

Unclassified**English - Or. English****7 December 2020****TRADE AND AGRICULTURE DIRECTORATE
COMMITTEE FOR AGRICULTURE****Working Party on Agricultural Policies and Markets****Chapter 3 – Achieving Better Policies****Food Systems and the Challenge of Coherent Policies**Contact: Koen Deconinck (koen.deconinck@oecd.org)**JT03469533**

Note by the Secretariat

The 2019-20 Programme of Work and Budget of the Committee for Agriculture, under Expected Output Result 3.2.2.2.1, foresees a major report on the performance of food systems. The scoping paper for this report was discussed at the May 2019 meeting of the Working Party on Agricultural Policies and Markets (TAD/CA/APM/WP(2019)18).

Work on this report over the biennium has proceeded under the working title “Food Systems and the Challenge of Coherent Policies” but delegates agreed to the final title for the publication being “Making Better Policies for Food Systems”.

The report consists of the following chapters that were all declassified at the Working Party on Agricultural Policies and Markets meeting on 24-26 November 2020 (with the exception of Chapter 1, which was declassified by the Working Party on Agricultural Policies and Markets on 17-18 March 2020):

- Introduction (TAD/CA/APM/WP(2020)32/FINAL).
- Chapter 1 (TAD/CA/APM/WP(2019)29/FINAL) takes stock of the achievements and challenges of food systems in terms of the triple challenge of ensuring food security and nutrition, providing livelihoods, and using natural resources sustainably and contributing to climate change mitigation. The Secretariat has updated this chapter with the latest data and has made other minor edits to make the chapter consistent with the terminology adopted elsewhere in the report. The Secretariat also proposes changing the title of the chapter to “The Triple Challenge”. A revised version highlighting the changes was made available on Delegates’ Corner for information.
- Chapter 2 (TAD/CA/APM/WP(2020)4/FINAL) discusses synergies and trade-offs between the different dimensions of the triple challenge, and what this means for the design of coherent policies for food systems.
- Chapter 3 (TAD/CA/APM/WP(2020)29/FINAL) discusses various issues which complicate the task of achieving better policies, as well as mechanisms to manage them.
- Three case studies (on the seed sector, the ruminant livestock sector, and the processed food sector).
 - The seed sector: TAD/CA/APM/WP(2020)19/FINAL
 - The ruminant livestock sector: TAD/CA/APM/WP(2020)18/FINAL
 - The processed food sector: TAD/CA/APM/WP(2020)17/FINAL
- Conclusion (TAD/CA/APM/WP(2020)33/FINAL).

This document contains Chapter 3 and was declassified by the Working Party on Agricultural Policies and Markets meeting on 24-26 November 2020.

1. Introduction

1. As the first two chapters of this report show, better policies offer significant potential to meet the “triple challenge” facing the food systems, especially when policy coherence can be achieved. Yet coherence by itself does not guarantee policies will be sufficiently ambitious to address these challenges. This chapter focuses on three sources of “frictions” which can occur during policy design and decision-making: disagreements over facts, diverging interests, and differences over values.¹ Many policy questions related to food systems encounter frictions on one or more of these dimensions, and the most controversial policy issues face frictions on all of them. In addition, frictions related to facts, interests, and values may influence each other in complex ways. The goal of this chapter is to draw on insights from diverse perspectives to provide policy makers with a better understanding of those frictions and a range of practical approaches to overcome them.

2. Chapter 2 discussed how policy makers can develop coherent policies when faced with potential synergies and trade-offs across different food systems objectives. As noted, a trade-off cannot be resolved on purely technical grounds, but involves an element of societal choice. In pluralist societies, people will typically have diverse interests and values, so that there will rarely be a unanimous view on how to strike the balance between competing objectives. Moreover, in some cases it may not be clear whether there is a trade-off and if so, what the exact consequences would be of different policy options. People may hold different views about these effects.

3. Such frictions around facts, interests and values are not unique to food systems, and are encountered to some degree in the design of any public policy. Yet there is reason to believe they are of particular importance in debates around food systems, where current policies are often not aligned to address the “triple challenge” and where policy developments have shown less progress than in other sectors. This is notably the case for agricultural trade liberalisation; despite progress over time, applied tariffs on agricultural goods remain higher than for industrial goods (OECD, 2019^[1]), and agriculture remains a stumbling block in international trade negotiations (Jensen and Shin, 2014^[2]). Likewise, despite agriculture’s important contributions to global greenhouse gas (GHG) emissions, adopting effective strategies to mitigate agricultural emissions has proved especially challenging, as highlighted in the case study on ruminant livestock.

4. The discussion in this chapter complements existing OECD work on determinants of successful reforms. For example, work by the OECD (2017^[3]) on the political economy of biodiversity policy reform highlighted the importance of the real or perceived economic costs of such regulations, distributional effects, and the role of vested interests and rent seeking behaviour, as well as the “political acceptability” of reform. The latter is a broad concept which includes factors such as public trust in government, the perceived effectiveness of proposed reforms, and whether the public understands and agrees with the proposed reforms. OECD work on the reform of water policies in agriculture (Gruère, Ashley and Cadilhon, 2018^[4]) emphasised the importance of “windows of opportunity”

¹ The OECD wishes to thank Béatrice Cherrier (CNRS) for bringing this parsimonious triad to its attention. The discussion in this chapter draws on a voluminous literature on public policies, with notable contributions from political science (surveyed by e.g. Weible and Sabatier (2017^[154]), Moran et al. (2008^[155]) and Dodds (2018^[156])) and economics (surveyed by, for example, Mueller (2003^[157]), Persson and Tabellini (2000^[158]), Rausser et al. (2011^[10])). The “triad” of facts, interests and values usefully captures and synthesises many of the insights from these literatures, although different traditions have tended to emphasise different elements of this triad. This chapter uses the term “frictions” as shorthand to refer to the ways in which disagreements over facts, diverging interests, and differences over values can complicate the policy-making process.

created by crisis situations, such as droughts or floods or the current COVID-19 pandemic. Governments should thus prepare reforms early on to take advantage of reform opportunities when a window of opportunity opens (Gruère and Le Boëdec, 2019^[5]).² Consistent with this view, many countries have announced their ambition to “build back better” following the COVID-19 pandemic, focusing economic recovery plans that improve sustainability and resilience.³ Analysis by the OECD on fisheries policy changes confirms the importance of trusted evidence and the role of distributional effects and lobbying efforts, but also highlights other factors such as legal commitments to periodically evaluate and review policies (Delpuech and Hutniczak, 2019^[6]).

5. One conclusion of the existing work is that there is no “one size fits all” approach to policy reform (OECD, 2017^[3]). Strategies which work in one context might backfire in another context; different countries have different institutional settings; and different sectors or policy problems have different characteristics, all of which affect the feasibility of different reform strategies.⁴ That said, it is possible to identify some common factors, such as the three sources of frictions discussed in this chapter.

6. Policy design and political decision-making will naturally be easier if three criteria are met: if there is broad agreement in society on the basic facts of a policy question (such as the extent and nature of a problem and the types of policy instruments best suited to address that problem); if there is no major conflict between different interest groups and if all interests have the opportunity to voice their views – i.e. when there is no “policy capture” by special interests; and if there is agreement on the relative importance of different values. Policy questions which meet these three criteria will tend to be resolved without attracting much controversy. By contrast, difficult policy questions seem to be characterised by frictions in at least one area – facts, interests or values. Depending on which area is most problematic, different approaches are needed to move forward on policy issues:

- If frictions are limited to a disagreement about the facts, then what is needed is additional credible technical expertise, scientific evidence, or cost-benefit analyses to identify the best policy option, or better communication of the existing body of evidence.
- If frictions are due to diverging interests, then policymaking will involve an element of bargaining. Tensions between diverging interests (and hence interest groups) are unavoidable in diverse and pluralist societies, and much of political decision-making involves a search for compromises or grand bargains which can reconcile diverging interests in society. However, conflicts between diverging interests can become problematic if there is no “level playing field” – i.e. if one interest group has disproportionate influence over political decision-making. In such cases, achieving better policies will require efforts to ensure open and

² As an example, New Zealand underwent major reforms to its economic policies in the 1980s, including to agricultural support policies. The magnitude of these reforms was considerable: New Zealand’s Producer Support Estimate stood at 20% in 1986, but was reduced to about 3% in 1988 and fell further to around 1% by the early 1990s. These reforms were made possible by an “atmosphere of crisis” and considerable budgetary problems, and a new government brought to power after the 1984 election (Atkinson, 1997^[170]).

³ See <http://www.oecd.org/coronavirus/policy-responses/making-the-green-recovery-work-for-jobs-income-and-growth-a505f3e7/>

⁴ For a detailed discussion of how the dynamics of public policy differ across economic, social, education, or environmental policymaking, see Dodds (2018^[156]).

equitable access to policy-making processes, and to safeguard integrity in decision-making (OECD, 2010^[7]).

- A third source of frictions are differences over values. In contrast with factual disagreements (which can in principle be adjudicated with additional evidence) and diverging interests (where it might be possible to “buy off” interest groups with compensatory measures), the source of friction here is that people may disagree over what constitutes the public good. In some cases, it may be possible to find creative solutions to reconcile differences over values by focusing on finding specific actions which can be supported by people with different values. When such creative solutions are not available, deliberative approaches can help to build societal consensus.

7. The most difficult policy issues encounter frictions in all three areas. A particular difficulty occurs when frictions in one area spread to the other areas. For example, conflicts between diverging interests or differences over values can lead to motivated reasoning, whereby people interpret evidence in a way which is consistent with their interests or values. Interest groups may also deliberately distort facts. In the resulting policy controversies, opposing camps may hold different “worldviews”, understood as incompatible sets of mutually reinforcing factual beliefs, interests, and values (Rein and Schön, 1993^[8]).

8. Different authors have tended to emphasise different sources of friction. For Sunstein (2018^[9]), politically contentious issues “are fundamentally about facts rather than values”, and “[i]f we can agree on the facts, we should be able to agree on what to do – or at least our disagreements should be narrowed greatly.” By contrast, a considerable literature on political economy has long emphasised the importance of tensions between the public interest and special interests (Rausser, Swinnen and Zusman, 2011^[10]), while a third perspective emphasises the importance of values and differences over values (Thacher and Rein, 2004^[11]) (Inglehart and Welzel, 2005^[12]) (Stewart, 2006^[13]) (Enke, 2020^[14]). In reality, all three are likely to play a role, although their relative importance will vary by issue. An awareness of these distinct sources of friction, and their interactions, can help policy makers anticipate likely risks and develop ways forward in policy processes around food and agriculture.

9. This chapter focuses on policy design and decision-making. However, translating policy decisions into results is far from straightforward, and requires difficult processes of implementation, evaluation and adjustment of policies (Pressman and Wildavsky, 1973^[15]). This chapter refrains from discussing implementation for several reasons. First, although some general principles of implementation hold across different policy areas, such as the importance of achieving clarity on priorities, of planning, and of measuring progress (Barber, 2015^[16]), the specifics of how to achieve effective implementation will be highly context-dependent, and institutional aspects such as the degree of centralisation of political institutions also likely matter a great deal. The principles and approaches set out in this chapter offer a general guide, but the path and precise process will be different in each country and to set out how this should work in specific instances or issues risks being overly reductive of this diversity.

10. Fundamentally, implementation cannot be seen independently from the decision-making process. If decision-making is not based on a shared understanding of the facts, is tarred by (perceptions of) conflicts of interest, or fails to address differences over values, implementation will be difficult. Conversely, a decision-making process which successfully addresses frictions related to facts, interests, and values will greatly facilitate implementation. While this chapter outlines several approaches to build a shared understanding of the facts, balance diverging interests, deal with differences over values,

and prevent or manage policy controversies, few of the approaches outlined in this chapter offer quick fixes. Rather, a recurring theme is the importance of building and maintaining the effectiveness, integrity and trustworthiness of public institutions. There is no rule of thumb on the precise choices different societies should make, but it is essential that processes and institutions for making these societal choices are transparent, ensure a level playing field, and promote accountability. Achieving such processes and institutions at the international level is also important, although no less challenging.

11. The remainder of the chapter is organised as follows. The next three sections discuss frictions related to facts, interests, and values respectively. Each section illustrates the relevance of these sources of frictions to food systems, and outlines possible policy approaches. Section 5 then discusses the particularly fraught case of policy controversies involving simultaneous frictions related to facts, interests, and values. In Section 6, international aspects are highlighted, while Section 7 concludes.

2. Building a shared understanding of the facts

12. Policy-relevant information is not always available about the existence or extent of a problem, its causal mechanisms, the effectiveness and distributional effects of various policy measures, or the magnitude of synergies and trade-offs between different policy goals. Several best practices exist to ensure that policies are based on the best available evidence, e.g. through the use of regulatory impact assessments, scientific advisory bodies and stakeholder consultations. Yet evidence by itself is rarely sufficient: on the one hand, societal choices always depend on the interests and values at stake; on the other hand, the role of interests and values also means that facts may become distorted or interpreted in ways consistent with people's prior views.

2.1. Relevance to food systems

13. For many policy issues facing food systems, developing an effective policy response is made difficult by a lack of knowledge. For example, the necessary evidence base to design policies for healthier food choices would need to combine information on the food environment (e.g. the role of food away from home, the role of fast-food outlets, the relative availability of healthier and less healthy food options in different areas), on food products (e.g. nutritional composition, prices), and on consumers' food choices (purchases, individual intake, household waste) and the determinants of those choices; the informational requirements are even greater if environmental sustainability is taken into account as well. Information on these elements is not always available, or exists in disparate databases with inconsistent definitions and methodologies and which are in many cases privately owned (Giner and Brooks, 2019^[17]).

14. Policy discussions around food and agriculture are often also made complicated by instances of misconceptions and unreliable statistics used in public discourse (Box 1).

Box 1. Misconceptions and data gaps on food systems

Public debate around food systems often features claims which on closer inspection turn out to be misconceptions or based on unreliable statistics.

For example, it is often claimed that smallholder farmers produce most of the world's food. However, it is estimated that their contribution, although vital for global food security, is closer to one-third of world production (Ricciardi et al., 2018^[18]).

Another example is the claim that due to soil erosion, the world only has “about 60 years of topsoil left” (World Economic Forum, 2012^[19]), a claim repeated in major news outlets such as Scientific American (Arsenault, 2014^[20]), The Guardian (Cosier, 2019^[21]), and France24 (Bertsch, 2019^[22]). There is no factual basis for this claim; for example, no evidence to back this statement can be found in the 2015 report “Status of the World's Soil Resources”, a 600-page review prepared by the Intergovernmental Technical Panel on Soils (FAO and ITPS, 2015^[23]). Moreover, translating the complexity and diversity of global soil conditions into a single “end-point” statistic is practically impossible, which is why such statistics are not found in the scientific literature (Wong, 2019^[24]).

A similar claim that “[a]bout a third of the world's soil has already been degraded” (Arsenault, 2014^[20]) is based on a single chart in FAO (2011^[25]), where the results are explicitly described as “preliminary”. Indeed, a more recent report “The Status of the World's Soil Resources” (FAO and ITPS, 2015^[23]) mentions the “unreliability of some of the databases used” in this earlier exercise, and refrains from making any global assessment of “land degradation”, instead presenting peer-reviewed evidence on a broad range of soil characteristics as well as detailed reviews by region. Yet, the “one-third” statistic is commonly found in discussions about food systems.

In other instances, the origin of some commonly cited statistics related to food systems is unclear. For example, it is often said that livestock contributes to the livelihoods of 1.3 billion (or in some versions, 1.7 billion) poor people. Such statistics are often found in policy discussions on the importance of the livestock sector. Yet despite their widespread use, it is unclear where these claims come from. The 2016 report of the High Level Panel of Experts on “Sustainable agricultural development for food security and nutrition: what roles for livestock?” (HLPE, 2016^[26]) merely notes that “*it is often said* that 1.3 billion people depend on livestock for their livelihoods” (p. 35, emphasis added). The 2018 FAO report “World Livestock: Transforming the livestock sector through the Sustainable Development Goals” (FAO, 2018^[27]) contains detailed and well-documented discussions of the contribution of livestock to poverty reduction, economic growth and employment (among other dimensions), but does not address the question of how many livelihoods depend on livestock. While there is no doubt that the contribution of livestock to livelihoods is significant, especially in lower- and middle-income countries, in the absence of a reliable source, caution is needed when citing precise figures.

In other cases, widely cited statistics rest on underlying data and methodology that may not be as robust as policymakers would wish. This is particularly the case for statistics on food loss and waste, where it is commonly said that one-third of the world's food is lost or wasted (see e.g. National Geographic (2014^[28])). These estimates are based on an influential 2011 study (Gustavsson, Cederberg and Sonesson, 2011^[29]); however, given the paucity of detailed studies at the time, the calculations involved several

extrapolations and assumptions. Estimates of food loss and waste have also been plagued by inconsistent definitions and measures (Bagherzadeh, Inamura and Jeong, 2014^[30]). A critical review by Xue et al. (2017^[31]) highlighted the relatively limited evidence base on which many estimates of food loss and waste were based. In recognition of the limitations of these earlier estimates, researchers have made considerable efforts in recent years to harmonise definitions and methodologies. In the context of the Sustainable Development Goals and the One Planet Network's Sustainable Food Systems Programme, FAO and UNEP are collaborating to develop new estimates of food loss (along the supply chain) and food waste (at retail and consumer level). FAO (2019^[32]) presents new estimates of food losses worldwide, while new estimates of food waste are under development.

15. In addition to a lack of information, there may also be gaps between public perceptions and the available evidence. A study by the Pew Research Center demonstrated substantial gaps between the views of U.S. citizens and scientists on a range of scientific topics, with the largest gaps found in views on food safety. For example, while 88% of scientists agreed that genetically modified foods are safe to eat, only 37% of the broader U.S. public thought so. Similarly, while 68% of scientists thought that food produced with pesticides is safe to eat, only 28% of the broader public agreed (Pew Research Center, 2015^[33]). Such gaps between perceptions and evidence are likely to create tensions when policymakers attempt to design evidence-based policies, as discussed in the case study on seeds.

16. Finally, what matters for policy design is finding the *relevant* facts and correctly interpreting the policy implications of available evidence. Even when data are available on certain aspects of an issue, the data may miss policy-relevant aspects of the problem or may lend itself to misinterpretation. For example, internationally comparable data on pesticide use typically only cover total use or total sales, without distinguishing different toxicity levels. Yet, the health effects of pesticides differ greatly and also depend on application rates (Fantke, Friedrich and Jolliet, 2012^[34]). Moreover, as regulations have become more stringent, and as newer, less toxic products have replaced older, more toxic ones, the average toxicity of pesticides used has fallen over time.⁵ Statistics showing levels of total pesticide use could thus hide important differences in terms of potential health effects. Similarly, direct emissions from ruminant livestock consist mainly of methane (CH₄) and nitrous oxide (N₂O) which differ from each other and from carbon dioxide (CO₂) in their ability to absorb energy and in their lifetime in the atmosphere. As discussed in the ruminant livestock case study, there are different ways of converting these gases into a common unit, with potentially different policy implications. More generally, discussions on food systems often invoke aggregate or average figures (e.g. at the global level) which ignore the heterogeneity of food systems across regions and countries highlighted in Chapter 1.

⁵ As noted in Chapter 1, of the ten best-selling pesticides in the United States in 1968, six are now banned, including DDT (Phillips McDougall, 2018^[176]); toxicity of pesticides used in US agriculture has fallen considerably since the 1960s (Fernandez-Cornejo et al., 2014^[177]). Similarly, Fantke et al. (2012^[34]) report that 33 of the 133 pesticides in their study, accounting for 20% of the health impacts in the EU in 2003, were banned by 2012. The situation is likely different in many low- and middle-income countries, which often still allow pesticides that have been banned in high-income countries (Schreinemachers and Tipraqsa, 2012^[178]).

2.2. Approaches

17. As these examples illustrate, it is essential for policymakers to invest in the generation and communication of trustworthy and policy-relevant evidence which can serve as the basis for a shared understanding of the facts by all stakeholders. A number of approaches can improve the evidence base underlying policy decisions. These include regulatory impact assessments, input from scientific advisory bodies, stakeholders, and policy research organisations, as well as more experimental approaches through “learning by doing”.

18. The OECD Council Recommendation on Regulatory Policy and Governance calls on policymakers to integrate Regulatory Impact Assessments into the early stages of the policy process (OECD, 2012_[35]). As highlighted in the previous chapter, these assessments should cover economic, social and environmental impacts, ideally in a quantified and monetised form. A range of methods can be used to collect evidence and information relevant to such *ex ante* assessments.

19. Scientific and technical input into policy processes typically comes from three main sources (OECD, 2015_[36]): scientific advisory bodies that are mandated to address specific issues, either permanent ones such as the Joint Research Centre of the European Commission or ad hoc ones such as the U.S. committee on dietary guidelines (Dietary Guidelines for Americans, 2020_[37]); academic institutions that provide information (which may or may not have been requested explicitly by the government), such as the Centre for Food Policy at the City University of London; or individual advisors in formal or informal roles. In the European Union, the European Commission Group of Chief Scientific Advisors recently commissioned a systematic review on sustainable food systems from SAPEA (Science Advice for Policy by European Academies) (2020_[38]), a consortium of European academies of science.

20. The success of science advisory processes depends on three factors. First, an effective and trustworthy process must have a clear objective and well-defined roles and responsibilities. Second, such a process must involve the relevant actors; this not only includes scientists from all the relevant disciplines but also, where necessary, non-scientific experts and/or civil society stakeholders. There should be a transparent process for their participation, and strict procedures for declaring, verifying and dealing with conflicts of interest. Third, the advice should be sound, unbiased, and legitimate – which in turn means that it should be based on the best available scientific evidence, clearly describe scientific uncertainties, and be protected from political or other interest-group interference (OECD, 2015_[36]).

21. Another important source of information is stakeholder consultation, which can be a powerful tool for policymakers to learn about policy issues and about how proposed policies might affect different groups in society (UNEP, 2019_[39]). Examples in a food systems context include Canada’s open consultation on dietary guidelines (Health Canada, 2018_[40]) and the consultative process used to develop the first Food Policy for Canada (see Chapter 2), as well as France’s “Estates General of Food” (Etats généraux de l’alimentation, also known as Egalim) (Ministère de l’Agriculture et de l’Alimentation, 2020_[41]). Stakeholder consultation is not without its complexities, however, as not all stakeholders are equally organised or vocal. There is a risk that consultations will ignore a “silent majority” or disproportionately focus on certain well-organised groups (see Section 3 below). Moreover, stakeholder views are not necessarily factually accurate. The OECD Council Recommendation on Regulatory Policy and Governance therefore advises governments to hold open and balanced public consultations, actively engage all stakeholders, and design the consultation process to maximise the quality of information

received. One way of doing so is by using impact assessments as part of the consultation process (OECD, 2012^[35]). The OECD is currently developing best practice principles for stakeholder engagement (OECD, 2017^[42]). These best practices emphasise the importance of transparency and inclusiveness.

22. Policy research organisations such as think tanks, foundations associated with political parties, movements, or interest groups, and government policy research departments occupy an intermediate place between scientific advice and stakeholder input. These organisations are often an important source of information and specific policy ideas, but may also be pushing a particular viewpoint. The relative role of private and public organisations in this field differs strongly according to national historical contexts (Campbell and Pederson, 2014^[43]).⁶ Research from an authoritative, non-partisan institution which is trusted across the political spectrum can have an important impact. International organisations such as the OECD play a role through collecting internationally comparable data and providing research and recommendations (Tompson, 2009^[44]) (OECD, 2010^[45]). For instance, to obtain trusted information on the extent of producer support in agriculture, governments preferred that data would be gathered by a respected international institution at arms' length from domestic policymakers and trade negotiators, leading to the OECD's efforts in measuring Producer Support Estimates and other indicators of agricultural policies (Legg, 2019^[46]) (OECD, 2020^[47]).

23. In addition to these methods to collect information *ex ante*, another method for resolving disagreements over facts is to engage in a form of “learning by doing”, e.g. through the use of pilot projects. For example, in France a network of experimental farms was set up to explore possibilities to reduce pesticide use; this network, known as Dephy, currently counts around 3 000 farms spread across France.⁷ In these cases, mechanisms to allow for timely feedback to be collected and for any necessary course corrections can be important. More broadly, adopting a culture of experimentation is fundamental to helping better inform policies, as well as to build evidence of “what works” before implementing a policy at full scale (OECD, 2019^[48]).

24. Whichever method is used to collect evidence, achieving a reliable shared understanding of policy issues is an important precondition for developing successful policies (OECD, 2010^[45]). Uncertainty can greatly complicate policy-making. Clarity on the likely distribution of costs and benefits is of particular importance, as uncertainty is likely to create resistance to reform (Tompson, 2009^[44]). However, such detailed assessments are not always undertaken; in the context of fisheries policy, for example, impact assessments have often tended to focus on biophysical effects, and where socio-economic impacts are considered these are often limited to the overall societal balance of costs and benefits without exploring distributional effects (Delpeuch and Hutniczak, 2019^[6]). At the same time, waiting for more data can lead to “paralysis by analysis” as complete information is rarely available, in part because scientific insight continues to evolve.

⁶ The dynamics of this “ideas industry” (Drezner, 2017^[134]) have been changing in recent years due to a waning trust in expertise (Nichols, 2017^[135]) as well as growing political polarisation and a growing role of philanthropists funding think tanks.

⁷ See <https://ree.developpement-durable.gouv.fr/themes/economie-verte/activites-de-l-economie-verte/pratiques-agricoles-respectueuses-de-l-environnement/article/vers-la-transition-agro-ecologique>

2.3. Limitations

25. While evidence describes the way things are, policy debates inevitably also involve a consideration of how things should be. The importance of evidence-based policymaking should thus not obscure the fact that evidence alone is never sufficient to make policy choices, which almost always involve some trade-off between competing interests and values (Parkhurst, 2017_[49]). A *technocratic* approach to policymaking, which sees policy issues as essentially technical problems which can be solved through evidence and expertise, is thus insufficient.⁸ Not only can facts by themselves not decide a policy issue, but the availability of information, and the types of facts that are considered relevant in a policy debate, depend themselves on the interests and values at stake in a policy issue (Parkhurst, 2017_[49]). For example, data on gender implications of a policy decision are likely to be collected only if at least some participants in a policy debate consider gender issues important. Statistical indicators presented as evidence in a policy debate may also implicitly include some value judgments, especially when different variables are aggregated into a composite indicator – for example, when various aspects of environmental performance are aggregated into an overall index of sustainability. The selection of variables, and the relative weights of these variables in the overall index, implicitly depend on a judgment of which aspects of a problem are most important, and how a good performance on one dimension can compensate for a worse performance on another dimension.⁹ Some aspects of a problem may also lend themselves more easily to quantification and measurement. In some contexts, an appeal to evidence-based policymaking could thus be an attempt to circumvent a debate over interests and values (Parkhurst, 2017_[49]).

26. Interests and values also affect the role of evidence in other ways. Research in psychology has long documented how people exhibit “motivated reasoning”: faced with evidence and arguments, people tend to arrive at the conclusion they prefer to arrive at (Kunda, 1990_[50]) (Nickerson, 1998_[51]) (Bénabou and Tirole, 2016_[52]) (Flynn, Nyhan and Reifler, 2017_[53]).

27. People’s worldviews can influence this process. Beliefs on unrelated issues tend to “cluster” in ways which are difficult to explain rationally but which make sense given individuals’ worldviews (Kahan and Braman, 2006_[54]). For example, researchers studying risk perceptions have suggested that people attracted to a more egalitarian worldview find it easier to believe that economic activities are causing societal harm, whereas people with a more individualist worldview are more likely to dismiss such claims (Kahan et al., 2010_[55]). Moreover, while people recognise that others’ beliefs are not consistent with the facts, they may not recognise the same mechanisms at work in influencing their own beliefs

⁸ Technocratic approaches assume that ends are given and that the only relevant questions concern the optimal choice of means. Such approaches are thus inappropriate in a context where there is disagreement over the ends. Recently, Friedman (2020_[153]) has argued that technocratic approaches often fall short even on their own terms (in finding the optimal means to given ends) as it is impossible to predict how people will react to policies.

⁹ Recent attempts to construct indices have sometimes allowed users to adjust the weights to see how overall rankings are affected. This approach is used in the OECD Better Life Index (www.oecdbetterlifeindex.org). The Global Food Security Index by the Economist Intelligence Unit similarly allows users to download a spreadsheet where the weights can be modified (<https://foodsecurityindex.eiu.com/>). As an example of how the mathematical formula for aggregating information can play a role, since 2010 the Human Development Index combines sub-indices of life expectancy, education, and income using a geometric mean (i.e. multiplying the three sub-indices, then taking the cubic root) rather than an arithmetic mean (which would add the three sub-indices and divide by three). Using a geometric mean implies that a low score on one dimension is much harder to compensate with a high score on another dimension. For instance, if a country would score zero on one dimension, the overall Human Development Index would be zero regardless of the score on the other dimensions.

(Cohen, 2003^[56]). These mechanisms affect not only stakeholders, but also experts and policymakers (World Bank, 2015^[57]).

28. One implication of these findings is that information by itself may not be sufficient to change people’s minds, especially on issues which have become strongly polarised. It is therefore imperative to prevent the needless polarisation of debates around the challenges facing food systems. Some approaches have been suggested to overcome or avoid these problems (Kahan, 2010^[58]) (Kahan, Jenkins-Smith and Braman, 2011^[59]) (Flynn, Nyhan and Reifler, 2017^[53]). A first approach is to present information in a way which affirms the values held by the audience. For instance, people with an egalitarian worldview would probably be more positive about new technologies if information is provided on how these technologies could help in environmental protection (and not only on their potential use in e.g. reducing costs) (Kahan, 2010^[58]). A second approach is to ensure that information is communicated by experts with diverse values; this increases the probability that people will hear the message from someone they identify as a trusted source (Cohen et al., 2007^[60]).

29. Interests and values affect not only how people interpret evidence, but can also lead to distortions in communication around evidence. Interest groups may deliberately spread misinformation or biased information to influence policy debates.¹⁰ Interest groups may also sponsor their own “scientific” studies, raising doubts about the impartiality and credibility of the resulting findings, as discussed in the section on “policy controversies” below. For these reasons, the task of building a shared understanding of the facts is often made difficult by diverging interests and differences over values.¹¹

3. Balancing diverging interests

30. Most public policies have distributional consequences. Even if a policy reform would increase overall economic welfare, there are likely to be some who stand to lose; conversely, a policy which has important negative effects on society as a whole may benefit some sectors or some groups in society.

31. Groups with a strong stake in a policy outcome may organise to try to influence the policy process. It is probably not possible, and perhaps not even desirable, to have a political process which is completely immune to such influence. Interest groups, from businesses to civil society organisations, are critical actors in the policy-making process: by expressing their needs and by sharing their expertise, evidence, and policy proposals, they can provide valuable information to policymakers, and the political system can act as a mechanism to balance these diverging interests. But problems arise when some special interests achieve a disproportionate influence, leading to policy capture – the situation

¹⁰ Recent work by the OECD distinguishes between *misinformation* (when false information is shared but no harm is meant), *disinformation* (when false information is knowingly shared to cause harm), and *malinformation* (when genuine information is shared to cause harm) (Matasick, Alfonsi and Bellantoni, 2020^[183]).

¹¹ The emphasis on pragmatic, rigorous, evidence-based approaches throughout this report also extends to the ex post evaluation of the effectiveness of existing policies. But just as with debates over new policies, the evaluation of existing policies rarely involves only facts. Despite the importance of feedback and learning, policy evaluations may be used to apportion blame or praise, leading to a “politics of policy evaluation” (Bovens, ’t Hart and Kuipers, 2006^[164]). Nevertheless, such ex post evaluation is important, as policies may have outlived their original rationale. For example, many countries provide reductions on excise taxes for fuels used in agricultural production. Such measures go against any sustainability logic, but have often been in place for a long time: in the United Kingdom, the lowering of fuel duties originated during the Second World War to increase production. Despite international pressures to reform fuel subsidies, only a handful of countries (e.g. Austria, the Netherlands) have reformed these policies (OECD, 2020^[169]).

where public policy is used to benefit a special interest at the expense of others in society (OECD, 2017^[61]).

3.1. Relevance to food systems

32. In the context of the food system, influence over policies has been ascribed to farm lobby groups, agricultural input suppliers, food processing companies, and NGOs, among others. In some cases, disproportionate influence has been well-documented in the scientific literature; in other cases, the available evidence is more anecdotal.

33. Policies affecting the incomes of agricultural producers in both the developing and the developed world show a number of systematic patterns which are difficult to explain as a socially optimal response to market failures, but are best understood as the result of pressures exerted by various interest groups (Anderson, Rausser and Swinnen, 2013^[62]) (Swinnen, 2018^[63]). For example, poorer countries have historically tended to tax the agricultural sector while richer countries have tended to support it, and as poorer countries developed economically, they have tended to reduce taxation or even moved to supporting agricultural producers. This “development paradox” (Swinnen, 2018^[63]) can be explained in large part by the impact of economic development on interest group competition and the political incentives of policymakers. In rich countries, food is a smaller share of consumers’ budgets, which reduces consumer opposition to policies to raise the price of food. Development also reduces the relative number of farmers, which lowers the cost to society of increasing farm incomes. Furthermore, it is easier to organise a small group of farmers for whom a sizeable amount of support is at stake than to organise a large group of consumers for whom the cost of that support is relatively small. This logic of collective action (Olson, 1965^[64]) is further strengthened when farm incomes lag behind incomes in other sectors, as this makes lobbying more attractive to agricultural producers. The impact of these structural economic factors on policy outcomes is however mediated by the role of political institutions and governance mechanisms, as well as by ideology and other factors such as inequality or the role of mass media (Swinnen, 2018^[63]). Similar processes have been documented for fisheries policies, with lobby groups exerting a surprising degree of influence despite the sector’s small share of economic activity and employment in most countries (Delpuech and Hutniczak, 2019^[6]).¹²

34. Other actors in the food system similarly exert pressure to influence policies. As discussed in the case study on processed foods, for example, food and drinks companies engage in a variety of “corporate political activities” such as disseminating information; providing financial incentives to politicians, political parties and other decision makers; proposing voluntary initiatives or self-regulation as an alternative to public policies; or challenging proposed policies in court (Mialon, Swinburn and Sacks, 2015^[65]). Corporate political activities have also been documented for many other actors in the food chain, such as retailers or biotech firms (Clapp and Fuchs, 2009^[66]). Many of these activities are not illegitimate; neither are they unique to the agro-food sector. Yet there exists a “grey area” between legitimate advocacy activities on the one hand and illegal influence-seeking

¹² Agricultural policies tend to be complex, with large variations by commodity even within a single country (OECD, 2020^[47]). This can be seen as another consequence of the logic of collective action, i.e. the observation that lobbying is more difficult for larger groups because members have an incentive to try to benefit from the resulting policy without contributing to the lobbying effort (“free riding”). An interest group representing all agricultural producers is necessarily heterogeneous and large, and hence vulnerable to free riding behaviour. Moreover, not all producers within the group necessarily share the same interests and there may be trade-offs. Smaller groups representing more narrowly defined producer interests (e.g. dairy, sugar, rice) can thus often be effective in pursuing specific interests, including when they are also linked to a concentrated geographical region. This leads to different levels of support across commodities – which in turn leads to greater economic distortions (OECD, 2020^[47]).

activities such as bribery on the other. In this grey area, advocacy activities can lead to increased risks of policy capture (OECD, 2017_[61]).

35. As these examples suggest, several mechanisms can lead to policy capture. Work by the OECD (2017_[61]) identified a number of direct and indirect channels of influence on public officials. Direct channels include actions designed to create a sense of reciprocity (ranging from legal activities such as political campaign donations to illegal actions such as bribery or threats) or leveraging personal ties (e.g. as a result of family ties or “revolving door” practices where former government officials end up working in industry or advocacy organisations). Indirect channels of influence build on strategic communication (e.g. press releases, media articles, participation in public hearings) and expertise (e.g. providing research and analysis), discussed in more detail in section 5. Influence can also come simply from repeated interactions between public officials and members of an interest group (e.g. contacts between energy regulators and energy companies, or between environmental regulators and environmental services firms). Other, more subtle channels may exist: for example, members of an interest group and public officials may have similar educational or social backgrounds, causing public officials to unconsciously identify and sympathise with members of the interest group (Kwak, 2014_[67]).

36. There is no doubt that such mechanisms exist and can lead to policies favouring special interests at the expense of the public interest. As pointed out by Carpenter and Moss (2014_[68]), however, “observers are quick to see capture as the explanation for almost any regulatory problem,” even though many claims about policy capture in the literature turn out to be poorly supported by the evidence. An excessive pessimism about the existence of policy capture could undermine public trust in government and lead to unwarranted fatalism about the scope for policy interventions. Hence, as with other claims regarding food systems, claims of regulatory capture should be scrutinised. What complicates such an analysis is that policies could have positive efficiency effects yet at the same time lead to important gains for some groups at the expense of others.¹³ Where risks of capture exist, several approaches discussed below can help to strengthen the integrity of public decision-making.

37. Even where some of the stronger claims about regulatory capture may turn out to be exaggerated, it is undeniable that not all interests in society are represented equally well in the policy process. In particular, smaller groups with more concentrated interests at stake tend to be better organised than larger groups with more diffuse interests. In fact, the latter may even be “rationally ignorant” when the costs to an individual of being informed and politically engaged about a policy issue outweigh the potential benefits (Downs, 1957_[69]). In the context of agriculture, policies in high-income countries often raise the price of agricultural commodities. In those cases, producers naturally have a strong incentive to be informed about policy developments which affect their revenues, while consumers will

¹³ This can be the case, for instance, for official food standards (Swinnen et al., 2015_[179]). Compared to traditional trade instruments such as import tariffs, the economic analysis of official/government standards is considerably more difficult. For a small open economy, welfare analysis shows that a positive tariff (on a good for which the country is a net importer) restricts trade and benefits domestic producers at the expense of domestic consumers, leading to a net welfare loss. For public standards, these effects can go in different directions. For example, standards can act as a barrier to trade (e.g. by imposing costs on foreign suppliers) but can also act as a catalyst to trade (as the standard could reassure domestic consumers, and hence expand total demand, including imports). Empirically, some standards appear to simultaneously raise costs yet expand trade because of this demand-enhancing effect (Cadot, Gourdon and van Tongeren, 2018_[181]). Moreover, while in the traditional analysis, domestic (import-competing) producers benefit from higher tariffs while consumers lose, there is no simple relation between the level of stringency of standards and its welfare effects on producers and consumers; this depends on factors such as implementation costs and whether consumers’ utility from products with a higher quality standard is offset by higher prices. For detailed discussions, see Swinnen et al. (2015_[179]); Beghin et al. (2015_[180]); Swinnen (2018_[63]).

typically have a smaller incentive given the relatively low share of household budgets spent on food (although this share is higher for lower income households within high-income countries). Similarly, major policy reforms tend to impose clearly identifiable costs on specific groups in society while benefits may be less certain and spread out over the wider population. In such a context, groups which stand to lose could block the proposed reforms (Tompson, 2009^[44]). Successful reform may then require compensating those who lose, or mobilising a countervailing coalition.

3.2. Approaches

38. To prevent policy capture, OECD (2017^[61]) recommends four mutually reinforcing strategies:

- *Levelling the playing field* by engaging stakeholders with diverging interests to ensure a more inclusive decision-making process that is harder to capture by specific interests. This requires policies to foster integrity and transparency in lobbying activities; policies to ensure transparency in political finance; and policies to promote stakeholder engagement and participation, as described by the draft OECD Best Practice Principles on Stakeholder Engagement in Regulatory Policy (OECD, 2017^[42]) and the OECD Council Recommendation on Open Government (OECD, 2017^[70]).¹⁴ As mentioned earlier, however, stakeholder engagement has its limitations, especially when some interests are not well-organised or difficult to represent (e.g. future generations).¹⁵
- *Enforcing the right to know*, i.e. creating transparency about how policy decisions are made and who was consulted during the policy process. Such information has to be timely, reliable, accessible, and available in a user-friendly format. Examples of transparency measures include making information available on meetings with external stakeholders, disclosing private interests of relevant public officials, publishing background studies, stating explicitly the rationale underlying a policy decision, and publishing evaluation reports and stakeholder comments. For example, in the case of the Canadian dietary guidelines mentioned earlier, Health Canada made available not only a summary of comments from stakeholders (Health Canada, 2018^[40]) but the content of all correspondence between lobbyists and the government.¹⁶
- *Promoting accountability* through independent oversight and control bodies such as supreme audit institutions or an *ombudsman* (Zuegel, Cantera and Bellantoni, 2018^[71]). Competition authorities and regulators also have an important role to play in mitigating the risks of capture by ensuring that companies are exposed to competition and by regulating markets where competition is not possible or desirable, such as natural monopolies. Because of their importance these agencies are themselves at risk of policy capture. To prevent this requires appropriate

¹⁴ The importance of inclusive multi-stakeholder approaches is also emphasised in the Collaborative Framework for Food Systems Transformation (UNEP, 2019^[39]).

¹⁵ A further limitation of stakeholder engagement is that it may have a “status quo” bias: policy reforms might create new businesses, new employment opportunities etc., but these potential new interest groups are typically not yet organised, or at least not as well-organised as existing interests.

¹⁶ Health Canada's policy regarding transparency of stakeholder communications is outlined on <https://www.canada.ca/en/services/health/campaigns/vision-healthy-canada/healthy-eating/transparency-stakeholder-communications-healthy-eating-initiatives.html>.

institutional design to guarantee the agencies' independence of political influence, sufficient powers, resources and staff to fulfil their role, and internal strategies to promote a culture of integrity and accountability.

- *Identifying and mitigating capture risk* through organisational integrity policies requires internal control mechanisms, clear standards of conduct, and efforts to promote a culture of integrity.

39. While these strategies can help in mitigating risks of policy capture, they may not be sufficient to implement reforms where a politically powerful minority stands to lose but where benefits are diffused widely.

40. Surveying a set of major policy reforms in OECD countries, Tompson (2009^[44]) found that successful reforms typically found a way to win over potential opponents, for instance by exempting some groups from the reforms (that is, “grandfathering” their acquired rights); by providing long transition periods; by providing concessions; by involving potential opponents in the post-reform system (e.g. by allowing trade unions to administer pension funds in the case of pension reforms); or in some cases by adopting policies in other domains to offset the cost of reform for some groups. As described in the case study on ruminant livestock, the New Zealand “zero carbon” policy adopted in 2019 will price agricultural emissions, but provides for a five-year transition period and foresees that 95% of carbon credits at the farm level will be allocated for free. A number of supporting measures are also put in place, such as tools for estimating farm-level emissions (to help farmers plan ahead), increased farm advisory efforts, and incentives for early adopters. In several other cases where agricultural support policies were abolished, producers received compensation (Alston, 2007^[72]). However, compensation measures can also impede reform if they mask the market signals that are needed to spur adjustment (Martini, 2007^[73]).

41. Tompson (2009^[44]) notes that there is often little mobilisation of interest coalitions in *support* of reform, consistent with the earlier point that benefits are often diffuse and uncertain while costs are concentrated and visible. A notable exception is created through the principle of reciprocity in trade negotiations. If countries choose their trade policies unilaterally, producers in import-competing industries will have strong incentives to lobby the government for protectionist tariffs. These producers will tend to form a relatively small group with important and clearly identifiable gains from protection.¹⁷ Even though the costs to society of protectionism outweigh the benefits to these producers, those costs are diffuse and spread out over a large number of consumers, making it difficult to mobilise a coalition in support of reforming protectionist trade policies. However, the reciprocity principle in trade negotiations implies that domestic exporters can get improved market access abroad only if foreign producers are granted more market access at home. This creates a countervailing interest group of exporters, facilitating trade liberalisation (Irwin, 2015^[74]). Historically, the adoption of reciprocity as a basic principle in U.S. trade policy fundamentally changed the political dynamics around this issue, leading to greater political support for trade liberalisation (Bailey, Goldstein and Weingast, 1997^[75]). A related strategy is *issue linkage*, where negotiations on various topics form part of a package deal where “nothing is agreed until everything is agreed”. This approach was taken during the

¹⁷ In many instances, these benefits may be perceived rather than real, or may be offset by long-term costs, especially in the context of global value chains (GVCs). For example, Greenville, Kawasaki and Jouanjean (2019^[173]) found that protectionist policies in agro-food sectors have a negative effect on the long-term growth of the sector they seek to protect, as they limit participation in GVCs. Other research across all sectors in turn suggests that stronger participation in GVCs leads to lower tariffs, consistent with the argument that GVCs reduce industries' incentives to lobby for protectionist tariffs (Bown, Erbahar and Zanardi, 2020^[175]) (Blanchard, Bown and Johnson, 2017^[174]).

Uruguay Round, during which developed countries agreed to an unprecedented reduction in barriers to agricultural imports in exchange for greater market access for their industrial and service exporters. Agricultural interests in developed countries were opposed to liberalisation, but industrial and service firms lobbied their governments to compromise. Issue linkage thus created countervailing interest groups in favour of agricultural trade liberalisation (Davis, 2004^[76]).

42. Outside of trade negotiations, mobilising such a countervailing coalition may be difficult for policymakers. However, civil society actors committed to change can try to create such a coalition, for example through awareness-raising campaigns among the broader public.

4. Dealing with differences over values

43. Disagreements over facts and diverging interests are not the only possible sources of friction in policy design. Even if there is a shared understanding of the facts, and there is no undue influence of special interests, people differ in the values they emphasise, and such differences can create difficulties in designing policies. Some people may emphasise equality while others emphasise freedom; some may emphasise progress while others emphasise traditions; some may emphasise economic growth while others emphasise the environment; and so on. As noted by Stewart (2006^[13]), differences over values are a relatively neglected aspect of policymaking, and some authors dismiss values as merely convenient covers for the pursuit of self-interest. Yet, there is growing evidence on the importance of values in policymaking.

4.1. Relevance to food systems

44. Food and agriculture are intimately connected to people's values. This is the case for religiously prescribed food consumption patterns or behaviours (e.g. dietary restrictions or fasting), but the role of values also holds for new phenomena such as organic foods (Paarlberg, 2013^[77]). People differ in the values they hold relative to food and agriculture, and these value differences correlate with their behaviour as consumers and as citizens. For example, research has shown that people who attach a greater value to naturalness, fairness and the environment are more likely to buy organic food (Lusk and Briggeman, 2009^[78]) and that consumers can be willing to pay a price premium for local and organic food in part because of a concern with farmers' incomes (Toler et al., 2009^[79]) (Chang and Lusk, 2009^[80]). In the United States, people with a preference for maintaining family farms and for preserving the environment tend to favour government intervention in agriculture (Moon and Pino, 2018^[81]); other research shows that people's policy preferences on food and agriculture are correlated with their overall political outlook (Lusk, 2012^[82]). The cultural importance of fisheries was highlighted by policymakers as a crucial factor in shaping processes of policy change (Delpeuch and Hutniczak, 2019^[6]). It has also been suggested that the negative attitudes of non-experts towards genetically modified food are to an important extent value based, reflecting a preference for "naturalness" (Scott et al., 2018^[83]).¹⁸

45. There appear to be some systematic patterns in the values people generally emphasise. Drawing on cross-cultural research in moral psychology, Haidt (2012^[84]) distinguishes six "moral foundations": *care versus harm*, *liberty versus oppression*,

¹⁸ For a clear discussion of value differences in a different public policy setting, see Ford (2013^[161]) on forest management for Australian native forests.

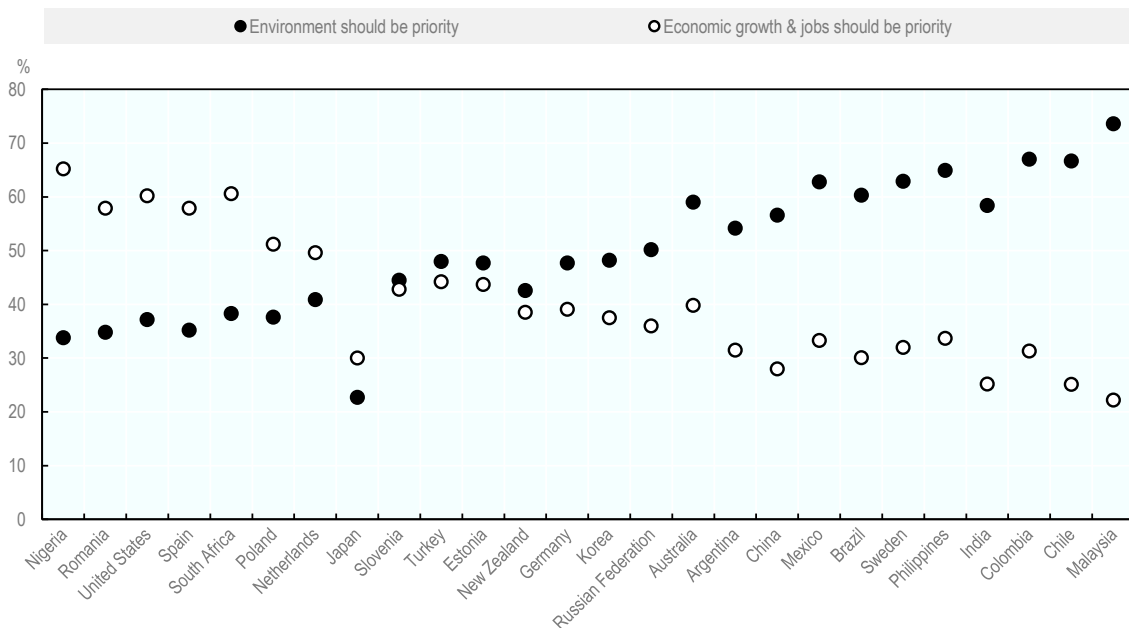
fairness versus cheating, loyalty versus betrayal, authority versus subversion, and sanctity versus degradation. Individuals, cultures, and political traditions differ in the relative importance they attach to these moral foundations.¹⁹ The moral foundations also appear to be relevant to food and agriculture. Mäkineniemi et al. (2013^[85]) asked people in Finland, Denmark and Italy to engage in a word-association task, where they wrote down the first five words, ideas or concepts that came to mind when thinking of “ethical food” or “morally right food” on the one hand, and “unethical food” or “morally wrong food” on the other hand. These answers revealed a particularly strong influence of the “care versus harm” foundation (e.g. the suffering of animals), the “sanctity versus degradation” foundation (e.g. chemical free, pure, clean, natural), and the “fairness versus cheating” foundation (e.g. fair trade, good working conditions, human rights). The study also found systematic differences in response by gender, country, and political orientation.

46. Value differences similarly exist around broader societal issues with relevance to the food system. This is illustrated in Figure 1 using data from the World Values Survey, a large-scale project to quantify cross-country differences and trends over time in people’s values and attitudes. While specific questions about food and agricultural policy are not available, one of the questions included in the 2011-14 World Values Survey asked respondents whether they think protecting the environment should be the priority, or whether economic growth and jobs should be prioritised. In some countries (e.g. Nigeria, Romania, the United States, Spain) a majority of respondents prioritises economic growth and jobs, while in some other countries (e.g. Colombia, Chile, Malaysia) a majority of respondents prioritises the environment. In yet other countries (e.g. Slovenia, Turkey, Estonia, New Zealand) the shares of respondents are roughly evenly matched. Interestingly, there is only a weak correlation between countries’ overall level of economic development and the share of respondents prioritising economic growth over protecting the environment. Moreover, even in countries with a clear preference for either option, there is typically a large minority choosing the other option; a national consensus is rare.²⁰

¹⁹ For an application of Haidt’s moral foundations to U.S. politics, see Enke (2020^[14]). The “moral foundations” approach is not wholly undisputed; for a critique, see Scott Curry (2019^[172]), who instead distinguishes seven “moral domains”: family, group, reciprocity, heroism, deference, fairness, and property. Other research suggests that as societies modernise and provide greater economic and physical security, they undergo cultural changes leading to a greater emphasis on egalitarian social norms, a greater openness to new ideas, and a reduced emphasis on traditional cultural norms (Inglehart and Welzel, 2005^[12]) (Inglehart and Welzel, 2010^[141]) (Inglehart, 2018^[142]).

²⁰ Among the 59 countries for which the World Values Survey collected this information in 2011-14, the most unanimous response was found in Haiti (not shown in the chart) where 93% of respondents prioritised economic growth and jobs, with only 4% prioritising the environment. The next country is Egypt, where 69% of respondents prioritised economic growth and jobs; but even here, more than 30% of respondents prioritised the environment.

Figure 1. Prioritisation of environment versus economic growth within and across countries



Note: Respondents in nationally representative surveys were asked to indicate which of the following two statements comes closer to their personal view: "Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs" or "Economic growth and creating jobs should be the top priority, even if the environment suffers to some extent". Chart is showing responses for selected countries only. In Japan, 47% of respondents either gave a different answer or stated they did not know. Surveys were conducted between 2011 and 2014.

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). 2014. World Values Survey: Round Six - Country-Pooled Datafile Version: <http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp>. Madrid: JD Systems Institute.

47. Values are important for agriculture and food policy, and policy decisions often involve a trade-off among several values. As there is rarely unanimity in society on how values should be prioritised, the design of policies for food systems is thus likely to encounter differences over values. Such differences are harder to resolve than situations where interests diverge: while those who lose financially from a policy change could in principle be compensated, the violation of cherished values is much more difficult to “compensate”. The remainder of this section first discusses the distinction between interests and values, before turning to different approaches which have been used to deal with value differences in policy settings.

4.2. Interests versus values

48. The distinction between interests and values is not always clear-cut, but a first characteristic which distinguishes interests and values (at least as the terms are used in this chapter) is that interests are self-regarding while values are other-regarding. For example, people may vote to pay higher taxes out of a conviction that tax revenue will be used to help others in society; people may thus vote against their own material interests because of their attachment to certain values. This other-regarding nature of values is also obvious for the “moral foundations” mentioned earlier. Other-regarding values are not necessarily altruistic or cosmopolitan: moral foundations such as loyalty versus betrayal, or authority

versus subversion, are other-regarding but could lead to e.g. nationalist or ethnocentric attitudes.

49. The distinction between interests and values may sometimes be hard to ascertain in practice; e.g. a high earner may vote for lower taxes out of self-interest or out of a conviction that hard work should be rewarded; a citizen may vote for more redistribution because of a belief in fairness and equality, or because of an expectation that he or she will personally benefit from a more equal income distribution. Yet, even if it can be hard to disentangle motivations, in each case the conceptual distinction can be made between self-regarding interests and other-regarding values.

50. There is a considerable and growing body of evidence demonstrating that, despite traditional economic assumptions of self-interest as main motive of behaviour, other-regarding motivations are in fact important drivers of decision-making (Fehr and Schmidt, 2006^[86]) (Cooper and Kagel, 2016^[87]). In real-world settings, scholars studying voters' preferences on international trade have argued that these preferences do not solely reflect voters' economic self-interest but to an important extent include considerations of how trade liberalisation would affect others, or their country in general (Mansfield and Mutz, 2009^[88]) (Rho and Tomz, 2017^[89]). Opinion surveys also often find strong support among the public for agricultural subsidies and tariffs, despite the fact that these economically harm them as consumers (Naoi and Kume, 2011^[90]) (Jensen and Shin, 2014^[91]) (Moon and Pino, 2018^[81]). This could be due to "rational ignorance" as discussed in the previous section; alternatively, it could reflect a belief in the importance of supporting farmers or of the public goods produced by agriculture, or a lack of understanding of the impacts of support on other groups about which they might also be concerned (e.g. producers in poor countries).

51. A second distinction between values and interests is that interests are usually interpreted in the material sense (e.g. income and wealth, economic opportunities, the cost of living) while values are usually interpreted as non-material ideals which cannot easily be translated into an equivalent in material terms (e.g. gender equality, fairness, democracy). This makes interests "commensurable" – that is, stakeholders could be compensated, or might be willing to give up something in return for achieving a desired outcome – while values are in principle "incommensurable". To illustrate the distinction, Winship (2006^[92]) describes efforts to build a dam in Arizona which would have had considerable economic benefits but which would have flooded the ancestral lands of the Yavapai Indians. The government was willing to pay compensation, but the Yavapai were not interested at any price, arguing that selling the land would be akin to selling one's mother.

52. In a conflict involving interests, numerous solutions may be possible, as stakeholders usually have several interests and hence could be compensated in one domain in return for compromising in another. By contrast, in a value-laden debate, "[c]ompromise, in its most pejorative sense, means abandoning deeply held beliefs, values, or ideals. To negotiate away values is to risk giving up one's identity" (Susskind, 2006^[93]). It is thus important to correctly identify whether a policy disagreement revolves around interests or values. As Goldgeier and Tetlock (2008^[94]) observe, "the very willingness to consider certain categories of trade-offs is taken as a sign in many political cultures that one is not adequately committed to core cultural values and identities." They distinguish three types of trade-offs, depending on whether the trade-off involves commensurable interests or incommensurable values.²¹ A *routine* trade-off involves a choice between two interests, as

²¹ Goldgeier and Tetlock (2008^[94]) themselves use the terms "secular values" and "sacred values", which broadly correspond to interests and values as used in this chapter.

is often the case in private economic decision-making or negotiation. A *taboo* trade-off pits values (e.g. human rights, the environment) against interests (e.g. profits). A *tragic* trade-off, meanwhile, pits two values against each other.

53. The difference between commensurable interests and incommensurable values bears some similarities to the distinction between goods which have a market price and those which do not, although the mapping is not exact. A good may have a market price, yet its owner may not be willing to accept any compensation to part with it; the case of the Yavapai Indians is an example. On the other hand, some desirable goods without a market price (e.g. reductions in crime or pollution) can be valued in monetary terms indirectly, by assessing consumers' implicit willingness to pay for additional "units" of the good (or willingness to accept compensation to part with one unit). For example, real estate prices will tend to be lower in areas with higher crime rates. While people dislike crime, they do not avoid these neighbourhoods entirely; their behaviour reveals that a lower price for housing can compensate for higher crime rates, and this information can be used to estimate the economic value of reductions in crime levels. Hence, some desirable ends could at least partly be translated into a monetary equivalent.

54. Such analytical techniques are commonly used in cost-benefit analyses and have the advantage of translating diverse outcomes into a common metric, which facilitates comparisons between different policy options.²² If all costs and benefits of a policy can be expressed in monetary terms, then it is possible to identify the policy option with the highest net benefit; and if net benefits of a policy are positive, it should in theory be possible to design a set of transfers from those who gain to those who lose, thus ensuring that everyone is at least as well off as before.²³ However, there is no consensus on the scope and limits of these techniques, which strike some as requiring "a questionable philosophical leap of faith" (Smith, 2006^[95]) in assuming that all policy-relevant aspects of a problem can be translated into monetary terms (Wolff and Haubrich, 2006^[96]).²⁴ In its strongest form, cost-benefit analysis can be seen as an attempt to translate all policy problems into *routine* trade-offs (between commensurable interests); but this attempt strikes many as a *taboo* trade-off (between commensurable interests and incommensurable values).

55. Yet even where a monetary equivalent is hard to define, people may be forced by circumstance to prioritise or trade off different desirable ends in their personal lives. The resulting choice can be seen as a "revealed preference", or an implicit ranking or comparison of the outcomes involved. A similar logic holds for some policy choices involving seemingly incommensurable values (tragic trade-offs, in the terminology of Goldgeier and Tetlock (2008^[94])). For example, the allocation of scarce resources across different medical treatments forces policymakers into uneasy comparisons between treatments in terms of number of people affected, number of life-years spared, the health-related quality of life which can be gained, fairness considerations, and so on. It may be impossible, or taboo, to translate the different options into monetary equivalents, but concrete policy dilemmas may still force a choice.

²² For an introduction to these and other "non-market valuation" techniques, see Baker and Ruting (2014^[184]).

²³ This idea is known in economics as the Kaldor-Hicks criterion.

²⁴ See Sunstein (2018^[9]) for a recent defence of cost-benefit analysis. In debates on the role of cost-benefit analysis, it is important to distinguish between the claim that policy making should be based on a comprehensive, well-researched and where possible quantified analysis of likely impacts, and the stronger claim that any policy decision should be based only on "net benefits". The first claim is uncontroversial and a cornerstone of sound regulatory policy and good governance (OECD, 2012^[35]). The second claim, by contrast, introduces additional ethical assumptions about how impacts in different policy domains and affecting different stakeholders should be weighed against each other.

56. The distinction between those aspects which are commensurable and those which are not is thus best thought of as a continuum. In general, policy decisions will be easier if there is a greater degree of commensurability; conversely, where highly incommensurable values are at stake, the resulting differences over values will be more difficult to resolve.

4.3. Approaches

57. There are several ways of dealing with differences over values, not all of them wholly satisfactory. Stewart (2006^[13]), building on Thacher and Rein (2004^[11]), identifies six mechanisms which are used in practice to deal with value differences in policymaking:

- *Structural separation*, whereby responsibilities for different values are assigned to different institutions or departments (i.e. a “silo” approach).
- *Hybridisation*, where policies or practices with different underlying values coexist, often because a new set of policies is layered on top of existing policies with different underlying values.
- *Casuistry*, where choices are made on a case-by-case basis instead of making a general decision on how different values should be prioritised; in this approach, decisions might be made by reference to how earlier cases were decided (Thacher and Rein, 2004^[11]). This is the approach taken in some legal systems, where precedents are used to guide decisions in court cases.
- *Incrementalism*, where small, gradual steps are made instead of enacting larger changes. This approach can help in signalling the intent to accommodate new values without generating too much opposition.
- *Bias*, where institutions and policy processes implicitly privilege some values over others. Dominant paradigms among policy advisors and decision-makers may imply that some values or policy options are simply never considered.
- *Cycling*, where policymakers focus sequentially on different values. The result may be that policies “oscillate”.

58. In the past, agricultural policymaking often relied on structural separation and bias. In most developed countries, the post-war period was characterised by “agricultural exceptionalism”, with agricultural policies made by closed policy networks consisting of agriculture ministries and farm groups and with a near-exclusive focus on raising farm income and productivity to the exclusion of other considerations. This suppressed some values while privileging others, giving the impression that value differences had been resolved (Daugbjerg and Swinbank, 2012^[97]). Similar dynamics have historically been at work in fisheries policy (Delpeuch and Hutniczak, 2019^[6]).

59. While perhaps common in practice, the approaches listed above suffer from obvious shortcomings. In particular, most are unlikely to lead to policy coherence, with the result that value differences will simply show up as incoherent policies. This is particularly the case for structural separation and cycling. Some other approaches such as casuistry and bias may lead to more coherence but not necessarily to policies which are seen as acceptable by all stakeholders.

60. More promising approaches exist to deal with value differences, however. Meijer and De Jong (2019^[98]) identify the two complementary approaches of *problem-solving* (where policies are re-designed in an attempt to accommodate the different values at stake) and *deliberation* (where stakeholders discuss why certain values are important in an attempt

to clarify and potentially resolve value differences).²⁵ These approaches hold the promise of a coherent approach, either because tension is removed through a creative solution or because agreement is reached on how different values should be prioritised. A further approach can be to try to identify another common value which all or most parties share, or to identify how a different approach could still satisfy the same value as the basis for problem-solving; for example, when the value of “fairness” is invoked in a policy debate about support to farmers, “fairness” can also be appealed to in seeking to avoid harm to other countries or producers.

61. Policy decisions rarely pit values against each other directly; decisions are typically about actions, which are interpreted by stakeholders in terms of values. Ideally, modifying the specifics of a policy can increase its compatibility with different values through creative problem-solving (Winship, 2006^[92]) (Rein, 2006^[99]). One example of how such an approach could work is suggested by empirical work by Ehrlich (2010^[100]), who found that many voters are opposed to free trade not because of how it would affect them personally, but because of sincere concerns about labour and environmental conditions abroad. If opposition to free trade is motivated by such values, conventional approaches to provide compensation (e.g. job training, a stronger welfare state) will not be effective. Yet correctly identifying the source of voters’ opposition to free trade also points the way to alternative policy solutions such as greater support for development programmes aimed at improving labour conditions, or attaching labour or environmental side agreements to trade agreements, or supporting private initiatives such as fair trade labelling schemes. Ongoing work by the OECD is identifying factors which can help arrive at such innovative solutions to complex societal problems (OECD, 2017^[101]).

62. Where such creative adjustments are possible, they are clearly preferable, but not all differences over values will lend themselves to such an elegant solution. In principle, one approach to deal with persistent disagreement is to use decision rules such as voting mechanisms to translate individual preferences into a societal choice. However, such mechanical decision rules have severe shortcomings. First, as shown originally by Arrow (1951^[102]) and confirmed by a large subsequent literature (Arrow, Sen and Suzumura, 2002^[103]), such decision rules can lead to inconsistent societal choices or other undesirable outcomes even if people are well-informed, which is rarely the case on complex policy issues. Second, with contentious issues it may be desirable to achieve consensus, or at least widespread support; a decision based on numerical strength could foster resentment and may make it harder to implement the chosen policy afterwards (Susskind, 2006^[93]). An alternative approach therefore emphasises *deliberative mechanisms* (Bächtiger et al., 2018^[104]). Rather than taking people’s beliefs, values and preferences as given, this approach focuses on the process of discussing policy options, where participants can exchange their views, argue in favour or against courses of action, and persuade or be persuaded (Dryzek and List, 2003^[105]). Ideally, deliberation helps to resolve value differences by building consensus or at least finding compromises with widespread support.

63. Existing democratic systems combine elements of both voting and deliberation: parties compete for votes, and elected officials subsequently discuss and negotiate over policies in the legislative and executive branch, although countries obviously differ in their precise institutional setup (Lijphart, 2012^[106]). However, a growing number of jurisdictions have been experimenting with forums where citizens can deliberate about important policy

²⁵ Meijer and De Jong (2019^[98]) use the term “reconciliation” instead of problem-solving; however, the former term is avoided here as it is also used to denote processes to overcome traumatic national events (e.g. South Africa’s Truth and Reconciliation Commission).

issues (OECD, 2020_[107]) (Van Reybrouck, 2016_[108]). Many initiatives use random selection or other approaches to ensure that participants represent the larger population to guarantee an inclusive process and to avoid disproportionate influence of stakeholders with vested interests (OECD, 2020_[107]).

64. Proponents of citizen deliberations argue that these experiences demonstrate that ordinary citizens are willing and able to engage in high-quality deliberation. Other potential benefits include the potential to overcome polarisation and populism, and the ability to generate innovative solutions and move beyond impasse (Dryzek et al., 2019_[109]). Empirical research on deliberative practices finds qualified support for many of these claims, although successful deliberation is often difficult to achieve (Ryfe, 2005_[110]) (Thompson, 2008_[111]). The quality of deliberations is improved when they include the provision of balanced information, expert testimony, and oversight by a facilitator (Dryzek et al., 2019_[109]). The use of citizen deliberations can also create greater legitimacy for decisions and should in principle reduce the risk of policy capture if random selection is used. Work by the OECD has explored a wide variety of innovative citizen participation initiatives and has identified good practices to ensure high-quality processes that result in useful recommendations and meaningful opportunities for citizens to shape public decisions (OECD, 2020_[107]).

65. Many deliberative initiatives have covered food and agricultural policies (Ankeny, 2016_[112]). A prominent recent example is the Irish Citizens' Assembly. Established in 2016, this body consists of a chairperson and 99 citizens, randomly selected to be representative of the Irish population. The Citizens' Assembly has considered a number of issues, such as legalisation of abortion; population ageing; and climate change. As explained in the case study on ruminant livestock, the Irish Citizens' Assembly made several recommendations on how Irish agriculture could contribute to climate change mitigation, including a tax on agricultural emissions with revenues to be reinvested in climate friendly agriculture and incentives paid to farmers for sequestering carbon. A committee with representatives from Ireland's political parties considered these recommendations, but did not endorse taxing agricultural emissions. In France, the *Convention Citoyenne pour le Climat* similarly used random selection to bring together 150 citizens to define initiatives to reduce greenhouse gas emissions. Several of the decisions of the Convention related to food systems, such as encouraging a shift towards a diet with less meat and dairy and more fruits and vegetables, as well as providing consumers with information on the environmental impacts on food products (Convention Citoyenne pour le Climat, 2020_[113]). At the international level, Food Systems Dialogues form another example of deliberative approaches to food and agricultural policies. This initiative was established in 2018 by EAT, the Food and Land Use Coalition, the Global Alliance for Improved Nutrition, the World Economic Forum (WEF) and the World Business Council for Sustainable Development (WBCSD). So far, more than 40 dialogues have been convened in 23 countries with over 2 500 participants; Food Systems Dialogues will also be used during the preparations for the 2021 United Nations Food Systems Summit.²⁶

66. In both problem-solving and deliberation approaches, it is often essential to rely on trusted, independent facilitators. Susskind (2006_[93]) outlines a "consensus building process" in which a trusted neutral facilitator plays a key role in identifying the underlying issues and conflicts and in organising sessions where stakeholders can review information, brainstorm possible solutions, and discuss with outside experts. In this approach, the neutral facilitator then proposes decisions.

²⁶ See <https://foodsystemsdialogues.org/>

67. An important concern is that some people are considerably more interested and more vocal than others. This is the case for food and agriculture, where “foodies” may see themselves as more knowledgeable than the general public (Ankeny, 2016_[112]). Moreover, people who take an interest in food policy are also likely to have more social and economic power, creating “subtle forms of social domination” which can undermine the attempts to foster deliberation (Ankeny, 2016_[112]). This problem is particularly pronounced where participants are recruited on a voluntary basis, as “foodies” are considerably more likely to volunteer for deliberative processes around food policies.

68. Another method, increasingly used by civil society actors, is litigation. As explained in more detail in the case study on ruminant livestock, lawsuits demanding more ambitious climate action have been filed in at least 28 countries. In the Netherlands, civil society actors have sued the Dutch government over its climate policies and, in a separate case, over its nitrogen policy. In both cases, the courts ruled in favour of the civil society groups, forcing the government to adopt more stringent measures to combat climate change and nitrogen oxide emissions. The increased use of litigation to settle political and policy issues has been referred to as the “judicialisation of politics” (Hirschl, 2009_[114]), a term which encompasses not only the spread of legal and rights-based discourse and procedures in society, but also an increasing use in some countries of “administrative review” (whereby courts can review policy decisions by administrative bodies) as well as a growing tendency for courts to decide on major political controversies. Hirschl (2009_[114]) warns that even though political controversies often have constitutional aspects, they are not exclusively or even mostly legal dilemmas. This makes it doubtful whether courts are the proper forum for deciding on such matters, rather than settling these issues through public deliberation in the political sphere.

69. As is clear from these descriptions, successful reconciliation and deliberation approaches require careful preparation and are neither easy nor cheap. Such mechanisms may therefore not be practical for all policy decisions, although they could be a powerful tool to move forward in the face of important differences over values— at least when their recommendations are taken to heart by policymakers.

5. Managing policy controversies

70. The most sensitive policy issues concerning food systems combine disagreements over facts, diverging interests, and differing values. For example, as argued in the case study on the seed sector, policy controversies over the proper regulatory approach to genetically modified organisms (GMOs) are not merely about the technical question of benefits and risks of the technology, but also involve claims that biotech firms or NGOs have disproportionate influence over policy processes. The debates also involve differing values, e.g. on the role of technology, small farmers, or corporations. As another example, controversies over the role of animal agriculture involve values (such as ethical aspects of eating animals, or the humane treatment of animals), interests (such as those of farmers and industry) as well as facts (such as the contested health effects of eating red and/or processed meat, or the precise contribution of ruminant livestock to global warming); several of these aspects are explored in more detail in the case study on ruminant livestock.

5.1. Mutually reinforcing beliefs

71. With policy controversies, friction in one area (e.g. differences over values) may reinforce frictions in another area (e.g. disagreement over the facts) through a number of mechanisms. One such mechanism, motivated reasoning, was discussed earlier: people tend to interpret evidence and arguments in a way consistent with their prior beliefs, so that diverging interests and differing values can lead to persistent disagreements over facts as well.

72. Another example is the deliberate spread of biased, misleading or wrong information by certain interest groups in an attempt to influence public opinion and the policy process, for example through funding and dissemination of research.²⁷ A considerable body of evidence from various sectors shows that industry-funded research leads to results and conclusions more favourable to the funder (Lundh et al., 2017_[115]). Industry funding has also been shown to affect research priorities (Fabbri et al., 2018_[116]). These dynamics also appear at work in industry-funded research on nutrition and health. A review of more than 200 nutrition-related articles showed that industry-funded studies were four to eight times more likely to report results favourable to the industry (Lesser et al., 2007_[117]).²⁸ Mandrioli et al. (2016_[118]), studying reviews on the effects of beverages with artificial sweeteners (e.g. saccharin) on weight outcomes, found that industry-sponsored reviews were more likely to have results and conclusions favourable to the industry compared with non-industry sponsored reviews, while all reviews sponsored by competing industries (e.g. the sugar industry) found unfavourable conclusions. Bes-Rastrollo et al. (2013_[119]), studying reviews on the effects of sugar-sweetened beverages on weight gain or obesity, found that among reviews without any reported conflict of interest, about 80% concluded that sugar-sweetened beverages could be a potential risk factor for weight gain. Among reviews disclosing a financial conflict of interest with the food industry, by contrast, 80% concluded that the scientific evidence was insufficient. Similar results were found by Massougbdji et al. (2014_[120]). The damage done by industry influence extends beyond these specific topics; it may lead citizens to dismiss *any* scientific study which contradicts their prior beliefs, making it difficult to engage in evidence-based discussions. As highlighted in the case study on seeds, one possible reason why consumers in many countries remain sceptical about GM crops may be that the public trusts environmental NGOs more than scientists and the private sector, as NGOs are perceived as not having a hidden agenda (Qaim, 2020_[121]). As discussed in the case study on processed foods, industry funding is not problematic *per se*; it can enable important research and innovations, especially in a context of scarce public funding. But clear governing principles are needed to manage the relationship between industry and the research community to avoid the production and dissemination of biased information and to safeguard the public interest. In addition to rules requiring researchers to disclose funding sources and potential conflicts of interest, these can include requirements by scientific journals for transparency regarding e.g. the data and methods used by researchers. An example are the Transparency and Openness Promotion guidelines of the Center for Open Science.²⁹

²⁷ A classic exposé of such practices is Stauber and Rampton (1995_[123]).

²⁸ Similar results were reported by Chartres et al. (2016_[139]), although the authors themselves conclude that the findings were not statistically significant. However, their results show that favourable conclusions were 1.31 times more likely in industry-sponsored studies, with a 95% confidence interval from 0.99 to 1.72. Despite the authors' cautious interpretation, the data thus strongly suggest a correlation between industry funding and favourable conclusions.

²⁹ See <https://www.cos.io/initiatives/top-guidelines>.

73. Diverging interests can also influence the values emphasised in a policy debate. In attempts to influence policy debates, interest groups are likely to advocate a policy position with reference to broader values, and not only with reference to the expected gains for the interest group. Thus, farm groups are likely to describe their goal as a *fair* income rather than simply a higher income for their members. Similarly, agricultural input firms are likely to describe their activities as aiming at improved sustainability, better lives for farmers and healthy food for consumers, rather than in terms of financial goals.³⁰ In other cases, interest groups have deliberately sought to emphasise certain values (e.g. consumer choice, freedom) in an attempt to oppose policy initiatives. For example, the American Beverage Association has organised a campaign “Your Cart, Your Choice” in response to initiatives to impose taxes on sugar-sweetened beverages, with the message that “[e]lected officials and pro-tax advocacy groups should not be dictating what you can and can’t eat or drink. These choices are yours – and yours alone.”³¹ Even though these interest groups are clearly invoking values for self-serving reasons, the values in question are real, and are held by at least part of the public.³² Efforts to frame a policy discussion in terms of values can thus help interest groups to move a policy debate in a desired direction.³³

74. The distinction introduced earlier between routine trade-offs (between interests), taboo trade-offs (between interests and values) and tragic trade-offs (between values) is again relevant here. Opponents may try to frame a policy they oppose as involving a taboo trade-off, e.g. surrendering a deeply held value for money or convenience, which has the effect of portraying proponents of the policy as unprincipled or immoral (Goldgeier and Tetlock, 2008^[94]).

75. Uncertainties or disagreements over facts can also worsen conflicts over interests and differences over values. Uncertainty over the distribution of gains and benefits of a policy reform is likely to lead to greater resistance (Tompson, 2009^[44]) (Fernandez and Rodrik, 1991^[122]). Conversely, *creating* uncertainty over the facts is often a useful tactic for interest groups trying to block proposed policy initiatives (Stauber and Rampton, 1995^[123]). Disagreement over facts and differences over values can also reinforce each other through framing – for example, whether farmers are seen as “stewards of the land” or “polluters” will influence how people feel about agricultural and environmental policy issues.³⁴

76. Finally, values can affect stakeholders’ effectiveness in organising to protect their interests. As noted earlier, efforts to influence public policymaking may suffer from a “free rider” problem: organising to influence policies is costly, and it is difficult to exclude those who did not contribute to the lobbying effort from the benefits of a policy. This logic of collective action means that individual stakeholders may find it hard to organise themselves

³⁰ A subtle form of this mechanism in the context of food systems is the promotion of what has variously been called “the agrarian myth” (Brooks, 1996^[185]) or the “rural idyll” (Bell, 2006^[186]), a widespread positive perception of rural landscapes, communities, and lifestyles, including family farming. Such myths combine both factual beliefs (which may or may not be accurate) and values.

³¹ Americans for Food and Beverage Choice (2020), “Your Cart, Your Choice”, <https://yourcartyourchoice.com/your-cart-your-choice/> (consulted 4 June 2020).

³² For a discussion of the ethical issues involved in taxing sugar-sweetened beverages and other proposed interventions, see e.g. Dawson (2016^[166]), Véliz et al. (2019^[167]) and Goiana-da-Silva et al. (2020^[165]).

³³ For a similar argument in the context of trade policy, see Ehrlich (2010^[100]), who warns that protectionist interests might “hijack” sincere concerns of citizens about labour and environmental standards abroad.

³⁴ In New Zealand, reference is often made to farmers’ “social licence to operate”, a concept which denotes the social acceptability of farming activities (as opposed to merely its regulatory acceptability). For a discussion of the concept (which is also used in reference to other sectors), see Edwards and Trafford (2016^[171]).

to successfully lobby for their preferred policy. However, a sense of solidarity, community and fairness may help overcome this problem; this has been suggested as a potential explanation for the lobbying strength of fishers (Delpeuch and Hutniczak, 2019^[6]).

77. These interaction effects between facts, interests and values can create complex problems, which Rein and Schön (1993^[8]) have labelled “policy controversies”. Policy controversies often involve two or more competing “frames” which combine facts and theories, interests, and values to make sense of a complex reality. This distinguishes them from mere disagreements over policy, where there are frictions related to facts, interests, or values but not all three at once. In such cases, there remains some common ground which can help establish rules for resolving disagreement. Policy controversies and their competing frames are more problematic, as they involve fundamentally different ways of looking at the world.³⁵

78. An example of such contrasting worldviews relevant to food and agriculture is offered by Mann (2018^[124]), who distinguishes between the worldviews of “wizards” and “prophets”. Wizards emphasise technological progress and innovation as a way to achieve environmental sustainability, while prophets emphasise the need for reductions in consumption (including through efforts to limit population growth). In Mann’s telling, the two worldviews are diametrically opposed: prophets see wizards’ faith in technology and innovation as unthinking, arrogant, and a recipe for environmental disaster, while wizards see prophets’ insistence on reducing consumption as backwards, indifferent to the poor, and unnecessarily apocalyptic. Moreover, prophets accuse wizards of prioritising corporate profits, while wizards accuse prophets of racism (as poverty, hunger and population growth are concentrated in non-Western countries). To the extent that participants in debates around food systems indeed hold such diametrically opposed worldviews, constructive policymaking may be difficult.³⁶

5.2. Approaches

79. Unfortunately, the political science literature does not offer much practical advice on how to manage policy controversies stemming from opposing worldviews. Rein and Schön (1993^[8]) themselves advocated for “frame-reflectiveness”, i.e. an awareness among policy analysts and participants in policy debates of the different frames that are being used, a willingness to identify their sources and consequences, and an openness to reassess these worldviews. However, the authors noted that “there are very few examples of such processes” (Rein and Schön, 1993^[8]). Another strategy is to search for “frame-robust” policies that are acceptable to stakeholders with different frames, an approach similar to the creative problem solving outlined earlier.

³⁵ The concept of a policy controversy is thus closely related to that of a “wicked problem”, first described by Rittel and Webber (1973^[162]). A wicked problem is one which cannot be definitively described, and where there is no undisputed solution, not only because of the technical complexity of the issue but also because there is no consensus on what would constitute a good outcome.

³⁶ Other authors have identified different worldviews relevant to food and agriculture. For example, Thompson (2017^[163]) identifies a “productionist” worldview (which emphasises increasing food production above all else), an “agricultural stewardship” worldview (inspired by the ideas of the American essayist Wendell Berry and emphasising not only agricultural sustainability but healthy rural communities, a sense of connectedness to place, and a scepticism of large-scale and industrial processes), a “true cost of food” worldview (which corresponds roughly to the viewpoint of many economists that externalities should be priced); and “holistic” approaches (including the “holistic management” approach of Allan Savory and the “natural systems agriculture” ideas of Wes Jackson, which both emphasise that sustainable agricultural practices should mimic natural ecosystems). Some of these worldviews also reflect elements of] bear a resemblance to the “agrarian myth” or “rural idyll” discussed earlier.

80. These ideas can be applied to the distinction between “wizards” and “prophets”. As Chapter 1 has argued, the actual performance of food systems in terms of the triple challenge is less black-and-white than these two opposing worldviews suggest; there have been remarkable achievements, but serious challenges exist. The impact of technology, too, has not been unambiguously good or bad. For example, the increasing use of synthetic inputs after World War II has contributed to enormous gains in agricultural production, but also to environmental problems; however, where technological progress has led to overall efficiency gains (as in more recent decades), environmental sustainability has generally improved, at least per unit of food produced. Acknowledging the evidence on both the successes and challenges of food systems can hopefully establish common ground between different worldviews. Rather than deriving policy prescriptions from a single worldview, Chapter 1 has also argued for a pragmatic approach based on assessing which practices are beneficial under which circumstances and with which trade-offs, emphasising careful, context-dependent and evidence-based evaluations. Such an approach is inherently eclectic, and can thus borrow insights and policy ideas from different worldviews, which may again help in finding common ground.

81. Success in bridging different worldviews is not guaranteed, however. The scarcity of practical solutions to policy controversies is in some sense not surprising – if solutions were readily available, policy controversies would not be a major concern. The difficulty of resolving policy controversies thus underscores the importance of *preventing* policy controversies from emerging in the first place.

82. This imposes a responsibility on participants in policy debates to commit to using rigorous evidence, to be forthcoming about potential conflicts of interest, to acknowledge different values at stake, and so on. But individual responsibility is unlikely to be sufficient. Rather, the various approaches outlined in the earlier sections – trusted, independent science; a commitment to consider evidence on a wide range of potential effects as part of impact assessments in the policy process; strict rules to prevent conflicts of interest and undue influence; mechanisms such as deliberative practices to deal with differences over values; and so on – need to be embedded institutionally. A large literature confirms the importance of institutions (the “rules of the game”) in shaping political and economic outcomes (North, 1990_[125]) (Ostrom, 1990_[126]) (Williamson, 1998_[127]) (Acemoglu, Johnson and Robinson, 2005_[128]) (Rausser, Swinnen and Zusman, 2011_[10]) (Lijphart, 2012_[106]); this institutional view of policymaking suggests that it is possible “to improve the *substance* of public policy choices by improving the *procedures* used to make these choices” (Immergut, 2006_[129]). As noted throughout this chapter, numerous best practices and principles exist which can help build a shared understanding of the facts, balance diverging interests while maintaining a level playing field, and provide a forum for dealing with differences over values, e.g. through deliberative practices. To the extent that guidelines such as the Recommendation of the Council on Regulatory Policy and Governance (OECD, 2012_[35]), best practices for preventing policy capture (OECD, 2017_[61]), best practice principles on stakeholder engagement (OECD, 2017_[42]) and the like are firmly embedded in the policy-making process, the obstacles described in this chapter should be greatly diminished. Robust processes should also contribute to public trust, reducing the suspicion that e.g. evidence provided in a policy debate is biased by conflicts of interest.

83. As noted at the outset, disagreements around facts, diverging interests and differing values are not specific to policy debates around food systems, so neither are the relevant best practices. The analysis in this chapter thus suggests that those concerned with achieving better policies for food systems should in the first place lend their support to these general principles of good governance and policy-making.

6. International aspects

84. Many of the challenges facing food systems require policy responses primarily at the national or local level. This is often true for problems related to nitrogen pollution or excessive water use, as well as for many problems related to nutrition. But a number of policy issues have international spillovers, notably those involving agricultural support and trade and international externalities such as agriculture's contribution to climate change. Coherent policies then require some degree of international coordination, as discussed in the previous chapter. As with domestic policymaking, achieving better policies at the international level can be complicated due to disagreements over facts, diverging interests, and differing values.

85. International organisations often play an important role in building a shared understanding of the facts at the global level. The OECD's estimates of producer support and FAO estimates of food loss, for example, were mentioned earlier. Other notable examples include the Intergovernmental Panel on Climate Change (IPCC); the High Level Panel of Experts of the UN Committee on World Food Security; the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES); the International Food Policy Research Institute (IFPRI) and other CGIAR centres; and the long-standing research efforts by the World Bank to estimate living conditions and poverty around the world. The UN Food and Agriculture Organization plays an important role in collecting and disseminating information and analysis, as does the High Level Panel of Experts on Food Security and Nutrition (HLPE), the science-policy interface of the UN Committee on World Food Security (CFS). On several issues there is arguably a better evidence base on global conditions than on national or local conditions: a lack of data for one country (e.g. on poverty rates) may not affect overall global estimates, although such data are of course essential for national policymakers.

86. The role of interests and values is harder to assess at the international level, as the behaviours of national governments derive from complex domestic policy processes as well as strategic interactions with other states (Putnam, 1988^[130]). As a result, it is not always easy to interpret whether a country's position on an international issue reflects its assessment of what would maximise domestic welfare; the lobbying of domestic interest groups; deeply held values of its population; or a complex mix of these different motivations. Moreover, governments may act strategically, for example by taking a strong position on one international issue to gain leverage in negotiations on another.

87. One illustration of these complexities was offered earlier: while interest groups are often seen as obstacles to achieving mutually beneficial outcomes, in a trade context the reciprocity principle helps to mobilise interest groups of exporters in favour of trade liberalisation, thus offsetting pressures for protectionism by import-competing interest groups. In other policy areas (e.g. global public goods such as climate change mitigation), domestic interest groups who stand to lose may have a less beneficial effect, although strong civil society groups may have an important role to play in offsetting the lobbying efforts of such interest groups. Even where contributing to global public goods is not a country's main policy objective, more domestically oriented motivations may still enable international cooperation, e.g. where a country's comparative advantage is in sustainable production (Keohane and Victor, 2016^[131]).

88. Values play an important role in shaping citizens' attitudes towards international policy issues (Rathbun et al., 2016^[132]). For example, Kertzer et al. (2014^[133]) show that the "moral foundations" are strongly and systematically associated with foreign policy attitudes, with the dimensions of harm versus care and fairness versus cheating linked to cooperative attitudes. Values also matter as a determinant of a government's policy

priorities. People around the world differ in the relative importance they assign to different values (Inglehart and Welzel, 2005^[12]), although there can also be commonalities of view in communities that cross borders, including in contexts where such views may not be dominant in the domestic policy debate. One could expect this diversity to be an additional source of friction, especially regarding sensitive issues such as food and agriculture. For example, people may differ in their degree of risk aversion in policy areas such as food safety, hygiene or biosecurity. Such differences could in turn explain differences in regulatory approaches around the world, which have led to international friction. However, as noted earlier, it is often difficult to disentangle the relative contribution of attitudes and values on the one hand, and interests on the other.

89. At the same time, value differences should also not be exaggerated; as Rein and Schön (1993^[8]) pointed out, at a sufficiently abstract level it is usually possible to find agreement. For example, despite their differences, all 193 members of the United Nations General Assembly have adopted the Sustainable Development Goals (SDGs). Even if countries will inevitably have their disagreements over how these should be achieved, the SDGs provide at least some common ground.

7. Conclusion

90. The challenges facing food systems are considerable, and better policies are urgently needed to meet the “triple challenge” of ensuring food security and nutrition for a growing population, providing livelihoods for actors along the food chain, and ensuring environmental sustainability. Because of the complexity of food systems, and the various synergies and trade-offs which exist between different dimensions of the triple challenge, such policies need to be coherent, and the previous chapter has outlined a pragmatic approach to increase the coherence of policies for food systems. Yet coherence by itself is of little value if policies are not sufficiently ambitious. Policies regarding food and agriculture have often proved to be difficult to reform, however. Policymakers can expect to encounter several obstacles on the path to better policies.³⁷ This chapter has identified frictions around facts, interests, and values as common obstacles. Disagreements over policy usually involve frictions in one of these three areas; the most problematic policy controversies may involve frictions in all of them. Achieving better policies thus requires building a shared understanding of the facts, balancing diverging interests (or finding ways to compensate those who stand to lose from a policy reform), and resolving differences over values. Good practices (summarised in Table 1) can help with each of these tasks. For example, rigorous *ex ante* Regulatory Impact Assessments should bring together the best available scientific and technical information to inform policy decisions. These

³⁷ This chapter has mostly addressed policymakers, although civil society actors are playing an increasingly important role in shaping the future of food systems, not in the least by creating awareness about issues. The analysis in this chapter suggests several other areas where civil society and other actors can contribute to the policy process. First, civil society actors, along with academics and researchers, can play an important role in building a shared understanding of the facts, such as by sponsoring or conducting original research and by giving voice to otherwise underrepresented stakeholders. Second, civil society groups can help in counteracting the influence of certain special interests, for example by highlighting instances where there has been an undue influence of other interest groups, or by building “countervailing” coalitions. Third, civil society actors can play an important role in facilitating dialogues with various stakeholders, clarifying values and worldviews, and building a consensus, for example by adopting the role of “food systems champions” (UNEP, 2019^[39]). Such initiatives are best seen as complements, rather than substitutes, for public efforts. While civil society can play an important role, civil society actors are also likely to have predetermined agendas and may have fundraising models that can rely on campaigns and can thus also themselves be a form of special interest: for example, many local food policy initiatives appear to be organised by groups opposed to “industrialised” food or genetically modified organisms and/or in favour of organic, local, or vegetarian/vegan food (Ankeny, 2016^[112]).

assessments could then be used as input in a stakeholder consultation process to gather further insights. To prevent policy capture by special interests, governments need to ensure all interests have the opportunity to voice their views (for example by designing inclusive stakeholder consultation processes) and take the necessary steps to promote transparency and accountability. Differences over values can sometimes be resolved by focusing on specific actions rather than general principles. In other cases, deliberative approaches can help to resolve thorny societal dilemmas. Ideally, such approaches can help to build societal consensus or at least find compromises with widespread support.

None of these approaches offer quick fixes. Rather, achieving better policies will require embedding the best practices highlighted in this chapter into institutions and policy processes. This can build trust and confidence in the approaches used to gather and assess evidence, to balance diverging interests, and to resolve differences over values, which in turn should make it less likely that friction in one domain spills over into others, creating intractable policy controversies.

Table 1. Three sources of friction and potential policy approaches

	Types of friction	Potential policy approaches
Facts	<ul style="list-style-type: none"> Lack of data/evidence about the extent, causes and characteristics of policy issues; about the synergies and trade-offs with other issues; and about the effectiveness of different policy options Gaps between public perception and scientific evidence 	<ul style="list-style-type: none"> Build a shared understanding of the facts through the use of Regulatory Impact Assessments, incorporating insights from scientific advisory bodies etc. Stakeholders can be a source of information, but not all stakeholders equally well represented, and stakeholders' views not necessarily evidence-based; therefore good to use regulatory impact assessment as input in stakeholder consultation
Interests	<ul style="list-style-type: none"> Most policies create winners and losers, leading to political frictions Interest groups can provide valuable information to policymakers, and the political system can act as a mechanism to balance diverging interests However, there is a risk that special interests capture policy processes 	<ul style="list-style-type: none"> Institutions and policy processes should promote transparency, accountability and a level playing field to minimise the risk of policy capture It may be necessary to mobilise a countervailing coalition
Values	<ul style="list-style-type: none"> Many food system issues are marked by differences over values (e.g. genetically engineered organisms, animal welfare). In contrast with interests, it is hard to "buy off" value-based opposition with compensation 	<ul style="list-style-type: none"> Creative problem solving: policies can sometimes be adjusted so they are acceptable to people with different values (i.e. focus on actions, not values) Making difficult decisions through deliberative processes so that choices have legitimacy; ideally, this builds societal consensus or at least widespread support
All of the above	<ul style="list-style-type: none"> A <i>policy controversy</i> combines all of the above and is difficult to resolve due to incompatible worldviews (e.g. "wizards versus prophets") 	<ul style="list-style-type: none"> Difficult to solve, although some approaches can help (e.g. ensure communication by experts with diverse values to reduce polarisation) Important to prevent the emergence of policy controversies by embedding the best practices for facts, interests and values into institutions and policy processes, thus building trust

Note: See main text of the chapter for detailed discussion on each of these items.

Source: OECD

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