities after a changeover of government – that was induced by political instability – governmental sustainable food policy ended. When societal and political actors regained attention for food sustainability, due to a change of societal problem definitions, new policies would be formulated. Also, new forms of governance co-regulation were established due to a shift in national mood, which carefully allowed for a bigger role of government. Focusing events have influenced a change of policy outcome directly and indirectly. Since they are part of the problem stream, focusing events influence societal problem definition, which in turn influences the political agenda. Focusing events can influence policy outcomes directly through their direct harmful impacts on society. Examples are the Q-fever crisis, financial crisis and leaking of animal abuse footage. Most often, however, a change of policy outcome is the result of a mixture of these four factors.

Based on this research, one could say that if policies change content-wise the modes of governance change too. And, more so, if governance modes change the content of policies change too, due to the inclusion or exclusion of societal perspectives and input. Policy change and governance change hence seem to influence each other. The order in which they influence each other probably depends on who takes responsibility first.

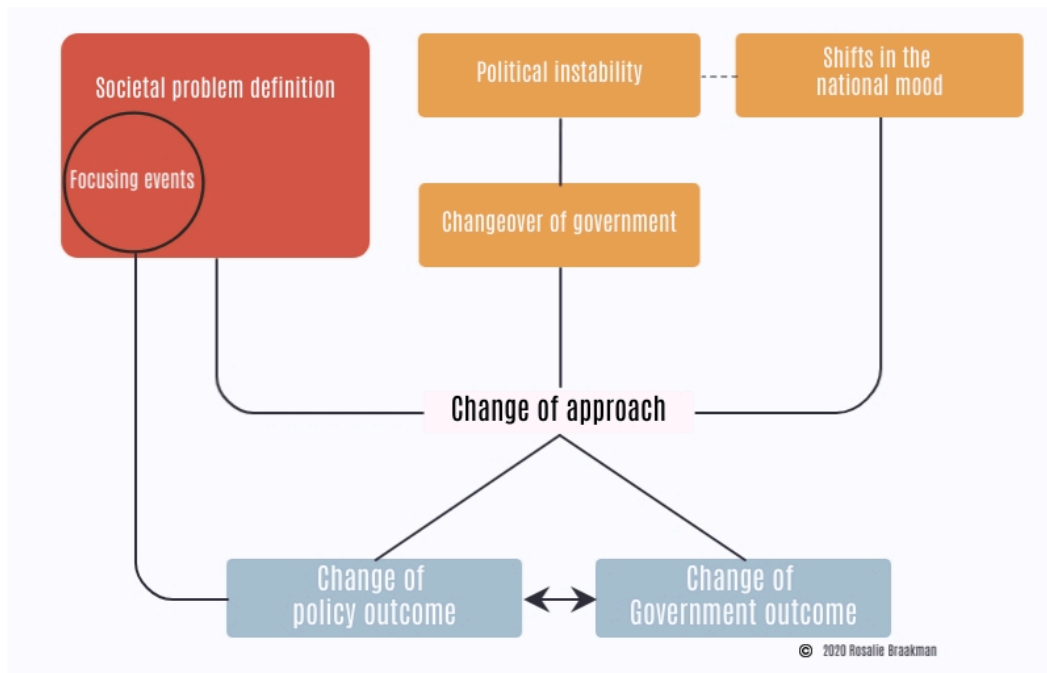


Figure 5.2.1 – Interrelations between policy change and governance change for the case of sustainable food policy in the Netherlands between 2007 and 2017

Methodological reflections

This research had a rather exploratory nature. The open interviews and focus group have offered some interesting insights, which could be further researched or tested in a more structured study. To do so, more perspectives could be included. For example, participants from market and civil society spheres could be interviewed or involved in creating a timeline.

For some periods, it was difficult to find data for some components of the policy stream, such as defined by Kingdon (1984; 1995). Technical feasibility, value acceptability, tolerable cost, anticipation of future constraints and receptivity of future decision-makers would be discussed by participants in interviews and the focus group but not as explicit as the components of the problem or political streams. Hence, the analyses of policy streams for the different periods is less specified in terms of Kingdon's components than the others.

In the interviews and focus group, participants' recollection and knowledge increased moving forward in the timeline. Hence, trustworthiness and validity of the research could be enhanced by increasing the number of interview and focus group participants or adding more data sources.

5.3 Recommendations

Future research

Future research could focus on the impacts of shrinking animal food production in the Netherlands, to see if that could offer increase sustainability, including improved animal welfare. What would happen with animal production if the Netherlands stopped producing for the world? What would happen to the animals, if animal welfare cannot even be secured in a country that *has* numerous rules? What would happen to the environment when animal production takes place elsewhere where less regulation or less strict control exists?

Yet another angle could be to investigate the role of a minister or state secretary and their ability to be policy entrepreneurs, given their position on the brink of political and policy arenas. If there was more time available for data collection at the ministry, this research could have developed more on the role of the minister or state secretary as policy entrepreneur.

Also, if there would be more time available, another interesting approach to research sustainable food policy in the Netherlands is to include the perspectives of actors from outside government, by interviewing actors from more or less organised forms of civil society, business, research and education, other levels of government, from local to international.

Another theme for future research could be how to ensure policy coherence and more integrative governance, in both a national setting and for different geographical scales, such as the European, global or even local level.

Furthermore, an interesting study would be to review the economic benefits of livestock farming against the economic impacts of all its negative externalities, including the cost of animal disease, animal welfare and various environmental impacts, amongst others.

Policy practice

The main recommendation for policy practice is to establish legally binding policy goals to achieve sustainable development of both food production and consumption, with:

- more collaborative, argumentative multi-sphere (and multi-level) governance;
- clear roles and shared responsibility for all involved stakeholders;
- a more inclusive definition of sustainable development, including animal rights and animal welfare;
- and, clear and shared vision which continuously receives feedback.

To be able to establish such policy and governance goals, however, there is a need for some discussions to finally be held first:

- a discussion within the ministry about the future of agriculture and food policy;
- a discussion with all involved societal stakeholders about the future of agriculture and food policy, such as climate and environmental experts; animal welfare experts; human health experts; consumers; and, producers of food. Together, these stakeholders may be able to shape a framework or boundaries in which production and consumption can take place;
- and, a discussion with farmers about the consequences of different scenarios for their future and the future of their work.

Hopefully, the government will start creating sustainable food policy together *with* society instead of *for* society. Then, perhaps, societal differences can be overcome, and forces can be joined to get out of the sickly animal agriculture system and into a more sustainable food system instead.

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Appendices

Appendix A – List of Interviews and Focus Group

Interviews*

Nr.	Position of interviewee at time of interviewing	Date of interview
1.	Policy coordinator and advisor at ANK, EZ	May 11, 2017
2.	<i>Senior policy maker for team food safety and project liaison for NAGF at PAV, EZ</i>	<i>May 11, 2017</i>
3.	Advisor on CSR, innovation and market transformation at RVO	May 16, 2017
4.	<i>Programme manager of Agro and Nature at ANK, EZ</i>	<i>June 2, 2017</i>
5.	Policy advisor for Food Strategy at PAV, EZ	June 13, 2017
6.	<i>Manager of Top Sectors AgriFood and Horticulture & Innovation at ANK, EZ</i>	<i>June 16, 2017</i>
7.	<i>Coordinating policy maker Food Quality and Food Waste at PAV, EZ</i>	<i>June 20, 2017</i>

In *italic*: also participated in focus group

Focus group*

Nr.	Position of participant at time of interviewing	Date
8.	Deputy director of the department of Plant Supply Chains and Food Quality (PAV) at PAV, EZ	June 22, 2017
9.	Policy maker, advisor and project manager at PAV, EZ	
10.	Policy maker for Alternative Protein Sources at PAV, EZ	
11.	Policy maker for Sustainable Food at PAV, EZ	
12.	Government trainee for Sustainable Development of Feed, team Food Safety at PAV, EZ	
13.	Policy maker for Sustainable Food, coordinator for VCN at PAV, EZ	

*All interviewees and group session participants worked as policy makers or advisors at the Dutch ministry of Economic Affairs (EZ) at the time of interviewing, except for interviewee #3, who worked as a policy implementer at Rijksdienst voor Ondernemend Nederland (RVO), which is an executive organisation of EZ. Due to elections and changeovers in administrations, EZ split up into two ministries, meaning the interviewees and group session participants are likely working for LNV at the time of publication.

In interview and group session transcriptions, interviewees are addressed with their initials as stated above. In the thesis itself, however, they are referred to with a number – listed in chronological order of interview dates. To secure privacy of interviewees, full names and contact details are not mentioned in the thesis but can be requested with the researcher.

Appendix B – List of Meetings and Events

<i>Date</i>	<i>Name/subject</i>	<i>Place</i>
16-02-2017	Green Protein Event	Aalsmeerderbrug
03-03-2017	Presentation SBIR instrument RVO	RVO, The Hague
06-03-2017	IMVO covenant signing	New World Campus, The Hague
07-03-2017	Informal IMVO meeting	EZ
13-03-2017	Overleg voeding en circulair	EZ
20-03-2017	General Meeting Green Protein Alliance (GPA)	Schouten Europe B.V., Giessen
20-03-2017	Informal conversation GPA	In transit
20-03-2017	Trouw Duurzame 100	Pakhuis de Zwijger, Amsterdam
21-03-2017	Catering concept University of Amsterdam + Amsterdam University of Applied Sciences	Volkshotel, Amsterdam
22-03-2017	Seaweeds and algae for food consumption	EZ
23-03-2017	Evaluation IMVO BZ/EZ	BZ
23-03-2017	Informal conversation Dutch Cuisine	EZ
28-03-2017	Circularity meeting	EZ
27-03-2017	Seaweed meeting	EZ
28-03-2017	IMVO evaluation	BZ
03-04-2017	Smart Food Alliance meeting	EZ
04-04-2017	Lunch lecture Lucas Simons	RVO, Utrecht
04-04-2017	Jong Leren Eten – plant-based food programme meeting	EZ
05-04-2017	Catering - Maatschappelijk Verantwoord Inkopen	Rijkswaterstaat, Utrecht
06-04-2017	Informal conversation Dutch Cuisine + strategy ‘towards more plant-based food’	EZ
10-04-2017	European food policy	EZ
11-04-2017	Rode Hoed debate: Positive Health	Rode Hoed, Amsterdam
12-04-2017	Buitengewoon Zeewier event	Zuiderstrandtheater, The Hague
12-05-2017	Rode Hoed: Slotdebat	Rode Hoed, Amsterdam
22-05-2017	Platform initiatives	EZ
23-05-2017	Informal conversation; GPA	EZ
24-05-2017	Informal conversation; DC	EZ

Appendix C – Observation tools: schemes and matrices

Observation tools, adopted from Spradley (1980):

- i. Three features of social situations (p.40);
- ii. Nine dimensions of social situations (p.78);
- iii. Descriptive Question Matrix (p.82-83).



1. *Space*: the physical place or places
2. *Actor*: the people involved
3. *Activity*: a set of related acts people do
4. *Object*: the physical things that are present
5. *Act*: single actions that people do
6. *Event*: a set of related activities that people carry out
7. *Time*: the sequencing that takes place over time
8. *Goal*: the things people are trying to accomplish
9. *Feeling*: the emotions felt and expressed

Descriptive Question Matrix

SPACE	SPACE Can you describe in detail all the <i>places</i> ?	OBJECT What are all the ways space is organized by objects?	ACT What are all the ways space is organized by acts?	ACTIVITY What are all the ways space is organized by activities?
OBJECT	Where are objects located?	Can you describe in detail all the <i>objects</i> ?	What are all the ways objects are used in acts?	What are all the ways objects are used in activities?
ACT	Where do acts occur?	How do acts incorporate the use of objects?	Can you describe in detail all the <i>acts</i> ?	How are acts a part of activities?
ACTIVITY	What are all the places activities occur?	What are all the ways activities incorporate objects?	What are all the ways activities incorporate acts?	Can you describe in detail all the <i>activities</i> ?
EVENT	What are all the places events occur?	What are all the ways events incorporate objects?	What are all the ways events incorporate acts?	What are all the ways events incorporate activities?
TIME	Where do time periods occur?	What are all the ways time affects objects?	How do acts fall into time periods?	How do activities fall into time periods?
ACTOR	Where do actors place themselves?	What are all the ways actors use objects?	What are all the ways actors use acts?	How are actors involved in activities?
GOAL	Where are goals sought and achieved?	What are all the ways goals involve use of objects?	What are all the ways goals involve acts?	What activities are goal seeking or linked to goals?
FEELING	Where do the various feeling states occur?	What feelings lead to the use of what objects?	What are all the ways feelings affect acts?	What are all the ways feelings affect activities?

EVENT	TIME	ACTOR	GOAL	FEELING
What are all the ways space is organized by events?	What spatial changes occur over time?	What are all the ways space is used by actors?	What are all the ways space is related to goals?	What places are associated with feelings?
What are all the ways that objects are used in events?	How are objects used at different times?	What are all the ways objects are used by actors?	How are objects used in seeking goals?	What are all the ways objects evoke feelings?
How are acts a part of events?	How do acts vary over time?	What are the ways acts are performed by actors?	What are all the ways acts are related to goals?	What are all the ways acts are linked to feelings?
What are all the ways activities are part of events?	How do activities vary at different times?	What are all the ways activities involve actors?	What are all the ways activities involve goals?	How do activities involve feelings?
Can you describe in detail all the <i>events</i> ?	How do events occur over time? Is there any sequencing?	How do events involve the various actors?	How are events related to goals?	How do events involve feelings?
How do events fall into time periods?	Can you describe in detail all the <i>time periods</i> ?	When are all the times actors are "on stage"?	How are goals related to time periods?	When are feelings evoked?
How are actors involved in events?	How do actors change over time or at different times?	Can you describe in detail all the <i>actors</i> ?	Which actors are linked to which goals?	What are the feelings experienced by actors?
What are all the ways events are linked to goals?	Which goals are scheduled for which times?	How do the various goals affect the various actors?	Can you describe in detail all the <i>goals</i> ?	What are all the ways goals evoke feelings?
What are all the ways feelings affect events?	How are feelings related to various time periods?	What are all the ways feelings involve actors?	What are the ways feelings influence goals?	Can you describe in detail all the <i>feelings</i> ?