CONCEPTUALIZING DRIVERS OF POLICY CHANGE IN AGRICULTURE, NUTRITION, AND FOOD SECURITY: THE KALEIDOSCOPE MODEL

By

Danielle Resnick, Suresh Babu, Steven Haggblade, Sheryl L. Hendriks, and David Mather

Food Security Policy *Research Papers*

This *Research Paper* series is designed to timely disseminate research and policy analytical outputs generated by the USAID funded Feed the Future Innovation Lab for Food Security Policy (FSP) and its Associate Awards. The FSP project is managed by the Food Security Group (FSG) of the Department of Agricultural, Food, and Resource Economics (AFRE) at Michigan State University (MSU), and implemented in partnership with the International Food Policy Research Institute (IFPRI) and the University of Pretoria (UP). Together, the MSU-IFPRI-UP consortium works with governments, researchers and private sector stakeholders in Feed the Future focus countries in Africa and Asia to increase agricultural productivity, improve dietary diversity and build greater resilience to challenges like climate change that affect livelihoods.

The papers are aimed at researchers, policy makers, donor agencies, educators, and international development practitioners. Selected papers will be translated into French, Portuguese, or other languages.

Copies of all FSP Research Papers and Policy Briefs are freely downloadable in pdf format from the following Web site: www.foodsecuritypolicy.msu.edu

Copies of all FSP papers and briefs are also submitted to the USAID Development Experience Clearing House (DEC) at: http://dec.usaid.gov/

AUTHORS AND AFFILIATION

Danielle Resnick (d.resnick@cgiar.org) is a research fellow in the Development Strategy and Governance Division of the International Food Policy Research Institute (IFPRI), Washington, DC.

Suresh Babu (s.babu@cgiar.org) is head of capacity strengthening in the Director General's Office of
IFPRI, Washington, DC.

Steven Haggblade (blade@msu.edu) is a professor of International Development, Agricultural, Food and
Resource Economics at Michigan State University, East Lansing, MI, US.

Sheryl Hendriks (Sheryl.Hendriks@up.ac.za) is director of the Institute for Food, Nutrition, and Well- being at the University of Pretoria.

David Mather (matherda@msu.edu) is an assistant professor of International Development, Agricultural, Food and Resource Economics, Michigan State University, East Lansing, MI, US.

ABSTRACT

The current emphasis in the development community on demonstrating policy impact requires a better understanding of national policymaking processes to recognize opportunities for, and limits to, generating policy change. Consequently, this paper introduces an applied framework, named the *kaleidoscope model*, to analyze drivers of change in the food security arena, with a specific emphasis on agriculture and nutrition policies. Focusing on five key elements of the policy cycle—agenda setting, design, adoption, implementation, and evaluation and reform—the model identifies key variables that define the necessary and sufficient conditions for policy change to occur. These variables were inductively derived through an extensive review of the secondary literature on episodes of policy change in developing countries across a broad range of policy domains related to food security, including agriculture, education, healthcare, nutrition, and social protection.

The advantages of the framework are at least fourfold. First, it incorporates issues of power and conflict much more than existing operational hypotheses in the donor community. Second, compared with many traditional public policy theories, it recognizes the importance of external actors, including donors, and the simultaneous influence of interests, ideas, and institutions. Third, it helps trace why a policy fails to be implemented by taking into account where gaps may have existed during other stages of the policy cycle. Finally, it is readily amenable to operationalization and application to a broader set of country case studies. Collectively, the model aspires to improve the relevance of public policy theories to the developing-country context; offer practical recommendations to key partners; and inform ongoing policy change processes, such as the Feed the Future initiative of the United States Agency for International Development (USAID).

Keywords: political economy, policy process, food security, agricultural policy, nutrition policy

Contents

Tables

Figures

1. INTRODUCTION AND OBJECTIVES

The current emphasis in the development community on demonstrating policy impact has led to an increased interest in promoting evidence-based policymaking. Yet, as is now well recognized, sound technical analysis does not always result in better-designed policies or improved policy outcomes. This discrepancy, in turn, has highlighted the importance of better understanding national policymaking processes to recognize the opportunities for, and feasibility of, informing policy decisions and generating policy change. For some development partners, enhancing the predictability, stability, and transparency of policy processes can also promote the Paris Declaration goals of mutual accountability between donors, partner governments, and their citizens (USAID 2013a). This paper presents a broad conceptual model for analyzing drivers of policy change. Subsequent policy research that applies this model will test the hypotheses outlined here and, in so doing, provide operational insights into effective means of enhancing policy processes and improving agricultural and nutrition policies.

Although the literature on policy processes emerged from the developed-country context, the focus on such processes in developing countries is gaining more attention. From the public policy angle, there have been recent attempts to reassess the effectiveness of long-standing frameworks in contexts that are not necessarily as open or pluralistic as the US system, where many of these frameworks were originally derived (see Sabatier 2007). Political scientists have likewise been engaged in understanding drivers of social protection, education, and health policy reforms in Africa, Asia, and Latin America (among others, Grindle 2004; Haggard and Kaufman 2008; Kaufman and Nelson 2004; Weyland 2005). Within the donor community, at least 27 aid agencies now have adopted some type of political economy analysis framework to guide their interventions (OECD 2008). There has even been a specific interest in better understanding agricultural policy processes as shown by the ongoing efforts of the Future Agricultures Consortium (FAC) at the Institute of Development Studies and the Political Economy of Food Price Policy project at the United Nations University–World Institute for Development Economics Research (UNU-WIDER) (see Pinstrup-Andersen 2014; FAC 2014).

In order to add value and build on this nascent body of research on policy processes, this paper aims to develop an applied framework with empirically testable hypotheses relevant to understanding drivers of change in the food security arena, with a specific emphasis on agriculture and nutrition policies. This approach is adopted because improving food security often relies on both augmenting the food supply through enhancing agricultural production and ensuring access to a healthy diet via interventions aimed at increasing nutrients, incomes, and information to affected populations.[1] Bridging insights from both public administration and political science theories, the framework aims to be flexible enough to encompass a broad range of agricultural and nutrition policy issues across a diverse set of countries while also recognizing the specific array of stakeholders and decisionmaking environments in which these policies operate.

Moreover, the framework will interrogate existing operational hypotheses within the international donor community related to drivers of policy change. In doing so, it aspires to inform a variety of ongoing policy initiatives related to promoting food security in developing countries, including the Feed the Future (FTF) initiative of the United States Agency for International Development (USAID).

Following Jenkins, this paper defines a *policy* as "a set of interrelated decisions … concerning the selection of goals and the means of achieving them within a specified situation" (1978, 15). Such goals might refer to lower infant mortality, better crop yields, and higher smallholder incomes. In the context of this paper, we focus exclusively on policies promoted by national governments. Collectively, policies may constitute the foundations of a broader *strategy*, which can be defined as "the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the

---

[1] Importantly, policies in these two domains do not always complement each other in the goal toward greater food security. Acosta and Fanzo (2012) pointed out that national agricultural policies that favor the cultivation of specific crops to improve smallholder incomes, such as maize in southern Africa, can sometimes undermine attempts to promote more diversified diets. Similarly contradictory outcomes may also emerge from policies that promote commercialization of smallholder agriculture.

allocation of resources necessary for carrying out these goals" (Chandler 1962, 13). Together, these efforts can translate into a multiyear vision and operational plan for addressing long-term challenges, including poverty, inequality, and food security.

With these definitional issues in mind, the paper first provides a summary of the prevailing operational frameworks in the development community regarding how policy change can be feasibly achieved in the agricultural and nutrition arenas. These frameworks are then compared with the public policy scholarship about how the policy process operates. The latter scholarship, however, often ignores the role of external actors, particularly donors, in the policy process within developing countries. Therefore Section 4 introduces a model that aims to integrate the operational approaches used by donors with the insights from the scholarly literature. The model delineates key variables that tend to be consistently important for explaining what policies emerge on a government's agenda, how they are designed, whether they are adopted and implemented, and how and why they might be incrementally refined. Labeled the *kaleidoscope model of policy change*, this model is inductively derived by drawing on actual episodes of policy change in developing countries from the agricultural and nutrition sectors as well as other domains. The paper then discusses how the model will be empirically validated through country case studies in a wide range of policy domains including, among others, fertilizer subsidies and micronutrient interventions. We conclude by highlighting the contributions of the model to the existing literature on policy processes and the political economy of agricultural and nutrition policy, as well as the implications of this framework for policymakers, donors, and other stakeholders interested in better understanding whether, why, and how specific agricultural and nutrition policies are implemented.

2. INSIGHTS FROM DONOR EFFORTS TO ENHANCE POLICY PROCESSES

Trends in the Evolution of Policy Interventions

Development partners have historically maintained keen interest in the policy environment in countries where they provide support.[2] The recent confluence of global financial and food crises has rekindled interest in policy issues, providing vivid reminders of the interdependence and importance of country policies in shaping food security outcomes among vulnerable groups across the globe. Because the policy environment shapes consumer, farmer, and business incentives, a favorable policy environment largely determines the level and effectiveness of private and aid-financed food system investments. Key structural vulnerabilities exposed by the global financial and food crises have motivated renewed interest in aid mechanisms that help to strengthen policy coherence; maintain private-sector incentives; and develop inclusive, accountable policy systems (GDPRD 2014).

Efforts to improve policy environments and policy systems have evolved over time in response to shifting conditions and pressures. This section traces major trends in donor policy efforts, in a roughly chronological order.

Policy Conditionality, 1960–1990

Between 1960 and 1990, economic policy conditionality constituted the dominant form of donor policy interventions. The first wave of donor policy conditionality—by the World Bank, USAID, and others—arose during the 1960s due to concerns about macroeconomic and sectoral policy incentives in borrowing countries. In addition, the policy loans' conditions served as a means of monitoring government financial and policy commitments as well as the performance of large donor financial transfers (Snodgrass and Rice 1970). A second, larger wave of policy conditionality emerged during the structural adjustment era of the 1980s, when the International Monetary Fund (IMF) and World Bank took the lead in facilitating the policy reforms required to address the startlingly swift and insupportable fiscal imbalances in foreign exchange and government finances.

Similar concerns triggered interest in policy reform during both waves. During the first wave of policy conditionality, concerns about overvalued exchange rates, high levels of inflation, trade protection, and heavy agricultural taxation built confidence that policy reform would improve the effectiveness and impact of donor inflows. During the mid- to late 1970s, a series of sharp oil price shocks exacerbated these concerns, as rising petroleum prices pressured domestic food prices, inflation rates, government budget deficits, trade deficits, and consequently increasingly overvalued exchange rates. In this environment, heavy losses by public agricultural agencies led to widespread insolvency, further increasing pressure for external borrowing and internal policy reform.

Policy conditionality has taken many forms. Policy lending programs of the 1960s focused the conditions of lending on macroeconomic as well as sectoral policies. In agriculture, conditional policies frequently included required levels of public investment, market controls, pricing, taxation, and fertilizer distribution (Snodgrass and Rice 1970). During the height of the structural adjustment years, in the 1980s, agricultural policy conditionality centered on market liberalization, fertilizer market reform, and dismantling of many public-sector parastatals (Sahn, Dorosh, and Younger 1997). In recent decades, the Paris Declaration principles, coupled with the shift to broad budget support by some donors, have led to a softer form of policy conditionality, one derived from mutual accountability agreements under which recipient countries agree to meet Performance Assessment Framework criteria in return for budget support. Currently, the US government's Millennium Challenge Corporation (MCC) provides large agricultural development grants to developing countries in return for meeting specific governance and performance targets, while the World Bank's new Performance for Results (PforR) program, launched in 2012, similarly provides funding tied to the achievement of specific results targets.

---

[2] See Appendix Table A.1 for an overview of the wide range of policy support programs currently in effect.

Several core perceptions underlie policy conditionality. First is the simple notion that "bad" policies constrain growth and limit the effectiveness of donor support. Second, policy reform imposes costs on some groups, not least on government finances. Third is the notion that donor funds can facilitate a transition to "good" policies by helping to underwrite the often considerable costs of economic adjustment borne by governments and affected stakeholder groups. At its core, policy conditionality provides a vehicle through which external actors help to alter host government behavior through the use of carrots and sticks.

Policy Research, 1975–Present

The food crisis of the early 1970s proved to be a critical point in the history of international food policy. Worldwide food shortages in 1972 and 1974 exerted unprecedented pressure on world cereal stocks and on food prices. Searing images from simultaneous famines in the Sahel and in Ethiopia captured international attention. Compounding these pressures, successive oil price hikes during the 1970s exacerbated food insecurity by driving up the price of agricultural inputs, such as fertilizer, transport, and food import prices. In response to these crises, the UN convened a World Food Conference in November 1974 to address the situation and bring the concept of food security to the forefront of international policy discussions (FAO 2000). The emerging food security discussions recognized trade policies, macroeconomic policies, exchange rate policies, price policies, and agricultural production policies as instrumental long-term solutions to food security problems (Headey and Fan 2010; FAO 2000). A key conclusion of the World Food Conference was that while production technologies to boost yields could be made available through international research, developing countries did not have adequate information to develop and implement complementary food security policies. Without appropriate policies, farmers would not adopt improved technologies. These concerns about policy incentives motivated the establishment of several new institutions, including the Committee on World Food Security and the International Food Policy Research Institute (IFPRI), in 1975.

Policy research gained momentum as several international and national organizations developed approaches to conducting research and communicating policy-relevant findings to key decisionmakers. International organizations such as IFPRI focused research efforts on building global public knowledge about what policies are needed, what approaches are effective in developing countries, and why. Initial research at IFPRI focused on policies related to food production, market and trade, and consumption. Organizations such as the Harvard Institute of International Development (HIID) and Stanford University's Food Research Institute (FRI) addressed similar issues through a combination of PhD training and advising the governments of developing countries. Land grant universities in the United States (including Michigan State University, Cornell, and many others) and European universities' research groups (such as the Institute of Development Studies, Sussex, UK) increased their engagement in food policy research and training. By the early 1980s these efforts made global knowledge on policy research increasingly available through detailed empirical research.

However, the capacity to analyze and use such knowledge remained limited in many developing countries. As a result, external assistance supported much of the food and agricultural policy research and analysis undertaken, in the same way that external technical assistance was used to design and implement policies and programs such as structural adjustment and stabilization policies.

Over time, developing-country policymakers came to realize that unless policy analysis and research are done by local, in-country researchers, countries would depend on external technical assistance for regular day-to-day policymaking. As a result, governments and donors made major investments to support the development of local capacity for policy research and analysis. For example, the United Nations Development Programme (UNDP), IMF, and a series of bilateral donors helped to establish the African Economic Research Consortium (AERC) and the African Capacity Building Foundation (ACBF). These institutions continue to help develop local research and analytical capacity in Africa through various research funding mechanisms, including competitive research grants. Recently, regional policy research networks such as the South Asia Watch on Trade, Economics and Environment

(SAWTEE) in South Asia, and the Regional Strategic Analysis and Knowledge Support System (ReSAKSS), the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN), and the Regional Network of Agricultural Policy Research Institutes (ReNAPRI) in Africa were established to increase policy research and analytical capacity at the country level. South Africa's Bureau for Food and Agricultural Policy (BFAP), for example, links three national research universities in applied research activities that serve to inform decisionmaking by stakeholders in the agrifood, fiber, and beverage complex by providing independent research-based policy and market analyses (BFAP 2014).

Donors promoted policy research and policy reform on the twin premises that bad policies impede economic growth and that good policies require a sound empirical foundation derived from policy research. While local capacity for policy research and analysis remains low, the information produced by local researchers for policymaking is increasing. However, application of local knowledge to the policymaking process remains a challenge. The belief that better empirical evidence will automatically result in improved policies is increasingly questioned and needs to be explored further.

Agricultural Policy Systems in the CAADP Era, 2000 Onward

In the early years of the new millennium, a group of African political and intellectual leaders attempted to assert control over Africa's development agenda by launching the New Partnership for Africa's Development (NEPAD), whose secretariat now resides at the African Union Commission. Despite flagging donor interest in agricultural development, NEPAD's flagship program, the Comprehensive African Agricultural Development Programme (CAADP), focused on the agricultural sector. Leaders perceived the sector, which employs two-thirds of African women and men, as the most plausible engine of poverty reduction and ensuring food security (Millennium Development Goal 1) in Africa (NEPAD 2003). Although a limited set of donors actively supported CAADP's launch in 2003, the 2005 Paris Declaration on Aid Effectiveness set out five principles—greater country ownership, harmonization of support measures, better alignment to national systems, a focus on results, and a commitment to mutual accountability—all of which helped to promote increased donor support for the CAADP agricultural agenda (NEPAD 2010).

Sharp world food price hikes in 2008 and 2011 triggered renewed global interest in supporting agricultural development—in Africa as well as in developing countries in Asia and Latin America. This interest further aided efforts to improve harmonization within the donor community to enable the process of country-led development. The notion of recipient-led priority setting was first articulated in the Paris Declaration on Aid Effectiveness (2005),[3] followed by the Accra Agenda for Action (2005) and then at the G8 meeting at L'Aquila, Italy, in 2008,[4] and endorsed unanimously as the Rome Principles for Sustainable Food Security by 193 countries at the 2009 World Summit on Food Security.[5] In the case of Africa, the members of the Global Donor Platform signed a set of guidelines for country-level support of the CAADP agenda to strengthen and streamline donor support.[6] This commitment extended to the Global Agriculture and Food Security Program (GAFSP)[7] in 2010—a multidonor funding platform that sought to coordinate the limited resources available for development through supporting country-led development programs at scale. The New Alliance for Food Security and Nutrition, launched in 2012, takes this commitment to country-led development to a new phase of integration of agriculture, food security, and nutrition-focused development.[8]

During the first decade of formal CAADP activity, from 2003 to 2012, investment levels and investment planning took priority as CAADP commitments motivated African governments to increase funding for agriculture. Peer-reviewed CAADP investment plans (CIPs) became the preferred vehicle for

---

[3] http://www.oecd.org/dac/effectiveness/34428351.pdf.
[4] http://www.mofa.go.jp/policy/economy/summit/2009/statement3-2.pdf.
[5] http://www.fao.org/docrep/003/w3613e/w3613e00.HTM.
[6] http://pages.au.int/sites/default/files/Guidelines-for-Donor-Support_Platform.pdf.
[7] http://www.worldbank.org/en/news/feature/2014/04/14/gafsp-improving-incomes-reducing-hunger.
[8] http://feedthefuture.gov/lp/new-alliance-food-security-and-nutrition.

managing priority setting and mobilizing investment levels in agriculture. Reflections at the beginning of the second CAADP decade, beginning in 2013, suggested that increased investments by both donors and African governments, though necessary, are not solely sufficient for stimulating agricultural growth, improving food security, and reducing malnutrition. The impact of these investments depends critically on the responsiveness of farmers, traders, and agribusinesses to the incentives prevailing within a given policy environment.[9] As with the policy lending of the 1960s, CAADP implementers and supporters now explicitly recognize that a favorable policy environment is critical to maximizing the impact of agricultural investments. Hence the second CAADP decade has begun with increased focus on policy content, supported in a variety of ways, through ReSAKSS, policy research, policy networks, policy hubs, and policy champions (AGRA 2014; BFAP 2014; DAI 2014).

A related form of donor policy engagement has focused on the political economy of agricultural and food policies. The varying and sometimes counterproductive policy responses elicited by the world food crisis (including trade bans and price controls) have renewed interest in the political economy of agricultural, nutrition, and food policy as evidenced by recent work by UNU-WIDER, Transform Nutrition,[10] CGIAR Collaborative Research Programs, FAC,[11] and a range of related researchers (Pinstrup-Andersen and Watson 2011; Pinstrup-Andersen 2014). Over the past decade, as many as 27 donor agencies have developed political economy frameworks to help guide their assistance efforts (OECD 2008).

Three corresponding premises motivate these multiple forms of policy activity. First, process-oriented interventions (such as CIP peer reviews and joint sector reviews) that aim to improve transparency and accountability in agricultural policy systems build on the premise that the structure of key policy processes influences the quality and impact of the resulting policies. Parallel efforts to motivate and empower policy champions draw on the complementary—but diametrically opposed— premise that powerful, resourceful champions can overcome bottlenecks and drive policy change even in opaque, poorly designed policy systems. Finally, much of the support for expanded empirical policy- relevant research (ReSAKSS and the African Growth and Development Policy Modeling Consortium, for example) builds on the simple premise that good information will lead to good policies. A more nuanced formulation of this position holds that situation-specific evidence can lead to contextualized policies that will have a greater impact.

The Rising SUN: Nutrition Policy Interventions in the New Millennium

Nutrition policy interventions have blossomed in the new millennium as advocates have combined compelling empirical evidence with a new international policy architecture that serves to inform, monitor, and promote key nutrition policy interventions. According to a recent review, nutrition policy has transitioned "from obscurity to a global priority" from the year 2000 onward (Gillespie et al. 2013). Following the food price crisis of 2008–2009, the UN secretary general established the High Level Task Force on the Global Food Security Crisis (HLTF) to advise him on appropriate responses to the crisis and to develop a framework for coordinated action. The result was the Comprehensive Framework for Action (CFA) (HLTF 2008).[12] The framework proposed a "twin-track" approach to directly address short-term hunger and emergencies while at the same time addressing long-term development needs to ensure future sustainable food security and nutrition through social protection, smallholder investment, international food market access, and a consensus in how to manage the impact of biofuel demand and its effect on food prices (HLTF 2008). The nutrition elements of the CFA subsequently gave rise to the Scaling Up Nutrition (SUN) Program.

---

[9] http://www.fao.org/docrep/016/i2845e/i2845e00.pdf.

[10] http://www.transformnutrition.org.

[11] www.future-agricultures.org.

[12] www.un.org/en/issues/food/taskforce/pdf/OutcomesAndActionsBooklet_v9.pdf.

As the 1974 global food crisis led to the establishment of the UN Committee on Food Security (CFS), so the 2008–2009 crisis led to the realization that reform in food security governance was necessary. This realization coincided with a changing institutional context: the Doha trade round was unable to move forward; key agriculture organizations such as the Food and Agriculture Organization (FAO) underwent external reviews; the World Bank's 2008 World Development Report focused on agriculture, a topic largely ignored since its 1982 report; and the G8/G20 renewed an agenda focusing on food price volatility (Brun and Treyer 2014). Combined with growing pressure from Via Campesina since 1996 regarding food sovereignty, the right to food, and the inclusion of civil society in global governance debates on food security, the CFS embarked on a two-phase process of reform.[13] The first phase (2009–2013) focused on policy coordination at a global level and support to countries and regions, while the second phase (from 2013 onward) is envisioned to include increasing national and regional involvement of the CFS as a facilitating accountability mechanism that promotes best practices with regard to global food security (Brun and Treyer 2014). HLTF reports provide the background information for CFS annual policy round table discussions and CFS decisions. Each report recognizes the need for comprehensive national policies on food security.

The reformed CFS architecture includes four key components: production of nonbinding norms, a common understanding of issues related to food security and nutrition, increased legitimacy of civil society, and establishing a new institutional culture centered on policies for food and nutrition security. To support the CFS, the High Level Panel of Experts on Food Security and Nutrition (HLPE) was established as a science-society interface. The purpose of the HLPE is to facilitate, clarify, and structure CFS debates (Eklin et al. 2014). Playing a threefold role, the HLPE seeks to assess and analyze the current state of food security and nutrition and its underlying causes; provide scientific and knowledge-based analysis and advice on specific policy-relevant issues based on existing high-quality research, data, and technical studies; and identify emerging issues that help members prioritize future actions and attentions on key focal areas (HLPE 2013).

The UN Standing Committee on Nutrition's (SCN's) documentation of country experience of undernutrition has played a similar role to that of the HLTF and the HLPE but in the nutrition domain. Evidence of the broader link of nutrition and the development process began emerging in the first decade of this century (Nisbett et al. 2014). The landmark *Lancet* series on nutrition in 2008 coincided with the global food crisis, the emergence of the CFA, and increasing momentum for new models of development. Ongoing reviews of nutrition policies such as the WHO global review continue to build cross-country comparisons and examples of good practice. The World Health Assembly (WHA) has endorsed an implementation plan on maternal, infant, and young child feeding that calls for comprehensive food and nutrition policies.

---

[13] A number of overarching frameworks provide key principles for the achievement of food security and nutrition. These include the World Food Summit Plan of Action; the Rome Declaration on World Food Security; the Final Declaration of the 2009 World Summit on Food Security; the Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security; the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security; the International Covenant on Economic, Social and Cultural Rights, which established the human right to adequate food; and all applicable international law relevant to food security, nutrition, and human rights (CFS 2014). In addition, a series of documents, instruments, guidelines, and programs provide principles and strategies that may be relevant to the achievement of food security. These include the 1989 Convention on the Rights of the Child, which brought separate development efforts for the specific needs of children to the forefront of development. Similarly, several programs and documents shed light on the unique needs and issues faced by women and girls, including the 1979 Convention on the Elimination of All Forms of Discrimination Against Women, the 1993 Declaration on the Elimination of Violence Against Women, and the 1995 Beijing Platform for Action to ensure women's rights. A number of strategies also spoke to the importance of more context-specific policies and programs, such as the International Labour Organization Conventions of 1987–1989. Programs and strategies surrounding the unique needs of the rural population, such as the International Assessment of Agricultural Knowledge, Science and Technology for Development; the final Declaration of the International Conference on Agrarian Reform and Rural Development; and the UN Declaration on Rights of Indigenous People have also influenced the policy process in many developing countries.

Initiatives such as the UN-REACH (Renewed Efforts Against Child Hunger and Under-nutrition) partnership and the SUN movement seek to consolidate partnerships among countries, donors, and stakeholders at national, regional, and global levels to improve nutritional outcomes. The SUN movement coalesced in 2010, drawing motivation from the world food crisis and building on strong empirical evidence from the *Lancet* issue (2008) highlighting the importance of good nutrition during the 1,000 days between pregnancy and two years of age. Supported by a UN coordinator in Geneva, initially Dr. David Nabarro, the SUN movement provides an international framework for bringing together key private- and public-sector stakeholders, assembling evidence, setting nutrition targets, formulating specific enabling legislation, mobilizing resources, and implementing expanded nutrition policies and programs in its 54 member countries (SUN 2014).

Implications for the Formal Study of Policy Processes

The blossoming of nutrition policy and the proliferation of efforts to support agricultural policy processes offer several important lessons for the formal study of policy processes. The first concerns the importance of *credible* empirical evidence (Eklin et al. 2014). Unlike the agriculture and food policy literature, much of the nutrition research comes out of the medical profession, with carefully controlled experiments and a strong level of consensus about the cost and impact of various nutrition interventions on human health (see Bhutta et al. 2008; Ruel et al. 2013). In contrast, agricultural policy research from the social sciences typically offers less rigorous counterfactuals and remains subject to conflicting interpretation, as the hotly contentious recent debates on fertilizer subsidies illustrate (Morris et al. 2007; Jayne and Rashid 2013).

The second key insight concerns the power of high-profile international conventions to crystalize attention, motivate action, and encourage international policy spillovers. The SUN initiative offers perhaps the best recent example of the enabling power of credible evidence combined with international focus (Nisbett et al. 2014).

Finally, the international policy architecture for agriculture and for nutrition differ significantly. In the case of nutrition, rights conventions and UN declarations by the WHO are adopted by governments through international peer pressure, promoting formal policy reform and adoption and through the rollout of programs backed by clear evidence of their benefits and the cost of acting versus not acting. Many nutrition-related programs roll out through such processes. The CFS follows a nonbinding approach through the adoption of voluntary guidelines, coercing governments to adopt these through review reports by the special rapporteurs. Although the HLPE provides input into such debates on highly controversial issues, topics such as input subsidies in agriculture are not discussed. At the national level, these subsidies give rise to large-scale rents and to powerful entrenched interests that contest technocratic reform agendas. Agricultural policies, therefore, typically remain more contentious and less amenable to international consensus. As a result, an asymmetry arises between the high-level international consensus, coordination, and support for nutrition policies and the more diffused, country-specific policy debates that characterize agricultural policymaking.

Implicit Hypotheses Underlying Policy Interventions

Seven implicit hypotheses underlie this rich history of intervention in agricultural and nutrition policy systems. The following discussion and Table 1.1 summarizes these different but often complementary hypotheses.

Table 1.1 Implicit hypotheses underlying donor policy interventions

	Hypothesis	Operational examples
a) Monte Carlo	Changes in the payoff matrix influence the likelihood and direction of public investments and policy change.	• Policy lending, 1960s • Structural adjustment programs, 1980s • CAADP investment plans, since 2000
b) Sherlock Holmes	Better empirical evidence leads to better policies.	• IFPRI • HIID • ReSAKSS • UN—HLPE, HLTF, SCN • Transform Nutrition
c) Contagion Inoculation (or Policy Diffusion)	Policy inoculation, by showcasing prominent policy "success stories," can spur international emulation.	• SUN initiative • Abuja Fertilizer Summit
d) Frank Lloyd Wright	Institutional architecture matters. Open, transparent, evidence-based policy processes improve policy outcomes.	• CAADP peer-reviewed country investment programs • Joint sector reviews • GAFSP • New Alliance
e) Hercules	1. Champions of policy change can overcome flawed institutional architecture to effect policy change.	• Africa Lead Champions of Change program • AGRA policy champions • Transform Nutrition champions
	2. Dark Knight's Dilemma: Concentrated pecuniary gains motivate powerful, self-interested policy advocates.	• Powerful vested interest groups lobby for favorable treatment in opaque policy systems
f) Masters of the Universe	Top-down negotiations and high-level commitments can enable and enforce policy change.	• New Alliance agreements • CAADP regional compacts

Source: Authors' compilation.

Notes: AGRA = Alliance for a Green Revolution in Africa; CAADP = Comprehensive Africa Agriculture Development Programme; GAFSP = Global Agriculture and Food Security Program; HIID = Harvard Institute for International Development; HLPE = High Level Panel of Experts on Food Security and Nutrition; HLTF = High Level Task Force on the Global Food Security Crisis; IFPRI = International Food Policy Research Institute; ReSAKSS = Regional Strategic Analysis and Knowledge Support System; SCN = Standing Committee on Nutrition; SUN = Scaling Up Nutrition.

Monte Carlo hypothesis

Changes in the payoff matrix (that is, in the level and distribution of benefits and costs from any given policy) influence the feasibility and direction of policy change within any existing policy system. The structural adjustment policies of the 1980s and the policy conditionality programs of the 1960s relied on this hypothesis directly. Africa's CAADP programs since 2000 build on similar incentives in which African government commitments give rise to increased donor funding, such as the GAFSP.

Since any given policy stance produces losers as well as winners, existing policy equilibria imply that winners have gained the upper hand in persuading key decisionmakers. Given these vested interests, policy change becomes difficult since the current winners typically attempt to stifle changes in policy that would dilute their present advantages. In some cases, once-powerful parastatal managers of government input subsidy programs become losers under the liberalization reforms imposed by policy conditionality. To counter this resistance, policy support programs typically provide resources to promote new winners (financing of private-sector dealers, for example) and to convert former losers into beneficiaries and potential champions of change. The ministry of finance, in many instances, becomes a powerful double winner following the removal of subsidies coupled with a large inflow of outside resources.

Sherlock Holmes Hypothesis

Better empirical evidence leads to better policies. Most of the policy research funded at IFPRI, HIID, AERC, ReSAKSS, and major research universities implicitly assumes that bad policies result from bad information and that improving the quality of policy-relevant empirical evidence will serve to promote policy change. In its most elementary form, the Sherlock Holmes hypothesis assumes that altruistic decisionmakers can be convinced to change their course when credible new evidence comes to light. In situations where policy change requires some sort of external trigger to generate the political energy necessary to fracture the policy status quo, a more nuanced interpretation of the Sherlock Holmes hypothesis holds that the accumulation of evidence over time builds up a body of knowledge and informed individuals prepositioned and able, when the trigger fires, to provide alternative policy options to newly receptive policymakers. Through a closely related causal pathway, the hypothesis proves highly complementary to the Hercules hypothesis below, given that new evidence often provides ammunition that champions of policy change then marshal to sway policymakers.

The nutrition and public health communities have perfected the model of mobilizing empirical evidence to elicit policy change. Instances of using evidence to enact policy change are illustrated in Table 2.1. In an acclaimed special issue of the medical journal *The Lancet*, a cadre of distinguished international scholars summarized a growing body of medical research on the impact of micronutrient availability on child survival, neurological development, school performance, physical development, and lifetime productivity. In combination with the low cost of these interventions, these significant lifelong impacts made a powerful social and economic case for micronutrient supplementation (Gillespie et al. 2013).

Contagion Inoculation Hypothesis

Policy inoculation, by showcasing prominent evidence on policy "success stories," can spur international emulation. This complementary hypothesis provides an operational instrument enabling champions to apply empirical evidence derived from the Sherlock Holmesian policy research efforts described above in order to influence policy priorities.

The classic example, again, comes from nutrition. By showcasing the *Lancet* results in high-profile international forums, public health researchers helped to launch the SUN initiative, which has successfully invoked this empirical evidence to promote micronutrient supplementation programs in more than 50 countries worldwide (SUN 2014). Another classic example comes from conditional cash transfer programs, which have spread like wildfire based on widely publicized successes in Latin America (Adato and Hoddinott 2010). The Abuja Fertilizer Conference of 2010 played a similar role in promoting emulation of the Malawi "fertilizer success story" by promoting fertilizer subsidy programs across Africa. As a result, African governments have now spent US$1 billion on fertilizer subsidies (Jayne and Rashid 2013).

Frank Lloyd Wright hypothesis: *Institutional architecture matters. Open, transparent, evidence-based policy processes improve policy outcomes.* The CAADP model embodies this hypothesis most explicitly. The peer-reviewed CIPs and the mutual accountability frameworks developed to support CAADP implementation aim to improve the transparency and quality of agricultural policy decisionmaking through evidence. Programs designed to support CAADP and related policy processes build these efforts on the premise that improved policy architecture will enable transparent, evidence-based policy processes and hence lead to improved policy outcomes (USAID 2013a; 2013b).

The Land Governance Assessment Framework of the World Bank relies on local country experts for its coordination and implementation. The framework involves several steps, including the collection of background information, inputs from the stakeholders to rank the issues to be addressed, preparation of the priority action report, stakeholder consultation to validate the finding and priorities, and collaborative development of the work plan (World Bank 2014). In Bangladesh, the Food Policy Monitoring Unit plays an important role in connecting current food policy challenges and solutions to the policymaking process. It provides evidence to inform policymaking and acts as a knowledge platform.

Hercules Hypothesis

Champions of policy change can overcome flawed institutional architecture to effect policy change. This hypothesis asserts that motivated, empowered champions can effectively lobby for policy change, even within weak, opaque policy systems. Work under the Africa Lead Champions of Change program serves to identify, motivate, empower, and support potential policy champions (DAI 2014). Similarly, the early work of the Alliance for a Green Revolution in Africa (AGRA) on policy hubs is centered on identifying key policy themes and policy champions willing and able to drive policy change (AGRA 2014).

Hedging its bets, USAID currently funds policy work promoting both improved institutional architecture and champions of change. Though built on seemingly opposite hypotheses, these parallel efforts can, in practice, prove complementary since they often operate on different timelines. The Hercules hypothesis aims to achieve policy change in the short run by working around or smashing through the constraints of an ill-designed, inhospitable policy architecture. In contrast, the Frank Lloyd Wright hypothesis aims to more slowly improve the frequency over time of sensible policy outcomes by renovating or rebuilding the operating environment and restructuring rules of engagement within the policy system.

Dilemma of the Dark Knight

Concentrated pecuniary gains motivate powerful, self-interested policy advocates. This direct corollary of the Hercules hypothesis holds in situations where effective, public-spirited champions are replaced by influential, narrowly focused self-interest groups. The status quo in many policy environments involves Dark Knights who champion self-interested policies in opaque policy systems susceptible to the peddling of concentrated influence by small groups. Corruption is possible in these circumstances, though not necessary. Large grain millers, for example, lobby for export bans in bumper harvest years, claiming to favor consumers but also intending to profit from higher profit margins for themselves when farm prices are depressed (Dorosh, Dradri, and Haggblade 2010). In a similar way, corrupt food inspectors and ration shop owners lobbied successfully for many decades to retain the large rents available in subsidized public food rationing systems in Bangladesh (Chowdhury and Haggblade 2000).

In a very real sense, efforts to improve institutional architecture (Frank Lloyd Wright) and to promote policy champions (Hercules) collectively aid in the elimination of the conventional influence peddling that prevails when Dark Knights enjoy the perquisites of uncontested self-interested policy influence in weak, opaque policy systems.

Masters of the Universe Hypothesis

Top-down negotiations and high-level commitments can enable and enforce policy change. Under the G8's New Alliance framework, high-level policy negotiations between the public and the private sector radically alter policy landscapes, which then instruct implementation. Similarly, CAADP regional compacts frame policy conditions that member country administrations are then obligated to implement, as with the ECOWAS (Economic Community of West African States) regional seed and fertilizer policy harmonization efforts. The UN's special rapporteur on the right to food similarly serves to focus international pressure for compliance.

This large body of operational experience and the implicit hypotheses underlying donor involvement in agricultural and nutrition policy systems offer insights that will help to define key features of our formal framework for the study of policy change, presented in Section 4. Prior to that discussion, the following section reviews the collection of formal academic models used, in various settings, to study policy processes.

3. EXTANT THEORIES OF THE POLICY PROCESS

In parallel with the donor approaches discussed above, a rich academic literature on the policy process has existed, albeit one derived mainly from industrialized-country contexts. In order to structure some of the main theories and frameworks, and position the operational hypotheses summarized above, the discussion here focuses on two main axes of differentiation (see Table 2.1). One relates to how these various theories view the state: captured by interest groups, autonomous with unitary preferences, or constituting a diverse entity that has an interactive relationship with society.[14] The second axis relates to what shapes actors' preferences and behaviors, with attention to the three drivers that are central in political economy analyses: interests, institutions, and ideas.

Table 2.1 Organizing prominent policy process models

| Dominant perspective of the state | What shapes actors' behavior? | | | Weakness of perspective |
	Interests	*Institutions*	*Ideas and identity*	
Captured by society	Public choice theory Marxism			• State is too weak • Interest groups are too strong, with clear understanding of policy implications
Autonomous from society, unitary preferences	Elitist theory Corporatism Developmental states	Street-level bureaucrats		• State is too strong and interest groups sidelined • Little differentiation between state autonomy to make decisions and capacity to implement them
Interactive with society, diverse preferences	Multiple streams Policy networks theory	Punctuated equilibrium Policy paradigms	Advocacy coalitions Social construction theory	• Assumes open political systems with functional institutions • Ignores the role played by external actors, such as donors

Source: Authors' compilation.

The perspective that actors' preferences derive from their interests is linked to rational choice theory, which assumes self-interested, utility-maximizing behavior. In this view, outcomes are explained in terms of individual choice and related to the distributional consequences of a particular policy (see Hindmoor 2006). Institutionalism suggests that individual interests are constrained and modified by rules and standard operating procedures that may be codified in political, economic, social, or administrative organizations (see Hall and Taylor 1996). Institutional factors can both determine how much power any category of actors can exert over policy outcomes and influence how actors define their interests given their relationships to others and their responsibilities (Hall 1986, 19). In this view, and in contrast to the rational choice perspective, interests are endogenously derived. Historical institutionalists further note that policies often become path dependent because there are increasing returns to sticking with the status quo (Pierson 2000). Constructivism concurs that preferences are not simply derived from a policy's distributional consequences and an actor's position in the economy; instead, it places greater emphasis on the role of ideas, beliefs, and identity. In Béland's interpretation, ideas can affect policy outcomes by creating "cognitive locks" that reproduce existing policies over time, as "policy blueprints" for new

---

[14] This distinction is modified from Hill (2013).

models, and as "ideological weapons" that empower actors to challenge existing policies (2007, 125). Ideas can also be central to the social construction of one's identity, and policymaking therefore involves a strong element of persuading others about the meaning and implications of identity (see Ruggie 1998; Schneider and Ingram 1997). This has been one of the key findings of some critiques of the international development community whereby the solutions advocated to complex problems reflect the preferences and abilities of technocrats rather than necessarily grappling with "messy" but potentially overriding barriers to reform, such as unjust regimes, poor leadership, or cultural norms (see Easterly 2014; Ferguson 1999; Mitchell 2002).

In the operational hypotheses delineated in Table 2.1, it is clear that the donor community has often taken interests into account through such mechanisms as policy conditionality. Institutions have recently received more attention, as emphasized by the Frank Lloyd Wright hypothesis. But given the "stickiness" of institutions, the difficulty of shifting to more open, transparent, accountable institutions from a different status quo is perhaps not adequately acknowledged. Ideas, beliefs, and identity have been given only cursory recognition through two mechanisms: the potential of credible, empirical evidence and the diffusion of ideas via policy success stories. But deeper beliefs about which goals policymakers believe should be prioritized (such as poverty reduction or economic transformation) and how they should be achieved (via private-sector initiative or state intervention, via smallholders or commercial agriculture, and so on) are much more difficult to change, even in the face of strong evidence. Indeed, donor organizations themselves are often characterized by deep beliefs that shape their portfolios of interventions and means of engagement with national policymakers.

Society-centric Models

Pluralist interpretations of the policy process are firmly oriented in the rationalist arena whereby power is fragmented and diffuse, and states face competing pressures from various interest groups (Dahl 1961; Polsby 1963). Public choice theory is one of the best-known perspectives in this category. Concerned with the distributional consequences of policy change, interest groups coalesce around potential winners and losers. These groups in turn lobby the state in order for benefits to be concentrated to them and the costs to be dispersed within the broader society (Buchanan and Tullock 1962). Even politicians' preferences are derived from concerns over utility maximization given interest group pressures; for example, the preference for winning elections may prompt politicians to favor certain groups over others or to allow outlays of expenditures that result in adverse macroeconomic outcomes in the long run (Grindle 1999). Politicians may therefore use political rather than technocratic criteria for designing tax policies and for targeting input subsidies, infrastructure investments, or social protection interventions. Indeed, Bates' (1981) seminal work on markets and states in Africa largely belongs in this category; though seemingly irrational from an economic standpoint, many agricultural policies pursued by governments in the 1970s were politically rational because they offered regime stability. More recently, based on an analysis of agricultural policy change in eight African countries, Poulton (2012) concluded that democratization within that region has led leaders to be more concerned about electoral outcomes and keeping certain interest groups happy. In turn, "club goods" and transfers that favor narrow interest groups are more frequent than public goods that would support sustained agricultural growth. The Dark Knight's Dilemma highlighted in Table 2.1 is the archetype of a pluralist, society-centric approach in that it predicts that interest groups with the most to lose materially from reform lobby against it.

Marxist theory likewise assumes that individuals' positions on policy are derived from their position in the economy and particularly the class structure. Policy change is driven by competition between the bourgeoisie and the unified proletariat, the latter of which is assumed to rise up at some point and overthrow the former (see Miliband 1969). Even though the state may be viewed as an instrument of the bourgeoisie because of overlapping backgrounds between this class and the governing elite, it is not given its own proactive role. Instead, it is an enabler of capitalist accumulation and its main role is "to maintain order and control within society" (Hill 2013, 42).

Unitary State Models

A second group of theories envisions that the state is not only proactive in policymaking but that its preferences are predominant in driving outcomes. Moreover, these theories rarely take into account conflicts among state actors over policies and instead adopt an assumption of unitary preferences. Elitist theory, which has become an outdated viewpoint, focused on a collective political elite that includes members of the government, military leaders, influential families, and powerful business leaders, with policy decisions based on the political elite's interest in maintaining power, influence, and wealth (Bottomore 1966; Domhoff 1978).

Corporatism recognizes the role of interest groups but sees them as subservient to state preferences, which are to maintain capital accumulation and economic growth. In particular, corporatism focuses on three categories: capital, labor, and the state. Where capital and labor are organized into a small number of hierarchically structured organizations (such as business associations and labor unions), they are given almost exclusive authority to represent their members' interests to the state (Schmitter 1974). The state takes an interventionist role in bargaining with these organizations in order to ensure that capital accumulation is not stalled by a breakdown in relations between capital and labor. The model historically was applied to understand the evolution of authoritarianism in Latin America (see Collier 1995). More recently, corporatism has been viewed as a distinguishing feature of economic policy processes in northern European economies (see Hall and Soskice 2001) and even in post-apartheid South Africa (Habib 1997).

The developmental state model, which has often been used to understand East Asia's economic transformation, privileges the business-finance-state relationship. In this view, state bureaucracies in Japan, South Korea, and Taiwan were relatively insulated from societal pressures and pursued development strategies that relied on directing loans and investments into targeted sectors believed to generate the greatest return (among others, Amsden 1992; Evans 1995; Johnson 1982). An interest in national security was a major incentive for the state's interest in gaining economic growth and autonomy. Ethiopia and Rwanda have been viewed as pursuing a developmental state model in Africa, both motivated by national security concerns spurred by internal violence and conflict with neighboring states (Booth 2012). A related variant of this research focused on economic reforms during the 1980s and 1990s in the developing world. Emphasizing that the state had its policy preferences, this body of scholarship assumed that reforms were possible in those countries where committed state elites could overcome vested societal interest groups who benefited from the status quo (among others, Haggard and Kaufman 1992; Nelson 1984).

Lipsky's (1980) work on street-level bureaucrats still placed a focus on the state as the primary driver of policy outcomes and still adopted a relatively aggregated view of state interests; in other words, it did not discuss conflicts among different bureaucrats. However, it highlighted the way in which institutions can structure behavior and preferences. More specifically, bureaucrats make policy based on the routines and everyday practices they adopt in their organizational settings, and as a consequence of their high degree of discretion: "The decisions of street-level bureaucrats, the routines they establish, and the devices they invent to cope with uncertainties and work pressures effectively *become* the public policies that they carry out" (Lipsky 1980, xii, italics in original).

Many of the existing operational models fall under the unitary state perspective. Indeed, they conceive of a homogenous political elite that can be convinced to engage in policy change if only exposed to the proverbial "magic bullet," whether shifts in payoffs imposed by conditionality (Monte Carlo), empirical evidence by researchers (Sherlock Holmes), or high-level commitments (Masters of the Universe).

Interactive Models

A great deal of contemporary policy process theorizing concentrates around a third group of approaches that emphasize the interactive relationships between public and private actors and their overlapping interests. The multiple streams framework places a large emphasis on trying to understand why certain

policies emerge on the agenda. At its root, the multiple streams framework draws on the "garbage can model of choice" by Cohen, March, and Olsen (1972) and centers around the view that policy processes are typically idiosyncratic and occur in contexts of uncertainty. The approach argues that a policy emerges on the agenda when a window of opportunity for change emerges in the political sphere ("political stream") and there is a concurrent recognition that a problem exists requiring attention ("problem stream") as well as a solution that might possibly address the problem ("policy stream"). Yet, while such a window of opportunity is necessary for policy change, it is not sufficient. Instead, skilled policy entrepreneurs, which include both individuals and corporations, are necessary to recognize and take advantage of this convergence (Kingdon 1984; 1995). Such individuals "couple" these different streams and act not only as advocates of their own positions but also as power brokers between interest groups and decisionmakers. Not surprisingly, the most successful policy entrepreneurs are those that have greater access to policymakers, possess more resources, and can strategically couple the streams (Zahariadis 2007). In its original formulation, the multiple streams framework has been almost entirely centered on individuals' behavior, with little attention to the institutional context in which they operate (see Schlager 2007). This is primarily because Kingdon's (1984) interest was in explaining policy output by the United States federal government. Zahariadis (2007) has tried to extend the applicability of the framework by noting that institutional factors shape the ability of entrepreneurs to couple the streams.

While the multiple streams approach suggests that policy change is erratic and dependent on the confluence of problems, politics, and policies, the punctuated equilibrium and policy paradigms tend to emphasize patterns of policy adoption over the long term as a consequence of the interrelationship between institutions and ideas. The punctuated equilibrium framework tries to understand why long periods of stability and incrementalism are suddenly marked by major policy changes (Baumgartner and Jones 1993). This framework highlights the interaction between policy venues, interest mobilization, and policy images. Agreed-upon policy images, a policy community's shared views about how an issue should be interpreted and the solutions that are most appropriate, can become contested and undermine existing policy monopolies. Different policy images can be promoted in different institutional arenas, or policy venues. Countries with more complex modes of institutional decisionmaking, such as those with federal systems and with a division between executive, legislative, and judicial branches, offer more policy venues. A change in policy images can occur through "focusing events," which are external shocks, such as strikes, protests, and crises, which can be seized upon by particular interest groups to question the policy status quo (see Birkland 1997). This view can be contrasted with an older view, such as that of Lindblom (1959) and Wildavsky (1984) that privileged incremental changes through endogenous evolutions.

Like that of Baumgartner and Jones (1993), Hall's (1993) seminal work on policy paradigms aimed to reconcile periods of both policy stability and change. Drawing on Heclo's (1974) work on policymaking in Britain and Sweden, Hall (1993) emphasized the role of social learning in policymaking and delineated three types of policy changes. First-order change relates to routine amendments to existing policy instruments, while second-order change involves shifting the policy instruments used to address shared policy goals. Third-order change is the most dramatic since it involves a change in the goals themselves. Hall (1993) focused on shifts from Keynesianism in post–World War II Europe and the United States, whereby the goal was to secure full employment through government intervention, to monetarism and neoliberalism in the 1980s, which stressed inflation targeting, reduced social spending, and privileging market forces over the state (see also Hall 2013). Using such an example, he argued that third-order change involves a radically different type of learning than first- and second-order change. Instead of simply involving policymakers in learning from past policy mistakes, third-order policy change is often influenced by new ideas and debates that come from outside the state. Berman (2013) further clarified that in this approach, ideas "rise and fall" in a two-step process: existing ideas are first discredited, creating a demand for new ideas, and then a supply of new ideas emerges among policy champions who each vie for dominance.

Both network theory and the advocacy coalitions framework (ACF) focus on dynamics in specific policy subsystems, that is, the range of actors and institutions primarily involved in a particular policy arena, delimited by both a territorial dimension (such as country, province, or district) and a functional area (such as water, education, or health). Network theory assumes conflicting interests among multiple state actors, such as different departmental ministries or institutional branches of government. Horizontal coordination between a select group of state actors and societal pressure groups allows the former to find legitimacy for its policies and the latter to gain greater influence in the policymaking arena (Hill 2013). This coordination might be driven by either formal, established structures for engagement or by informal relationships between state and societal actors. Analyzing networks requires determining the full set of actors relevant to a particular policy domain, their degree of power relative to one another, and how their relationships are structured (see Adam and Kriesi 2007).

The ACF of Sabatier (1988) and Sabatier and Jenkins-Smith (1993) is a type of network approach. It combines elements of the above perspectives by looking at bureaucratic actors and societal interest groups who are operating within a particular institutional context. It argues that policy changes are the consequence of competition and learning among coalition actors within a particular policy subsystem as well as the influence of external events. But instead of looking solely at the distribution of material costs and benefits, the ACF views individuals in the policy subsystems as having normative ideas that operate at three levels: deep core beliefs about human nature and priorities shaped by norms and socialization, which are difficult to change; policy core beliefs related to the policy subsystem and informed by deep beliefs (such as governments versus markets, the cause of the problem, whose welfare counts, and so on); and secondary beliefs that are focused more on the narrow design features of a policy. Those within a particular ACF strive to translate their beliefs into policy before their opponents can do the same by sharing resources and searching for allies: "The ACF argues that policy participants will seek allies with people who hold similar policy core beliefs among legislators, agency officials, interest group leaders, judges, researchers, and intellectuals from multiple levels of government" (Sabatier and Weible 2007, 196).

Social construction theory also privileges the role of ideas but is predominantly concerned with the drivers and consequences of the policy design element of the policy process. According to Ingram, Schneider, and deLeon (2007), the theory recognizes that power is not simply about economic and political resources but also about reputation, social standing, and image. With an emphasis on the impact of identity and persuasion, it argues that policymakers socially construct target populations (that is, those who either benefit or are explicitly excluded from a policy), in either positive or negative ways, and they design policies in accordance with these constructions. In turn, policy designs, through their rules and underlying causal logic, shape target populations' identities through their experiences with the policy. For example, Soss (2005) showed that the way in which welfare benefits are dispersed in the United States leads recipients to have negative feelings of political efficacy and therefore less inclination to participate in politics. In this way, the theory also gives scope for explaining modes of collective action and why some groups are more or less engaged in the political and policymaking arenas.

The Hercules model discussed in Table 2.1 is one of the operational hypotheses that approximates the interactive approach, and particularly networks theory, in that it recognizes that societal actors may find like-minded advocates for change among a select group of policymakers. This coalition building between state and societal policy champions may potentially advance policy change even in the face of conflicts and capacity constraints within and across key decisionmaking institutions. The institutional architecture approach (Frank Lloyd Wright) also recognizes the interaction between nonstate and state actors. However, it does not acknowledge clearly enough that a diversity of policymakers, with potentially conflicting beliefs, ideologies, and interests, can simultaneously operate within open, transparent policy systems.

Limits to Existing Approaches

The above scholarly theories advance our understanding about policy processes in a number of respects, but as highlighted in the last column of Table 2.1, a number of their underlying assumptions are questionable, especially for developing countries. Pluralist approaches, particularly public choice theories, assume that individuals know what their interests are and have full information about how policy change will alter those interests. This is not always very realistic in developing-country settings, which are characterized as low-information environments where education levels and media development are lower than elsewhere. Moreover, interest groups may lack organizational power, especially those who are among the most likely beneficiaries from agricultural and nutrition policy reforms (such as poor communities and smallholder farmers). In the African context, van de Walle argued that "African governments have typically outlawed, emasculated, or coopted economic interest groups such as unions, business associations, and farmer associations" (2003, 30). Grindle (1999) has also been critical of the society-centric view underlying these approaches given that governments in developing countries are highly centralized with strong executive powers.

On the other hand, the unitary state approaches to policy change are much more relevant to less pluralistic developing countries, including China, Ethiopia, Rwanda, and Vietnam, where fewer interest groups are incorporated into the policy arena (see Booth and Golooba-Mutebi 2012; Hai and Talbot 2014; Huang, Yang, and Rozelle 2014). But the unitary state models fail to explain where state interests truly derive and whose interests within the state matter the most and why. Moreover, the unitary state model implies that autonomy and capacity are correlated with each other, as was the case in the East Asian miracle economies and in much of North America and Western Europe. But in many other parts of the world, there is either a lack of capacity and autonomy or states may have autonomy from interest groups to make decisions but lack the capacity to implement their preferred policies (see Midgal 1988; van de Walle 2003). Relatedly, the "street-level bureaucrats" approach offers some diversity on the perspective of the state but very little leverage on the role of bureaucrats in policy implementation or how formal routines within the bureaucracy can affect the interests of key decisionmaking actors, such as executives and legislators (see Hicklin and Godwin 2009; Meier 2009).

The interactive policy process theories recognize that a fuller understanding of policy development requires consideration of both state and society perspectives, but these theories still suffer from many of the shortcomings noted above. They assume open political systems with few limits on resources and capacity for policy implementation. Institutions are variously viewed as constraining action or shaping interests and beliefs, but they are almost always assumed to be functioning, effective entities. Yet institutions in many developing countries, such as legislatures, may act only as "rubber stamps" on policy decisions already made by executives, ignored entirely, or subject to frequent changes (such as amendments to constitutions, dissolution of ministries, creation of new agencies).

Most significantly, the role of external actors is rarely considered, even though in developing countries the international donor community plays a critical role in shaping interests and beliefs as well as constraining action. Moreover, as Section 2 clearly highlighted, the donor community often has strong views ex ante about how the policy process works and what interventions (for example, changes in policy conditionality, supporting policy champions, fostering more evidence-based engagement) are more likely to be effective.

Existing comparative work on developing countries nicely addresses some of these weaknesses. For instance, Haggard and Kaufman's (2008) analysis of differences in social welfare systems in Latin America, Eastern Europe, and East Asia examined how the legacies of early-20th-century political regimes explain the subsequent emphasis of social welfare systems in these regions after they democratized. Grindle's (2004) work examined comparative case studies across Latin America over the 1990s to explain when and why contentious education reforms were implemented despite the existence of strong interest groups that opposed them.

However, these and other works (among others, Grépin and Dionne 2013; Kaufman and Nelson 2004) have tended to focus on just one policy subsystem (for example, education, health, social protection). This narrow focus inhibits understanding whether, as Lowi suggested, the type of policy being considered (such as distributive, redistributive, or regulatory) can actually affect the process: "Policies determine politics" (1972, 299). In other words, the content of a policy suggests particular outcomes, which in turn spur responses from those who will be affected and accordingly shape both the political debate and the prospects for implementation. In addition, these works rarely considered policy arenas that require multisectoral cooperation across ministries, each of which can have its own set of operating procedures, organizational culture, and bureaucratic capacity.

The kaleidoscope model presented in Section 4 attempts to meet Schlager's criteria for a useful theory on policy process, which include "careful attention to the collective action of actors, the institutions that provide the context for that action, and how policies change over time" (2007, 296–297). Moreover, it builds on the insights from the interactive models while also recognizing that interests, institutions, and ideas are all relevant to the policy process at different times. In particular, it addresses the constraints of existing models elaborated above in at least three ways. First, it explicitly takes into account dynamics at each stage of the policy process, from agenda setting through implementation, evaluation, and reform. This scope allows us to better pinpoint when and why policy change dynamics stall. Second, the model incorporates a broader range of actors that are relevant in the developing-country context, predominantly the donor community but also the international research community, and explicitly recognizes that financial resources and institutional capacity are often overriding constraints to policy implementation in these contexts. Third, the model is intended to be relevant not only across a broad range of developing countries with varying political, economic, social, and demographic contexts but also across multiple policy types and subsystems relevant to agriculture and nutrition. Consequently, it enables us to test whether policy change across multiple domains and countries is attributable to the same constellation of variables.

4. KALEIDOSCOPE MODEL OF AGRICULTURAL AND NUTRITION POLICY CHANGE

As noted above, a key gap in the existing literature on policy processes is that the specificities of the developing-country context and especially of the agricultural and nutrition policy arenas have not been taken into account. Despite the availability of natural resources and greater opportunities for foreign investment, a large number of developing countries are still characterized by low levels of tax mobilization and high degrees of dependence on donor funding. Civil society tends to be very urban-oriented and dependent on aid for sustainability, journalists face considerable capacity constraints, and political decisions tend to be highly centralized around the executive office or around a dominant political party regime.

Within these environments, understanding agricultural and nutrition policy change is especially challenging. The intended beneficiaries are often poor, insufficiently organized, and unaware of how particular policy changes may directly influence their welfare. In addition, some policies in these domains, such as land reform, micronutrient supplementation, or maternal health promotion, are more likely to have an impact on well-being in the medium to long term, creating potential political disincentives to invest resources into them over other pressing policy priorities.

Keeping in mind these issues and the insights from Sections 2 and 3, we present here an applied framework to explain drivers of *policy change* in the agricultural and nutritional policy arenas. The framework is aimed at answering why a policy change occurs in one country and not another, in one policy arena but not another, or at one time period but not another. The primary level of analysis is focused on understanding policy change based on the influences on and the actions of national policymakers in developing countries. Policy change for our purposes refers to whether a policy is actually implemented or not, which can be assessed in terms of required administrative changes, public expenditure outlays, delivery of the actual goods and services promised by the policy, or a combination of these factors. We focus on policy change because it allows for identifying a clear output and also gives the scope for simultaneously analyzing why change does not occur (that is, why there is non-implementation). In contrast, *policy processes* are often descriptive and vary substantially across countries and even within the same country over time. In other words, there is rarely a consistent and overarching policy process that can be ascribed to a particular country or policy area in a country, and hypotheses across countries are therefore more difficult to test.

To derive key variables that help drive policy change, we combined insights from the policy process and political economy literatures described in Section 2 with a review of episodes of policy reform in developing countries across a wide range of sectors and in very diverse political settings. Consequently, the framework has been inductively derived and is similar to the approach used by Grindle (2004) to examine social-sector reforms in Latin America and by Pelletier and others (2012) to understand policy adoption surrounding the Mainstreaming Nutrition Initiative. The method utilized also draws on the logic underlying Ragin's (1987) qualitative comparative analysis (QCA), which identifies sufficient conditions for causal patterns across case studies. QCA is well known as a technique for integrating within-country and cross-country analyses by examining antecedent conditions that contribute to diverse outcomes, particularly with respect to cases that are causally complex. In this way, in-depth knowledge of within-country cases can still allow for broader generalizations. It can be used to generate theories as well as to test existing hypotheses related to policymaking across a range of agricultural and nutrition policy domains.

The method involves delineating which variables (or conditions) repeatedly appear to be important for causing a particular outcome. To avoid a problem of having too many variables and too few cases, master or macro variables can be constructed (see Rokkan 1999; Berg-Schlosser and De Meur 1997). This approach is used below to differentiate between primary and secondary variables relevant for influencing each stage of the policy process. Primary variables are highlighted in the inner circle of Figure 4.1 and are labeled "key determinants of policy change." In turn, they are often influenced by the

nonexhaustive list of secondary variables presented in the middle circle and labeled "contextual conditions."

Drawing on other influential studies of policymaking in developing countries (see Fox and Reich 2013; Kaufman and Nelson 2004), the framework presented in Figure 4.1 focuses on five key elements of the policy cycle: agenda setting, design, adoption, implementation, and evaluation and reform. Some have rejected the stages heuristic by arguing that the policy process is often iterative and nonlinear, with substantial feedback loops as past decisions influence future policies (see John 1998; Sabatier 2007). However, since most existing theories on policy process and change are implicitly focused on one or more of these stages, we use it here as an organizing device to emphasize which variables appear to take precedence at different stages rather than as a predictive theory that policymaking occurs in such a linear fashion. More practically, it allows for tracing why a policy fails to be implemented by taking into account where gaps may have existed during other stages of the policy cycle. Indeed, as Hall (1993) highlighted, policy change is rarely one overarching outcome but rather consists of smaller policy changes related to design, adoption, and implementation along the way. By looking at all elements of the policy cycle, we therefore aim to offer more nuanced understandings of when and why smaller changes sometimes cumulate and result in larger outcomes while others do not.

The framework is termed the "kaleidoscope model" because just as shifting a kaleidoscope refracts light on a new pattern, so does focusing on a particular stage of the policy process reveal a different constellation of key variables (Figure 4.1). Like the pieces of a kaleidoscope, many of the underlying variables remain the same but as policy dynamics unfurl, some factors tend to have a disproportionately larger role in driving toward policy change than others at any particular point in time. The rest of this section describes the framework and justifies its emphasis on the key variables highlighted in the inner circle.

Agenda Setting

In understanding how and when certain issues arrive on the policy agenda while others do not, three common master variables appear to reoccur regardless of the policy issue, and in many ways they reflect support for Kingdon's (1984) "multiple streams" approach. The first variable is that some type of critical juncture, or punctuated equilibria or "*focusing events*" occurred.[15] In the literature on historical institutionalism, "critical junctures" are periods when major reforms are possible in the midst of long periods of inertia and biases for the status quo, and they are typically linked to exogenous factors that trigger a particular development trajectory (Collier and Collier 1991; Pierson 2004; Thelen 2003). The critical juncture may be a major crisis, such as a food deficit or price crisis, an economic collapse, a political coup, or a natural disaster. Crises help focus attention on particular problems during a specific time frame (see Boven, Hart, and Peters 2001). Undoubtedly, the 2007–2008 food crisis was a major impetus for the introduction of new fertilizer, trade, and social protection policies. Regime change can also be a key focusing event. For example, the recent abolition of health user fees as well as school fees for primary and secondary schooling in much of Africa and Latin America has been linked to democratization in those regions (among others, Grindle 2004; Harding and Stasavage 2014; Kaufman and Nelson 2004).

---

[15] See work by Birkland (1997) on "focusing events."

Figure 4.1 Kaleidoscope model of food security policy change
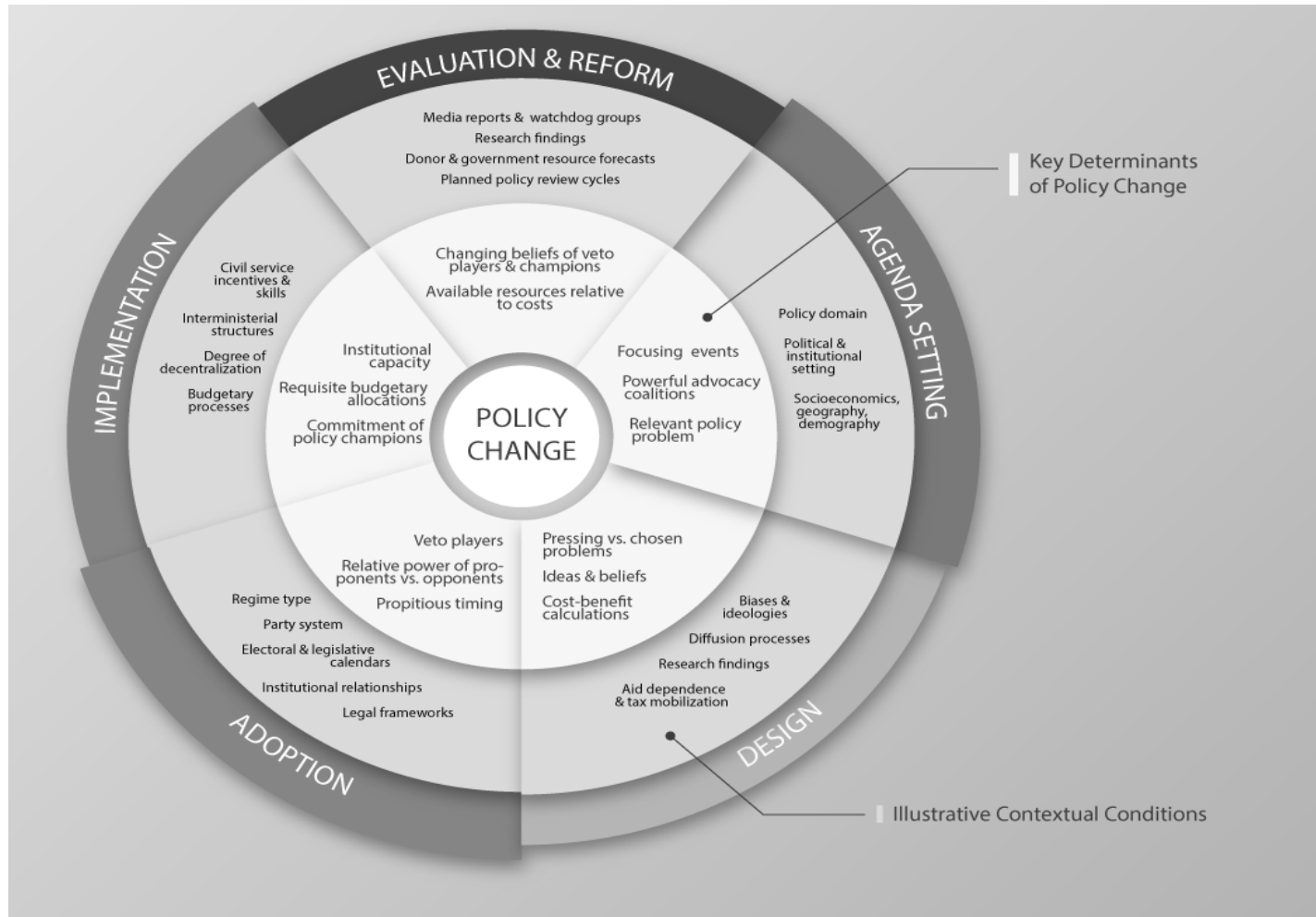
Source: Authors' compilation.

However, a focusing event may also be less extreme yet have a delimited time frame. For example, high-level international declarations, initiatives, or meetings can also serve as critical junctures, elevating the status of certain policy issues. In terms of agricultural investments, the Maputo Declaration and CAADP have played this role. The Abuja Declaration (2006) has been instrumental with respect to the reintroduction of fertilizer subsidy policies in many African countries, while the Jomtien Education for All Declaration (1990) and the Dakar Framework for Action (2000) did the same for school fees. Likewise, the Zero Hunger Challenge (2012) and SUN Framework (2010) represent focusing events that have mobilized global efforts to address malnutrition, while the Rio+20 initiative and Sustainable Development Goals have pushed the climate change agenda forward. These types of international meetings and conventions highlight that a particular policy issue is an area of concern or interest for the international community, which can both provide momentum to the issue and also signal that external financial resources to address the issue could be forthcoming.

Yet a focusing event on its own is typically not sufficient to place a specific issue on a government's policy agenda without the existence of *powerful advocacy coalitions* who push for action on that issue. These advocates can be considered "policy entrepreneurs" or "policy champions" but they are often most effective when they are able to mobilize coalitions that can draw on a broader network (see Natalicchio and Mulder-Sibanda 2010). These advocates can come from a range of sources, including government ministries, political parties, civil society, the private sector, the research community, foreign investors, or donors and multilateral agencies. For instance, it was often political parties and incumbent governments that introduced or scaled up fertilizer subsidies as either a campaign promise during an election (such as the United Democratic Front in Malawi) or in the wake of the food price crisis (for instance, the *Parti Démocratique Sénégalaise* in Senegal and the New Patriotic Party in Ghana). Their promises were frequently supplemented by the enthusiasm of international actors and initiatives, such as Jeffrey Sachs' Millennium Villages and AGRA (Minot and Benson 2009).

The role of advocacy coalitions can be even more significant for issues for which the lag between policy intervention and outcomes are often only seen in the long term or may not be highly visible, such as in the case of malnutrition. International advocates such as the United Nations' HLTF and its special representative for food security and nutrition, David Nabarro, have played a significant role in driving the nutrition agenda and the SUN initiative in some countries. For example, in Africa, Benson (2008) noted that advocates for malnutrition policy have mostly been external actors, particularly UNICEF. One study even highlighted that in Ethiopia and Kenya, there was a lack of real support for addressing nutrition at the prime ministerial or presidential levels, explaining less movement on the issue in those countries (Pelletier et al. 2012). In contrast, success stories in countries such as Brazil, Peru, Thailand, and Vietnam were all due to the existence of national nutrition advocates who pushed policies forward (Gillespie et al. 2013; see also Pelletier et al. 2012). In some cases, presidents also made the issue of nutrition key to their campaign strategies, such as former President Lula da Silva's Zero Hunger campaign in Brazil (Acosta and Fanzo 2012).

An advocacy coalition's commitment to a policy issue can be derived from many sources, including past efforts at policy reform, material interests of and expected benefits to the advocates as a result of policy change, effective empirical research and epistemic communities, high levels of media attention, deep beliefs and core values, and knowledge spillovers. Critically, these coalitions need to be powerful in either a material (for instance, donors, private sector), institutional (for instance, ministries of finance, executive leaders), or electoral (an important constituency due to, for example, size or status as the stronghold of an incumbent) sense. Otherwise, any interest group that had a public policy concern would be able to get it onto the agenda. Where this power is derived depends on the existing set of political and institutional arrangements that determine whose interests are filtered into the policy arena and how well they are organized. Some examples in this regard include whether a regime is democratic or autocratic, whether relevant political parties or groups have formal organizational mechanisms (such as unions) or are more inchoate, and whether established corporatist arrangements exist. For example, the food price crisis in democratic Senegal resulted in widespread protests by consumer groups and nongovernmental organizations (NGOs) and prompted then-President Abdoulaye Wade to push forward a

set of food price subsidies and value-added tax removals (Resnick 2014). In contrast, in the more authoritarian Ethiopian context, the positions of civil society, chambers of commerce, and the private media on the crisis were sidelined by the government and played little role in determining the government's response (Admassie 2014).

Finally, the policy needs to address a *relevant problem* for key segments of the country's population. This seemingly obvious requirement shapes policy outcomes in several ways.

In more open, pluralistic policymaking systems, the relevance criterion narrows the range of policy issues that could potentially emerge on the agenda because certain issues will have greater or less resonance with the broader public. In turn, a country's socioeconomic, demographic, and even geographic context shapes which issues are problematic. For instance, generating smallholder incomes or addressing food insecurity is more important in low-income, more agrarian countries. Likewise, in East Asia and Western Europe, pension reform has been an important issue due to those regions' aging populations, while youth unemployment is a priority issue in North Africa and Africa south of the Sahara. Pelletier and colleagues' cross-national analysis of nutrition policy change revealed that "in all four of the countries where national pronouncements were made to address chronic undernutrition (Bolivia, Guatemala, Peru, and Vietnam), the most influential factors appear to have been clear evidence for *the size and urgency of the problem*, the framing of the problem that had political resonance, and some strategically placed and effective 'messengers.'" (2012, 28, emphasis added). In other words, putting a relatively unseen or intangible problem such as malnutrition on a national agenda required the confluence of a relevant problem and strategic framing by advocacy coalitions that successfully communicated the relevance and importance of that problem.

Indeed, given that countries confront multiple problems simultaneously, advocacy coalitions can be instrumental in framing a particular problem as having immediate or dramatic impacts on society if not addressed, or portraying economic deprivations as a violation of human rights. Terms such as "demographic time bomb," "lost generation," and "right to food" have been effective in this regard. In India, the Right to Food Campaign, which lobbied against child malnutrition and for the universalization of the Public Distribution System, has been credited with the Congress Party's passage of the Food Security Act in 2013 (see Mohmand 2012). Likewise, Swinnen, Squicciarini, and Vandemoortele (2011) illustrated how major international organizations and charities shifted their discourse about food prices during the food price crisis of 2007–2008; having previously lamented the negative impact of low food prices for farmers, they reframed their discourse to raise alarm about the disadvantages of high food prices for consumers in the wake of the crisis. Food safety, particularly laws for and against genetically modified organisms, has certainly been affected by framing among various policy advocates and opponents, especially through skillful use of the media (see Curtis, McCluskey, and Swinnen 2008).

In settings where influential interest groups enjoy preferred access to decisionmakers operating within opaque policymaking systems, the relevance of the problems that are actually addressed may frequently remain confined to a limited set of issues of most concern for the preferred constituents. For example, monopolists or cartels controlling specific economic niches (such as domestic cell phone service or pharmaceutical supplies) may exercise their influence to shape regulatory policies in their favor. Influential industry groups may exercise similar influence to obtain tariff protection or trade bans on competitive goods (such as maize, seeds, fertilizer, or imported meats).

Policy Design

There are often strong interrelationships between the agenda and design elements, with discussions over the latter often determining whether an issue sustainably remains on the agenda. Moreover, the policy advocates who advance an issue onto the agenda frequently do so with a specific idea of the type of policy instrument or modality that they believe is best suited to achieving a particular policy goal. Similarly, decisions over policy design might be influenced by realistic assessments of implementation challenges. However, three factors appear to play a causal role in explaining why and how policies are designed.

One of these derives from the type of focusing event that precipitated the issue's emerging on the agenda in the first place. Specifically, Hirschman (1981) has made the useful distinction between *pressing versus chosen problems*, whereby the former are forced on policymakers due to crises and external circumstances while the latter are related to policymakers' own preferences and perceptions of a problem situation. Crises tend to make the length of the "problem stream" shorter, prompting policymakers to depend on "bounded rationality" (see Simon 1972) and cognitive shortcuts since there is little time to process the full complexity of a policy area.

Crises also have visible consequences and may prompt policymakers to choose instruments that have quick returns, such as export bans or trade tariffs, or ones that affect a large share of the affected population, such as subsidized food, value-added tax reductions, or even food aid. This was one of the key lessons that emerged from analyzing responses to the 2007–2008 food price crisis (see Pinstrup-Andersen 2014).

Chosen problems tend to allow policymakers more time and space for thoughtful analysis of policy options (Grindle and Thomas 1989). Since they do not require as quick a turnaround time as pressing ones, chosen problems give greater prominence to the role of technocrats, researchers, and potentially broader civil society in the design process. They may also be more technically complex and focused on a more incremental implementation plan. For instance, when Ghana's New Patriotic Party chose to remove health user fees and implement a universal health insurance model in first decade of this century, technocrats with experience in health system financing and service delivery were involved in the design process (Grépin and Dionne 2013). The vast range of health and education reforms that occurred in Latin America during the 1990s to improve and expand services were chosen issues that were often promoted by national executives for a range of political reasons but then designed in conjunction with teams in economic, planning, health, and education ministries (Grindle 2004). Addressing nutrition is certainly more of a chosen problem since the impact of interventions is achieved only in the medium to long term. Existing evidence suggests that countries that do pursue policies to address chosen programs are more likely to draw on international guidelines to aid their design and often use a combination of different interventions, from micronutrient supplementation to nutrition education (among others, Bhutta et al. 2008).

Ideational considerations are also central to the policy instrument choice. *Ideas and beliefs* may derive from multiple sources, and the importance of these sources may in turn depend on the type of critical juncture that initiated an issue's emerging onto the agenda in the first place. For instance, in crises, policymakers may look for shortcuts, and examples of past policy experiments may narrow thinking on available options. Some African countries that responded to the 2007–2008 food price crisis with "smart" input subsidy programs with avowedly better targeting had a long history of using input subsidies (see Chirwa and Dorward 2013). Biases and deep beliefs may also take root during crises. Again, the food price crisis caused African governments to sometimes pursue disadvantageous trade policies that reflected long-standing mistrust of private traders (FAO 2011; see also Dorosh, Dradri, and Haggblade 2009). Ideologies of parties or governing groups about the role of the state vis-à-vis markets can likewise shape which policy designs are feasible and which are completely off the table. For example, Olper (2007) found that land tenure regimes, and particularly unequal land ownership, are associated with whether the governing party is left- or right-wing.

Diffusion can be a mechanism of ideational transfer of policy design options during both crisis and noncrisis periods. According to Berry and Berry (2007), diffusion models are particularly good at explaining policy innovation rather than incremental tinkering with an existing policy. Diffusion can occur through a few channels. These include interactions between high-level officials in national, regional, or global forums; "leader-laggard" models that delimit the scope of examples policymakers look at, with a preference for emulating countries and subnational units that are more highly regarded; and the influence of international organizations, including donors, who might be interested in either broadly promoting an externally derived policy model or facilitating the exchange of lessons learned across different contexts (see Simmons and Elkins 2004; Weyland 2005). Just like at the agenda setting stage, how and when the media reports problems shapes the political attention they receive but may also

privilege certain perspectives over others through oversimplification or exaggeration of an issue (Parsons 1995; McCombs and Shaw 1972). Olper and Swinnen (2013) found that broader media diffusion is associated with policy designs that benefit the majority of the population, and is correlated with a reduction of agricultural taxation in poor countries and a decline in agricultural subsidization in rich countries.

Epistemic communities of experts consist of donors, researchers, policy entrepreneurs, and "change teams" of technocrats. Waterbury defined change teams as "technocrats with few or no links to the political arena" who "are to varying degrees shielded from the groups whose interests will be gored in the reform process" (1992, 191). Such communities can certainly facilitate the diffusion of external policy experiments, as speculated in the policy stream of the multiple streams framework described above. But they can also provide more authoritative evidence of what policy design features will work best to achieve particular goals. For instance, a number of health reforms and particularly the move toward health insurance models in developing countries appears to have been the result of these epistemic communities (see review by Fox and Reich 2013). At the same time, these communities may have stark divisions among them in terms of an appropriate policy design. Freeland (2013) noted that with regard to food subsidies and cash transfer programs, the World Bank and IMF prefer means testing, UNICEF prefers geographic targeting, and Nordic donors and the UK Department for International Development (DfID) favor a human rights/universalist approach to social protection interventions. Debates among all these donors were deemed to result in more than five years of stalemate over the design of Malawi's national social support policy (Freeland 2013). Institutionally entrenched technical perspectives by epistemic communities can also cause some solutions to problems to be prioritized and others marginalized. For example, enhanced food security may be achieved in multiple ways, such as through expanding the role of the private sector or increasing social transfers, but the solution that is advocated can be closely associated with one's training and deep beliefs.

Ideas and beliefs, however, intersect with the *cost-benefit calculations* of advocates. These calculations may be done in terms of nonmaterial goals, such as winning votes. For instance, Chinsinga argued that while all political parties in Malawi favored the introduction of fertilizer subsidies in 2004, variations in their proposals about how to design the subsidies reflected their "regional support bases and constituencies" (2012, 5). More typically, this variation refers explicitly to financing, which has distributive consequences and therefore shapes the type of interest group dynamics that emerge and that may subsequently influence the policy adoption stage. For example, targeted input subsidies or cash transfers can be a more affordable means of assisting the vulnerable than universal subsidies, which may be easier to implement but are prone to leakage and waste. This difference has been a key driver for Nigeria's decision to switch from universal to targeted fertilizer subsidies under the relatively new Growth Enhancement Support Scheme (see FEPSAN 2012).

If programs are financed predominantly by domestic taxpayers, there may be pressure to consider whether a broader range of beneficiaries can be covered. This may be especially true in more heterogeneous societies where socioeconomic cleavages overlap with ethnic, religious, or racial ones and where the existence of social solidarity to support such policies might be more difficult to mobilize (see Alesina, Glaeser, and Sacerdote 2001; Lieberman 2003; Miguel 2004). On the other hand, in aid-dependent countries such as Malawi and Tanzania, the views of donors have influenced the design of input subsidy programs to a much greater degree than in resource-rich Nigeria and Zambia. For example, DfID's provision of unconditional budget support in Malawi facilitated the Malawian government's pursuit of a state-dominated fertilizer subsidy scheme. In contrast, one of the main donors supporting the agricultural sector in Tanzania was the World Bank, which would only agree to provide financial support to an agricultural input subsidy scheme that was private-sector friendly.[16]

---

[16] Unlike the agricultural input program in Malawi, Tanzania's National Agricultural Input Voucher Scheme is a truly "smart" subsidy design (Morris et al. 2007) that relies upon the private sector to import and distribute all fertilizer in the country, while the government's role is limited to distribution of vouchers to smallholder farmers, which they can use to acquire a limited quantity of commercial fertilizer and seed (from private-sector input retailers) at a subsidized unit price.

Policy Adoption

Some policies are explicitly designed with the goal of increasing their propensity to be adopted and anticipating potential opponents. Yet the number and type of veto players required for adoption helps situate the constellation of opponents and proponents. *Veto players* are those individual or collective actors who have to agree in order for a proposed policy change to occur (see Tsebelis 2002). In some instances, they may champion policy change, while in other cases they may stifle change by exercising decisive influence via obstructionism. Such players could include major ministries as well as the president or prime minister and legislative actors. Obviously, who the relevant veto players are depends on the policy domain. Moreover, different institutional setups result in disparate numbers of veto players. Democracies typically have more veto players than authoritarian systems. Within democracies, parliamentary systems are viewed as having fewer veto powers than presidential ones because of the fusion of the executive with the legislative. Unitary systems likewise have fewer veto players than federal ones. According to Tsebelis (2002), policy change is much slower where there are more veto players, mostly because a greater range of stakeholder interests need to be taken into account. Consequently, policy stability rather than large-scale policy change tends to prevail in such political environments (see also Immergut 1990). Yet these theoretical expectations do not always coincide with empirical reality, especially in the African context, where legislatures are often functionally weak and presidents have proactive (rather than reactive) powers to push favored policies forward (see van de Walle 2003).[17] In these contexts, the president can be one of the strongest veto players, if not the strongest. Similarly, democracies controlled by dominant parties (for instance, Botswana, Mozambique, and Tanzania) typically do not have legislatures with very strong oversight functions.

Beyond the executive, the ministry of finance is usually one of the most powerful ministries and its opposition can be fateful for policy adoption. Finance ministries are typically opposed to policy options that will require a significant outlay of resources. For instance, in Zambia, the Ministry of Community Development and Social Services lobbied the Ministry of Finance to fund a cash transfer program. After allocating approximately US$300,000 in 2007, the Finance Ministry increased support in subsequent years and signed an agreement to expand the program for the next 10 years (Garcia and Moore 2012). In contrast, expanding health insurance coverage in South Africa has been thwarted by its Ministry of Finance (see McIntyre, Doherty, and Gilson 2003). In such cases where the finance ministry is opposed to a policy, supporters of that particular policy may need to either find stronger allies in government and other ministries, or compromise on the proposed policy design.

If veto players are also policy advocates, then the prospects for adoption are quite high. More generally, a critical determinant of the adoption stage is understanding the *relative power of advocates versus opponents*. Again, power can be conceptualized in different ways, ranging from electoral importance (voters, labor unions, lobbying groups), fiscal relevance (international donors, private investors), or institutional origin (executives, cabinet ministers, members of parliament). It may also depend on the political context: regimes perceiving a legitimacy crisis might accord greater weight to certain advocates, such as consumer groups and unions disgruntled with high food prices, in some periods but not others. For example, past failed attempts to reform exorbitant food subsidy policies in Egypt and Tunisia reflected the weak societal foundations of authoritarian rulers who were loath to alienate a sizable population of urban, middle-class consumers (Silva, Levin, and Morgandi 2013).

Not surprisingly, when executives (presidents or prime ministers) have been key advocates in the agenda-setting stage, they are more likely to push the policy forward in the adoption stage. Malawi from 2007 to 2010 was a paradigmatic case given the strength of the president, the late Bingu wa Mutharika, and his dual role as Minister of Agriculture during those years. As Chirwa and Chinsinga noted, "The president [Mutharika] almost entirely dominated the policymaking processes since the Office of the President and Cabinet (OPC) was effectively the center for all public policies, planning, and implementation" (2014, 155). His announcement during a political rally in 2008 of institutionalizing a

---

[17] See also Grindle (1999) for how politics in developed countries raises questions about traditional political economy analytical approaches.

maize export ban to help the country with the food crisis was essentially presented as a fait accompli (Chirwa and Chinsinga 2014). Similarly, if particular actors were engaged in designing the policy, such as the Ministry of Finance, they will tend to support it during adoption. Importantly, though, as time passes, advocates during the agenda-setting process are not always the same during adoption, as the recent example of the Food Security Bill in India indicates. While the Congress Party government pushed for the "right to food" as its major policy mantra toward achieving food security for all, the current BJP (Bharatiya Janata Party) government has been ambivalent in its adoption and support though allocation of resources. Thus, this major policy change depends on the support of new actors and players for its adoption and implementation.

Again, the institutional context plays an important role in determining which actors are more or less powerful and are more or less relevant to the veto players. When regimes, both democratic and authoritarian, derive their support from a broader range of stakeholders, a broader range of powerful advocates and opponents are likely to be involved in the adoption stage, which would tend to reduce the prospects for rapid policy change. For example, adoption of agrarian land reforms in the Philippines during the 1980s was slowed down by both the government's interest in appeasing the church and the leaders of NGOs, who both wanted greater equity in land ownership, versus the desire of powerful elite landowners to maintain the status quo (see Grindle and Thomas 1989).

When and how quickly adoption occurs requires a degree of *propitious timing,* which in turn is shaped by the nature of the policy and the motivations of the policy advocates. If parliamentary approval is needed, then adoption depends on the legislative calendar. If advocates want to gain political traction for a policy, they may take into account the electoral calendar and try to push at least de jure changes before an election. For instance, while India's Congress Party had included broader food subsidies in its 2009 election manifesto, the ultimate passage of the Food Security Act in 2013 as a presidential ordinance and then as a law was believed to be strategically timed during the run-up to the 2014 elections, leading the opposition to dub it the "vote security" act (see Iyer 2013). In contrast, if the policy is more of a regulatory nature, then adoption might be slower by necessity since the legal authority for regulation might need to be established, requiring confirmation with a country's constitution and engagement of the judicial system. This is particularly true, for example, for bio-, seed, or food safety regulations (see Jaffe 2006). Finally, a country's typical policy time frame for implementing its broader development strategy planning (five-year development plans, Vision 2020 strategies, and the like) affects the timing of adoption of sector-specific policies.

Policy Implementation

In terms of implementation, the model's emphasis is on understanding government-level efforts at implementation, which is the most visible evidence of actual policy change. As noted earlier, this can be reflected by, for example, administrative changes, public expenditure outlays, and delivery of the actual goods and services promised by the policy. An important limit to our model is therefore the inability to explain citizen uptake of government policies. Although this is an important issue, it would require delving into a much more complex interplay of very context-specific factors beyond the scope of this paper, resulting in a less parsimonious model.

With this caveat in mind, we note that the nature of a policy dictates how closely intertwined the adoption and implementation stages are. In other words, policies require different levels of complexity that determine not only the importance but also how protracted a stage may be. If a policy change belongs to the "stroke of the pen" genre, then adoption can sometimes be tantamount to implementation. Devaluation of a fixed currency, like the West African CFA franc in 1994, belongs to this category. Yet in many cases related to agricultural and nutrition policy, implementation may occur very slowly, or even not at all, after a policy is adopted. This in turn suggests that additional key variables often emerge to explain implementation.

In the case of some agricultural and nutrition policy modalities, a certain degree of *institutional capacity* is undoubtedly required within the bureaucracy to roll out, scale up, or oversee policy implementation. Such capacity is related to both technical and administrative factors. Education, skills, and relevant infrastructure are some factors that can influence technical capacity. Obviously, the degree of policy complexity, the periodicity of the policy (for instance, one-time change or annual oversight), and the need to adhere to international standards (such as the Cartagena Protocol for biosafety or the Codex Alimentarius for food safety) dictate the required levels of technical capacity. If policy implementation is to be partly or even fully controlled by subnational authorities (provinces, districts, traditional leaders), then local governments need to have the requisite resources and training to fulfill their mandates. For example, Pelletier and colleagues (2012) highlighted that while Bolivia's Nutribebe program was supposed to be implemented by the country's municipal officials, many of them were unaware of the program and did not have the skills to fulfill this function. Lapping and others (2013) likewise noted that in Vietnam, provincial nutrition programs have not been translated into action because of limited government capacity at that level.

Technical capacity is related to, but categorically distinct from, administrative capacity. While technical capacity refers to whether the delegated actors have the ability to proceed with implementation, administrative capacity refers to who is delegated to act in the first place. More specifically, some policies give multiple actors the power of implementation, which creates the potential for intergovernmental contestation. This is particularly true in the area of nutrition or agricultural biotechnology, where ministries of health, education, agriculture, and environment might be simultaneously engaged, or where public-private partnerships are employed. Intersectoral cooperation might involve multiple ministries' applying the same lens to an issue or having a formal mechanism that helps coordinate both horizontally across ministries and vertically across different levels of delegation and deconcentration (Gillespie 2014; Pelletier et al. 2012). For example, decentralization allows subnational authorities some autonomy in implementation. Although this arrangement may improve targeting, it can also increase opacity over accountability for delivery (see Faguet 2004).

Importantly, administrative capacity also involves consideration of organizational cultures and incentive structures. For example, implementers may not have the right incentives to perform, even if they have the requisite capacity. Therefore mechanisms that enhance accountability and transparency, such as performance contracts or citizen scorecards, can be useful. As part of Ethiopia's Productive Safety Net Program, the use of internal audits, even at the subnational level, is believed to have minimized cases of resource abuse (see World Bank 2013).

The stability of institutional leaders at the ministerial level is another facet of administrative capacity. High levels of ministerial turnover can delay or even derail plans for implementation, or result in parallel activities that may contradict rather than reinforce each other. For instance, during the course of former Senegalese President Abdoulaye Wade's tenure from 2000 to 2012, there were seven ministers of agriculture, resulting in a very haphazard agricultural policy landscape (Resnick 2014).

Capacity can often intersect quite strongly with the availability of *requisite budgetary allocations*. Not only is capacity often dependent on having resources, but also delays in resource disbursements are strongly correlated with delays in implementation. For instance, Chirwa and Chinsinga (2014) pointed out that the implementation of Malawi's Farm Input Subsidy Programme was initially delayed by a year because of donor threats to rescind aid if the policy progressed. Likewise, former Kenyan President Daniel Arap Moi stalled on implementing a national health insurance fund in the early part of this century, even after it was passed by Parliament, because of concerns over its costs (Grépin and Dionne 2013).

Commitment of policy champions can help with ensuring that the requisite institutional capacity, in both the technical and administrative domains, is in place. These policy champions are a subset of the advocacy coalition that helped at the agenda-setting and adoption stages, typically high-level level bureaucrats or political leaders that sustain momentum even when others' attention to the issue might fade. As Pelletier and others stated, "high-level policy champions may be the only actors capable of generating *system-wide commitment* on the part of midlevel ministry officials and staff, and the managers

and implementers at regional, municipal, and local levels" (2012, 28, italics in original). There are at least two ways by which such policy champions succeed in generating systemwide commitment to a given policy. First, champions can help give legitimacy and support to implementing agencies, or recognize bottlenecks and create new agencies. The late Ethiopian Prime Minister Meles Zenawi was directly instrumental in establishing the Agricultural Transformation Agency to streamline implementation and evaluation of complex and multifaceted agricultural policies, while Tanzanian President Jakaya Kikwete set up the President's Delivery Bureau to do the same. In Malawi, placing the Department of Nutrition, HIV and AIDS in the Office of the President and Cabinet ensured that nutrition received high-level attention (see Gillespie 2014). Second, policy champions push forth implementation even as other priorities emerge.

Evaluation and Reform[18]

Few policies are implemented in a vacuum. Most are consistently subjected to small refinements and some are even completely overhauled. Two macro variables appear to play a primary role in explaining such policy refinements (or the lack thereof), which are themselves influenced in turn by a variety of other key factors. Each one may be independently sufficient on its own to result in policy reform.

The first is the *changing beliefs of veto players and champions* about the effectiveness of a policy or the best way to achieve the original policy goal. Both those who helped adopt the policy and those who helped promote it in the first place might backtrack as a consequence of the emergence of new knowledge of the effectiveness of the specific policy in practice. This knowledge might come from media reports or parliamentary inquiries that uncover misuse of resources or unintended policy consequences. Another source of such knowledge is epistemic communities, including donor evaluations and research findings. For instance, a research study in 2001 reported the presence of transgenic DNA in maize in Oaxaca, Mexico, which then generated public opposition and forced the Mexican government to revise its biosafety legislation (Aerni and Bernauer 2006).[19] Likewise, amendments to safety net programs in Latin America were often influenced by impact evaluations analyzing how well the poorest were targeted. Many input subsidy programs in Africa have been accused of being manipulated for political aims (see Poulton 2012). Emerging evidence that such programs do not actually succeed in winning votes in Zambia (among others, Mason et al. 2013) might have motivated President Sata's decisions to reduce spending on them so that more government revenue could be used for spending on public goods in the health and education sector (see IRIN 2013).

Research findings have a higher likelihood of effectiveness if they are consistently highlighting the same outcomes. For instance, according to Behrman, Alderman, and Hoddinott (2004), fortification and micronutrient supplementation have some of the highest rates of return in terms of nutrition policies, especially given the relatively low cost of providing supplements. Jonsson (2010) noted that precisely because of the consistency of research findings about the considerable benefits of fortification and micronutrient supplementation programs relative to their costs, there has been strong and continued support for these interventions, especially from donors. In contrast, despite their being one area of agricultural policy that has generated a large body of evidence in recent years, policy beliefs about the effectiveness of agricultural input subsidy programs remain mixed. The root of the issue, as Ricker-Gilbert et al. (2013, 323) observed, is that input subsidies constitute a type of "wicked problem" that cannot be easily resolved through appeal to facts. Instead, support for or opposition to such a policy can be linked to deep values and core beliefs. Postpositivists and constructivists have further highlighted that in order to effectively influence policy, research must be interpreted as legitimate or be viewed as "usable knowledge" in that research biases are minimized and findings are validated (see Haas 2004).

---

[18] The term *reform* is used here to refer to changes to policies and does not imply a normative judgment about the need for or appropriateness of the change.

[19] The study in question was by Quist and Chapela (2001).

The emergence of new technologies may also change beliefs, particularly about the right type of policy design. For example, some countries are exploring targeted input subsidies that take advantage of "electronic wallets," whereby voucher numbers are sent to mobile phones (FEPSAN 2012). The availability of this kind of technology has the potential to weaken the resistance to agricultural input subsidy programs of some stakeholders who perceive that this delivery mechanism is less susceptible to illegal diversion of subsidized fertilizer from intended recipients. Better targeting of food subsidies in Egypt is being promoted with the use of electronic smart cards that limit the number of subsidized bread loaves that households can obtain and have consequently reduced government expenditures (see Kalin 2014).

Financial resource availability again plays a key role in this stage. The emergence of new focusing event junctures creates competing priorities and may divert resources to new areas. Some policies require a consistent outlay of finances that can be unsustainable if export revenues, taxes, or donor funding is not forthcoming. For example, Tanzania's National Agricultural Input Voucher Scheme (NAIVS) began to scale down considerably from 2012 to 2014 given the preplanned conclusion of World Bank funding support to NAIVS, and the program has been indefinitely suspended for the 2014–2015 fiscal year given serious government financial constraints linked to a combination of government overspending and revenue shortfalls. Likewise, the opposite dynamic is equally possible. A fortuitous increase in funding due to natural resource discoveries, foreign investment, or changes in donor modalities might allow a policy to continue or allow the scope of beneficiaries to increase. For example, Jayne and Rashid (2013) identified the shift by a number of key donors from largely project-based investments to general budget support as a key driving factor in the reemergence of agricultural input subsidy programs in Africa, because this shift helped alleviate both budget constraints and conditionality on African governments' spending.

5. APPLYING THE MODEL MORE BROADLY

Policy Variation

As noted earlier, Figure 4.1 was derived inductively from the existing literature on episodes of policy change. In order to further validate and refine the model, comparative case studies will be conducted in countries where there is variation on our outcome variable of interest, policy change. A select group of agricultural and nutrition policies were chosen for this purpose, which are not only important FTF priority areas but also critical issues on the global food security agenda and for national governments. Moreover, the robustness of the kaleidoscope model will depend on its ability to explain policy change across multiple policy domains. Table 5.1 highlights some similarities and differences across these policies.

Table 5.1 Illustrative agricultural and nutrition policy domains

Policy domain	Policy type	Focusing events	Advocates	Affected stakeholders
Fertilizer subsidies	Distributive	• Drought • World price spikes • High-level events (Abuja Declaration)	• Elected politicians • Fertilizer companies • Public figures (Jeffrey Sachs, Akinwumi Adesina)	• Poor farmers • Donors, taxpayers • Fertilizer companies, distributors, transporters
Micronutrients	Distributive	• High-level international conferences and targets (SUN, MDGs) • Survey findings and indicators on malnutrition	• Public health practitioners • Public health research community • NGO community • Donors	• Vulnerable populations • Agribusiness firms
Land tenure	Redistributive	• Land-related conflicts • High-level initiatives (LGAF)	• Government officials • NGO community • Research community • Donors	• Smallholders • Commercial farmers • Foreign investors

Source: Authors' compilation.
Notes: LGAF = Land Governance Assessment Framework; MDG = Millennium Development Goal; NGO = nongovernmental organization; SUN = Scaling Up Nutrition.

With respect to policy type, we draw on Lowi's argument that "policy may determine politics" in terms of who the main interest groups at stake are and what their constellation of benefits and losses from a policy is (1972, 298). Lowi (1972) delineated three types of policies: distributive, redistributive, and regulatory. Although in the long run, all policies may be thought of as redistributive in some way since some citizens may pay more in taxes than they receive in return, Lowi (1964) stressed that politics occurs in the short run, without regard for the fact that there are finite resources. Thus, distributive policies involve the distribution of "new resources" and can be "disaggregated and dispensed unit by small unit" (Lowi 1964, 690). Subsidy programs for inputs or food and micronutrient interventions constitute this type of policy because they are typically funded through the allocation of new resources from domestic and donor budgets on a regular basis. They can be targeted to specific subgroups who may in turn receive a different package of goods and services through the policy.

Redistributive policies involve changing the distribution of existing resources, and the impacts of these policies may not be solely on individuals or households but on larger social classes, defined in terms of socioeconomics, ethnicity, race, religion, or even livelihoods (for example, pastoralist versus agriculturalist, producers versus consumers, small-scale versus large-scale farm households, urban versus rural economic interests, importers versus exporters). Reform or clarification of land tenure arrangements and trade liberalization are quintessential redistributive policies in that they involve reallocating existing

resources in a way that may have considerable effects on the welfare and social relations of different classes or societal groups (see Deininger, Hilhorst, and Songwe 2014 on land).

Regulatory policies differ from distributive ones because the short-term winners and losers are much more obvious and such policies tend to occur along sectoral lines. As Lowi noted, "the impact of regulatory decisions is clearly one of directly raising costs and/or reducing or expanding the alternatives of private individuals" (1964, 690). Food safety and seed safety clearly are regulatory activities that may impose costs on food producers, food exporters, and seed and biotechnology companies, but they are aimed at improving general welfare.

In addition to spanning disparate policy types, these policy domains reveal an important degree of variation in other respects as well. For example, while both fertilizer subsidies and micronutrient interventions are distributive in nature, they may be spurred by different types of focusing events. Short-term, crisis events may be more of an impetus for fertilizer subsidies than for micronutrient interventions, which, as noted earlier, tend to come about due to micronutrient deficiencies' manifesting over the long term. High-level initiatives and conferences may be important across multiple policy types, especially to give legitimacy to the importance of an issue, but this might be especially true for micronutrients. Importantly, the advocates for a policy reform may not always consist of the affected stakeholders, highlighting that the diffusion of interest groups and their respective power is highly variable across policy domains. Moreover, affected stakeholders can consist of those with both complementary and conflicting interests. In the case of micronutrients, for example, agribusiness fortifying firms can benefit from producing food items that simultaneously benefit vulnerable populations. In contrast, some land tenure reforms can result in the pitting of smallholder interests against those of larger producers and foreign investors.

Testing our model to explain case studies of policy change (and nonchange) across this range of policy types will not only ensure that the model is robust but also help integrate the agricultural and nutrition communities, which often analyze policy processes in separate disciplinary silos and fail to recognize commonalities across sectors. At the same time, it will unveil how a given policy type interacts with political, institutional, and economic contexts to shape the extent to which each of the macro variables presented in Figure 4.1 drives the policy process within a given context.

Variable Operationalization

Applying the kaleidoscope model across disparate policy domains requires that the main macro variables be clearly operationalized to allow for replicability across countries. In some cases, USAID's ongoing efforts via institutional architecture assessments and the Africa Lead initiative can serve as valuable inputs into particular aspects of operationalization. More specifically, the following broad criteria and methodological approaches can be utilized:

- Agenda setting: Generating policy attention is pivotal for agenda setting. Among other things, evidence of policy attention may be through high-level policy pronouncements and initiatives (for instance, Maputo Declaration, Millennium Development Goals), party campaign promises, high-level speeches, and the organization of large-scale public forums (conferences, workshops) around the policy issue.

  a. A necessary, but not sufficient, condition for a policy to emerge on the agenda is that it actually correspond to a relevant problem in a particular country context. This can be determined through secondary data from the World Bank, FAO, WHO, and others, that is specific to the policy domain under investigation. For instance, fertilizer subsidies are most relevant where soil fertility is low, and micronutrient interventions are relevant where a high share of the population is undernourished.

  b. Powerful advocacy coalitions can be measured by

     (1) mapping the array of interest groups that have formed around a policy issue, including by using insights from existing institutional architecture assessments

(2) assessing their degree of influence based on their proximity to key decisionmakers, their access to sizable financial resources, and their organizational capacity and institutionalization. Techniques such as network mapping can be useful in this regard.

    c. Focusing events can be determined through process tracing techniques. A chronology of events at the national level can be created around an appropriate time frame for the policy under investigation. Subsequently, the events can be categorized in terms of whether or not they were crises (defined by affecting a large number of people in a relatively short period) with immediate implications for citizens' well-being. At the same time, a chronology of regional and international efforts around the chosen policy issue should be documented.

- *Design*: The spectrum of potential design features of the policy under consideration should be well specified. Depending on the policy, such features may involve different modalities for targeting beneficiaries (fertilizer subsidies and micronutrients) or different institutional arrangements for managing property rights (land tenure) and providing regulatory oversight (seed safety).

    a. Determining whether the policy is responding to a "pressing" versus "chosen" problem follows directly from the type of focusing event that propelled it onto the agenda in the first place. A crisis focusing event would be categorized as a pressing problem that might have either exogenous or domestic causes. A chosen problem is one with longer-term, rather than immediate, consequences and not readily identifiable with one particular catalyst event.

    b. Delineating ideas and beliefs requires engaging in discourse analysis of the salient members of various advocacy coalitions. Along with interviews with these coalitions, this requires analyzing how the policy issue is framed in media sources as well as in official parliamentary proceedings; academic research; government reports; and donor, private-sector, and civil society documents.

    c. The cost-benefit calculations of policymakers related to policy design would involve two elements:

    (1) which interests groups will win and which will lose as a consequence of different designs, and how important they are in terms of their voting weight, financial clout, and ability to engage in mass mobilization

    (2) which designs are most affordable given existing revenue levels and sources

- *Adoption:* Adoption might be assessed in terms of, among other types of evidence, whether a written strategy exists, a bill was passed in the legislature, a presidential decree was issued, or relevant legal agreements have been signed.

    a. Understanding the main veto players for adopting a decision depends on the policy under consideration and a country's constitutional and legal framework. If the policy requires legislative approval, then it is important to understand the broader institutional context (presidential or parliamentary system) and the dispersion of power among parties in the legislature. If the policy is within the regulatory category, then the judiciary may play a stronger role. A mapping of institutional relationships can be useful in this regard.

    b. Determining the relative power of proponents and opponents for a specific policy design relies predominantly on the same approach highlighted above for identifying powerful advocacy coalitions. However, an additional step would involve analyzing the relationship between these proponents and opponents vis-à-vis the identified veto players.

c. Whether timing is propitious enough for a policy to be adopted by the relevant veto players will likewise depend on the type of policy under consideration and the requisite procedures that accompany it. For instance, if parliamentary approval is required, then electoral and legislative calendars should be taken into account. If donors play a role, then the timing of annual aid negotiation processes should be considered.

- *Implementation:* Depending on the type of policy under consideration, implementation may be captured by studying whether concrete operational plans have been developed, relevant institutional structures have been established, outlays of budgeted expenditures and relevant materials (fertilizers, fortified foods, and so on) have occurred, and contracts with relevant actors have been established.

    a. Assessing institutional capacity for implementation requires a twofold evaluation of the administrative structures and the technical abilities of implementing agents. The former can be uncovered through a policy mapping exercise that delineates which actors and agencies, both within government and among the private sector and civil society, are de jure responsible for translating specific policy elements into reality. Subsequently, an inventory of required skills and resources for policy implementation can be compiled and assessed (via interviews, small-scale surveys, secondary indicators, and the like) against those of the primary implementing actors and agencies.

    b. Whether a country has the requisite budgetary allocations to implement a specific policy requires matching costing estimates with likely revenue sources over the time frame of the policy. In doing so, examining average aid flows, domestic tax revenues, and export revenues against other ongoing initiatives can provide a basic indication of the policy's affordability.

    c. Uncovering the ongoing commitment of policy champions requires first identifying who constitutes a policy champion. This can be done by returning to the identification of the advocacy coalitions that helped push the policy onto the agenda in the first place and specifically focusing on those individuals, groups, and agencies in high-level positions whose continued commitment is required for following through with implementation. In turn, commitment needs to be traced over time by examining discourses (via interviews, media, and so on) of these champions around the policy. For instance, if a particular policy champion's mention of the policy becomes more and more intermittent over time, this would suggest waning interest.

- *Evaluation and Reform*: Reform of a policy can be identified in at least three ways: (1) change in policy design, (2) change in modalities of policy implementation, and (3) scaling up or scaling down of the policy.

    a. Changes in beliefs of veto players and champions can likewise be uncovered through interviews and other modes of discourse analysis. Where changes are detectable, the source of these changes, including research findings, media reports, donor pressures, and other emerging policy priorities, will need to be identified.

    b. Given the financial costs of the policy change (where relevant), the levels of continued resource availability, based on existing and forecasted revenues, can be assessed.

Through comparative case studies across multiple policy domains, the model can be further refined in at least four ways. Some of the macro variables might be identified as absolutely necessary and sufficient across all country cases for policy change to occur, reaffirming our initial model. In other instances, some macro variables may be necessary but not sufficient, requiring the model to be expanded. If some variables are neither necessary nor sufficient, the model may need to be streamlined. A final scenario is that agricultural and nutrition policy changes represent instances of equifinality, defined as achieving similar outcomes through different pathways (Ragin 1987). In this instance, the model would need to further specify under what conditions different sets of macro variables are more or less salient.

6. CONCLUSIONS

How best to influence policy change will continue to be a foremost concern among development practitioners, national policymakers, and researchers. The ongoing, practical efforts detailed in Section 2 imply a variety of factors that may facilitate policy change, for example, better research, improved capacity, greater citizen participation, or more high-level advocates. The breadth of research on policy processes presented in Section 3, which includes a burgeoning stream of analysis in developing countries, has suggested an array of factors related to ideas, interests, and institutions that are collectively important to achieve this goal. This paper reviewed these academic and operational approaches, weighing where key gaps remain in theory and practice.

In turn, Section 4 drew on existing studies of policy change in developing countries to inductively derive a model based on common variables that consistently appear to play a role at a particular stage (or stages) of the policy process. This kaleidoscope model is flexible enough to capture different elements of the policy process relevant to disparate agricultural and nutrition policy domains in various political, economic, and institutional settings. However, it is also sufficiently streamlined to allow for empirical validation via a range of indicators, data sources, and methodologies suggested in Section 5. Through a comparative case study approach, testing this model can break new ground by revealing in-depth, country-specific agricultural and nutrition policymaking processes while still providing sufficient breadth and generalizability to inform ongoing food security initiatives, including USAID's FTF and the G8's New Alliance for Food Security and Nutrition.

APPENDIX: SUPPLEMENTARY TABLE

Table A 1 Illustrative overview of existing policy support programs

Policy support activity	Key actions	Implicit hypotheses	Promoter (implementer)
Africa Lead Champions of Change	• Identify, motivate, and support policy champions	• Hercules	USAID (DAI)
Feed the Future, policy assessments	• Assess institutional architecture • Highlight areas requiring strengthening	• Frank Lloyd Wright	USAID
Joint sector reviews (JSRs), mutual accountability frameworks (MAFs)	• Develop processes and timetables for policy review and feedback	• Frank Lloyd Wright	AU, USAID (CAADP)
Agricultural public expenditure reviews (AgPERs)	• Review public expenditure on agriculture • Evaluate efficiency of spending • Identify expenditures that promote pro-poor growth	• Sherlock Holmes • Frank Lloyd Wright • Monte Carlo	World Bank
Program for Results (PforR)	• Aid financing linked to the delivery of specified results	• Monte Carlo	World Bank
Land Governance Analytical Framework (LGAF)	• Assemble available evidence • Hold structured consultations leading to policy consensus	• Sherlock Holmes • Frank Lloyd Wright	World Bank (IFPRI)
Land Policy Initiative (LPI)	• Marshal evidence • Engage with parliamentarians	• Sherlock Holmes • Frank Lloyd Wright	AU/ECA/ADB (LPI Secretariat)
Monitoring African Food and Agricultural Policies in Africa (MAFAP)	• Measure policy costs and outcomes • Provide technical assistance for policy reform	• Sherlock Holmes • Hercules	Gates Foundation (FAO)
New Alliance	• Develop formal, high-level commitment among three key groups: (1) African governments for specific policy reforms, (2) private-sector investors, (3) donors funding key public investments	• Monte Carlo • Masters of the Universe	• AU • G8
African Economic Research Consortium (AERC)	• Build technical capacity for policy research • Fund applied policy research and outreach	• Sherlock Holmes • Frank Lloyd Wright	• AERC • Various donors
Alliance for a Green Revolution in Africa (AGRA) policy hubs	• Carry out policy research in key topic areas • Strengthen policy systems	• Sherlock Holmes • Frank Lloyd Wright	• AGRA • African partners

Table A 1 Continued

Policy support activity	Key actions	Implicit hypotheses	Promoter (implementer)
Micro Reforms for African Agribusiness (MIRA)	• Provide technical assistance to help identify and prioritize reform of agricultural regulations	• Hercules • Sherlock Holmes	• AGRA, IFC
Leveraging Agriculture for Nutrition in South Asia (LANSA)	• Perform empirical research on links between agriculture and nutrition • Strengthen capacity • Carry out policy advocacy	• Sherlock Holmes • Frank Lloyd Wright	• LCIRAH • IFPRI • BRAC • IDS • CSSR
Scaling Up Nutrition (SUN) initiative	• Promote international best practices • Garner donor support tied to nutritional interventions	• Contagion Inoculation • Masters of the Universe • Monte Carlo	• UN Standing Committee on Nutrition • 54 individual countries • Gates Foundation • Bilateral donors
Research and Policy in Development (RAPID)	• Strengthen demand for policy research • Improve policy-relevant empirical research	• Sherlock Holmes • Frank Lloyd Wright	• Overseas Development Institute
Strategic Analysis and Knowledge Support Systems (SAKSS)	• Build up empirical base for policy decisionmaking	• Sherlock Holmes	• NEPAD/AU • Various donors
Regional Network of Agricultural Policy Research Institutes (ReNAPRI)	• Conduct policy research • Strengthen local research institutions • Engage in outreach and policy dialogue	• Sherlock Holmes • Frank Lloyd Wright	• African agricultural universities and research institutes • Gates Foundation

Source: Authors' compilation.

Notes: ADB = Asian Development Bank; AU = African Union; BRAC is a Bangladesh-based development organization; CAADP = Comprehensive Africa Agriculture Development Programme; CSSR = Centre for Social Science Research; DAI = Development Alternatives Incorporated; ECA = United Nations Economic Commission for Africa; FAO = Food and Agriculture Organization of the United Nations; IDS = Institute of Development Studies; IFC = International Finance Corporation; IFPRI = International Food Policy Research Institute; LCIRAH =Leverhulme Centre for Integrative Research on Agriculture and Health; NEPAD = New Partnership for Africa's Development; USAID = United States Agency for International Development.

REFERENCES

Acosta, A. M., and J. Fanzo. 2012. Fighting Maternal and Child Malnutrition: Analysing the Political and Institutional Determinants of Delivering a National Multisectoral Response in Six Countries. Synthesis paper. Brighton, UK: Institute for Development Studies.

Adam, S., and H. Kriesi. 2007. "A Network Approach." In *Theories of the Policy Process*, edited by Paul Sabatier, 129–154. Boulder, CO, US: Westview Press.

Adato, M., and J. Hoddinott. 2010. *Conditional Cash Transfers in Latin America*. Baltimore: Johns Hopkins University Press.

Admassie, A. 2014. "The Political Economy of Food Price Policy in Ethiopia." In *Food Price Policy in an Era of Market Instability*, edited by P. Pinstrup-Andersen, 133–152. Oxford, UK: Oxford University Press.

Aerni, P. and T. Bernauer. 2006. "Stakeholder Attitudes toward GMOs in the Philippines, Mexico, and South Africa: The Issue of Public Trust." *World Development* 34 (3): 557–575.

AGRA (Alliance for a Green Revolution in Africa). 2014. "Policy Research for Development: AGRA Policy Hub." Accessed December 5, 2014. www.repoa.or.tz/index.php/policy/agra_policy_hub.

Alesina, A., E. Glaeser, and B. Sacerdote. 2001. "Why Doesn't the US have a European-Style Welfare System?" *Brookings Papers on Economic Activity* 2: 187–278.

Amsden, A. 1992. *Asia's Next Giant: South Korea and Late Industrialization*. Oxford, UK: Oxford University Press.

Bates, R. 1981. *Markets and States in Tropic Africa: The Political Basis of Agricultural Policies*. Berkeley, CA: University of California Press.

Baumgartner, F., and B. Jones. 1993. *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.

Behrman, J., H. Alderman, and J. Hoddinott. 2004. "Hunger and Malnutrition." In *Global Crises, Global Solutions*, edited by B. Lomberg, 305–333. Cambridge, UK: Cambridge University Press.

Béland, D. 2007. "The Social Exclusion Discourse: Ideas and Policy Change." *Policy and Politics* 35 (1): 123–139.

Benson, T. 2008. *Improving Nutrition as a Development Priority: Addressing Undernutrition in National Policy Processes in Sub-Saharan Africa*. Washington, DC: International Food Policy Research Institute.

Berg-Schlosser, D. and G. de Meur. 1997. "Reduction of Complexity for a Small-N Analysis: A Stepwise Multi-Methodological Approach." *Comparative Social Research* 16: 133-162.

Berman, S. 2013. "Ideational Theorizing in the Social Sciences since 'Policy Paradigms, Social Learning, and the State." *Governance* 26 (2): 217–237.

Berry, F. S., and W. D. Berry. 2007. "Innovation and Diffusion Models in Policy Research." In *Theories of the Policy Process*, edited by P. Sabatier, 223–260. Cambridge, MA, US: Westview Press.

BFAP (Bureau for Food and Agricultural Policy). 2014. "Regional Network (ReNAPRI)." Accessed October 10, 2014. www.bfap.co.za/index.php/regional-network/renapri.

Bhutta, Z., T. Ahmed, R. Black, S. Cousens, K. Dewey, E. Giugliani, B. Haider, B. Kirkwood, S. Morris, H. P. S. Sachdev, and M. Shekar. 2008. "What Works? Interventions for Maternal and Child Undernutrition and Survival." *The Lancet* 371: 417–440.

Birkland, T. A. 1997. *After Disaster: Agenda-Setting, Public Policy and Focusing Events*. Washington, DC: Georgetown University Press.

Booth, D. 2012. *Development as a Collective Action Problem: Addressing the Real Challenges of African Governance*. London: Overseas Development Institute.

Booth, D., and F. Golooba-Mutebi. 2012. "Developmental Patrimonialism? The Case of Rwanda." *African Affairs* 111 (444): 379–403.

Bottomore, T. B. 1966. *Elites and Society*. Harmondsworth, UK: Penguin.

Bovens, M., P. 't Hart, and B. G. Peters, eds. 2001. *Success and Failure in Public Governance*. Cheltenham, UK: Edward Elgar.

Brun, M., and S. Treyer. 2014. *The Committee on World Food Security: Moving the Reform Forward*. Agriculture Policy Brief 2. Paris: Institute for Sustainable Development and International Relations.

Buchanan, R., and G. Tullock. 1962. *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. Ann Arbor, MI, US: University of Michigan Press.

Chandler, A. 1962. *Strategy and Structure*. Cambridge, MA, US: MIT Press.

Chinsinga, B. 2012. "Deconstructing the Success Myth: A Case of the Malawi Farm Input Subsidy Programme (FISP)." Paper presented at third international conference of the Institute of Social Studies and Economics, Maputo, Mozambique, September 4–5.

Chirwa, E., and B. Chinsinga. 2014. "The Political Economy of Food Price Policy in Malawi." In *Food Price Policy in an Era of Market Instability*, edited by P. Pinstrup-Andersen. Oxford, UK: Oxford University Press.

Chirwa, E., and A. Dorward. 2013. *Agricultural Input Subsidies: The Recent Malawi Experience*. Oxford, UK: Oxford University Press.

Chowdhury, T.-E., and S. Haggblade. 2000. "Dynamics and Politics of Policy Change." In *Out of the Shadow of Famine: Evolving Food Markets and Food Policy in Bangladesh*, edited by R. Ahmed, S. Haggblade, and T.-E. Chowdhury, 165–188. Baltimore: Johns Hopkins University Press.

Cohen, M., J. March, and J. Olsen. 1972. "A Garbage Can Model of Organizational Choice." *Administrative Science Quarterly* 17 (1): 1–25.

Collier, D. 1995. "Trajectory of a Concept: 'Corporatism' in the Study of Latin American Politics." In *Latin America in Comparative Perspective*, edited by P. H. Smith, 135–162. Boulder, CO, US: Westview Press.

Collier, R. B., and D. Collier. 1991. Shaping the Political Arena: Critical Junctures, the Labour Movement, and Regime Dynamics in Latin America. Princeton, NJ, US: Princeton University Press.

Committee on World Food Security (CFS). 2014. *Global Strategic Framework, 2013*. Rome, Italy: CFS.

Curtis, K., J. McCluskey, and J. Swinnen. 2008. "Differences in Global Risk Perceptions of Biotechnology and the Political Economy of the Media." *International Journal of Global Environmental Issues* 8 (1): 77–89.

Dahl, R. 1961. *Who Governs?* New Haven, CT, US: Yale University Press.

DAI (Development Alternatives Inc.). 2014. "Africa Lead II." Accessed October 5, 2014. http://dai.com/our-work/projects/africa%E2%80%94africa-lead-ii.

Deininger, K., T. Hilhorst, and V. Songwe. 2014. "Identifying and Addressing Land Governance Constraints to Support Intensification and Land Market Operation: Evidence from 10 African Countries." *Food Policy* 48: 76–87.

Domhoff, G. W. 1978. *The Powers That Be: Processes of Ruling Class Domination in Americ*a. New York: Random House.

Dorosh, P., S. Dradri, and S. Haggblade. 2009. "Regional Trade, Government Policy, and Food Security." *Food Policy* 34: 350–366.

Easterly, W. 2014. *The Tyranny of Experts: Economists, Dictators, and the Forgotten Rights of the Poor.* New York: Basic Books.

Eklin, K., I. F. Evensmo, I. Georgescu, V. Hubert, J. Le, T. Malik, S. Treyer, and M. Brun. 2014. *The Committee on World Food Security Reform: Impacts on Global Governance of Food Security*. Agriculture Policy Brief 3. Paris: Institute for Sustainable Development and International Relations.

Evans, P. 1995. *Embedded Autonomy: States and Industrial Transformation*. Princeton, NJ, US: Princeton University Press.

FAC (Future Agricultures Consortium). 2014. "Policy Processes." Accessed October 5, 2014. www.future-agricultures.org/research/policy-processes.

Faguet, J. P. 2004. "Does Decentralization Increase Responsiveness to Local Needs? Evidence from Bolivia." *Journal of Public Economics* 88 (4): 867–894.

FAO (Food and Agriculture Organization of the United Nations). 2000. *The State of Food and Agriculture: Lessons from the Past 50 Years*. Rome. www.fao.org/docrep/x4400e/x4400e09.htm.

———. 2011. The *State of Food Insecurity in the World*. Rome.

Ferguson, J. 1999. *Expectations of Modernity: Myths and Meanings of Urban Life on the Zambian Copperbelt.* Berkeley: University of California Press.

FEPSAN (Fertilizer Suppliers Association of Nigeria). 2012. *The Growth Enhancement Support Scheme (GESS): Monitoring Report*. Kaduna, Nigeria: FEPSAN.

Fox, A., and M. Reich. 2013. "Political Economy of Reform." In *Scaling Up Affordable Health Insurance*, edited by A. Preker, M. Lindner, D. Chernichovsky, and O. Schellekens, 395–433. Washington, DC: World Bank.

Freeland, N. 2013. "Social Protection and the Four Horsemen of the Donor Apocalypse." *In Social Protection in Developing Countries: Reforming Systems*, edited by K. Bender, M. Kaltenborn, and C. Pfleiderer, 226–235. Oxon, UK: Routledge.

Garcia, M., and C. Moore. 2012. *The Cash Dividend: The Rise of Cash Transfer Programs in Sub-Saharan Africa.* Washington, DC: The World Bank.

GDPRD (Global Donor Platform for Rural Development). 2104. *Prospects: Agriculture and Rural Development Assistance in the Post-2015 Development Framework.* Bonn, Germany.

Gillespie, S. 2014. "Nutrition Policy and Practice: Unpacking the Politics." In *2013 Global Food Policy Report*, 75–86. Washington, DC: IFPRI.

Gillespie, S., L. Haddad, V. Mannar, P. Menon, N. Nisbett, and the Maternal and Child Nutrition Study Group. 2013. "The Politics of Reducing Malnutrition: Building Commitment and Accelerating Progress." *The Lancet* 382: 552–569.

Grépin, K., and K. Y. Dionne. 2013. "Democratization and Universal Health Coverage: A Case Comparison of Ghana, Kenya, and Senegal." *Global Health Governance* 6 (2): 1–27.

Grindle, M. 1999. *In Quest of the Political: The Political Economy of Development Policy Making*. Working Paper 17. Cambridge, MA, US: Center for International Development at Harvard University.

———. 2004. *Despite the Odds: The Contentious Politics of Education Reform*. Princeton, NJ, US: Princeton University Press.

Grindle, M., and J. Thomas. 1989. "Policy Makers, Policy Choices, and Policy Outcomes: The Political Economy of Reform in Developing Countries." *Policy Sciences* 22: 213–248.

———. 2004. "When Does Power Listen to Truth? A Constructivist Approach to the Policy Process." *Journal of European Public Policy* 11 (4): 569–592.

Habib, A. 1997. "From Pluralism to Corporatism: South Africa's Labor Relations in Transition." *Politikon* 24 (1): 57–75.

Haggard, S., and R. Kaufman. 1992. "Institutions and Economic Adjustment." In *The Politics of Economic Adjustment*, edited by S. Haggard and R. Kaufman, 3–37. Princeton, NJ, US: Princeton University Press.

———. 2008. *Development, Democracy, and Welfare States: Latin America, East Asia, and Eastern Europe.* Princeton, NJ, US: Princeton University Press.

Hai, N. M., and T. Talbot. 2014. "The Political Economy of Food Price Policy in Vietnam." In *Food Price Policy in an Era of Market Instability*, edited by P. Pinstrup-Andersen, 319–338. Oxford, UK: Oxford University Press.

Hall, P. 1986. *Governing the Economy: The Politics of State Intervention in Britain and France*. Cambridge, UK: Polity Press.

———. 1993. "Policy Paradigms, Social Learning and the State: The Case of Economic Policy Making in Britain." *Comparative Politics* 25: 275–296.

———. 2013. "Brother, Can You Paradigm?" *Governance* 26 (2): 189–192.

Hall, P., and D. Soskice. 2001. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford, UK: Oxford University Press.

Hall, P., and R. Taylor. 1996. "Political Science and the Three New Institutionalisms." *Political Studies* 44 (5): 936–957.

Harding, R. and D. Stasavage. 2014. "What Democracy Does (and Doesn't Do) for Basic Services: School Fees, School Inputs, and African Elections." *The Journal of Politics* 76(1): 229–245.

Headey, D., and S. Fan. 2010. *Reflections on the Global Food Crisis.* Research Monograph 165. Washington, DC: International Food Policy Research Institute.

Heclo, H. 1974. *Modern Social Politics in Britain and Sweden*. New Haven, CT, US: Yale University Press.

Hicklin, A., and E. Godwin. 2009. "Agents of Change: The Role of Public Managers in Public Policy." *Policy Studies Journal* 37 (1): 13–20.

HLTF (High Level Task Force on the Global Food Security Crisis). 2008. *Comprehensive Framework for Action.* New York: United Nations.

Hill, M. 2013. *The Public Policy Press*, 6th ed. New York: Routledge.

Hindmoor, A. 2006. *Rational Choice.* Basingstoke, UK: Palgrave Macmillan.

Hirschman, A. 1981. "Policymaking and Policy Analysis in Latin America." In *Essays in Trespassing: Economics to Politics and Beyond*, edited by A. Hirschman, 142–166. New York: Cambridge University Press.

HLPE (High Level Panel of Experts). 2013. *The High Level Panel of Experts on Food Security and Nutrition (HLPE): Key Elements*. Rome: Committee on World Food Security.

Huang, J., J. Yang, and S. Rozelle. 2014. "The Political Economy of Food Price Policy in China." In *Food Price Policy in an Era of Market Instability*, edited by P. Pinstrup-Andersen, 362–383. Oxford, UK: Oxford University Press.

Immergut, E. 1990. "Institutions, Veto Points, and Policy Results: A Comparative Analysis of Health Care." *Journal of Public Policy* 10 (4): 391–416.

Ingram, H., A. Schneider, and P. deLeon. 2007. "Social Construction and Policy Design." In *Theories of the Policy Process*, edited by P. Sabatier, 93–128. Boulder, CO, US: Westview Press.

IRIN (Integrated Regional Information Networks). 2013. "Removing Subsidies in Zambia—the Way to Go?" September 30. www.irinnews.org/report/98849/removing-subsidies-in-zambia-the-way-to-go.

Iyer, Shekhar. 2013. "This Isn't Food Security, It's Vote Security, Says BJP." Hindustan Times, August 26. www.hindustantimes.com/India-news/NewDelhi/This-isn-t-food-security-it-s-vote-security-says-BJP/Article1-1113375.aspx.

Jaffe, G. 2006. *Comparative Analysis of the National Biosafety Regulatory Systems in East Africa*. Environment and Production Technology Discussion Paper 146. Washington, DC: International Food Policy Research Institute.

Jayne, T. S., and S. Rashid. 2013. "Input Subsidy Programs in Sub-Saharan Africa: A Synthesis of Recent Evidence." *Agricultural Economics* 44 (6): 547–562.

Jenkins, W. 1978. *Policy Analysis.* London: Martin Robertson.

John, P. 1998. *Analyzing Public Policy*. London: Pinter.

Johnson, C. 1982. *MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925–1975*. Palo Alto, CA, US: Stanford University Press.

Jonsson, U. 2010. "The Rise and Fall of Paradigms in World Food and Nutrition Policy." *World Nutrition* 1 (3): 128–158.

Kalin, S. 2014. "Egypt Minister Hails Savings from Smart-Card System for Bread Distribution." Reuters. May 10. www.reuters.com/article/2014/05/10/egypt-wheat-idUSL6N0NW0Q920140510.

Kaufman, R., and J. Nelson. 2004. "Conclusions: The Political Dynamics of Reform." In *Crucial Needs, Weak Incentives*, ed. R. Kaufman and J. Nelson, 473–519. Washington, DC: Woodrow Wilson Center Press.

Kingdon, J. 1984. *Agendas, Alternatives, and Public Policies*. Boston: Little, Brown.

———. 1995. *Agendas, Alternatives, and Public Policies*, 2nd ed. New York: Harper Collins.

Lapping, K., E. A. Frongillo, L. J. Studdert, P. Menon, J. Coates, and P. Webb. 2012. "Prospective Analysis of the Development of the National Nutrition Agenda in Vietnam from 2006 to 2008." *Health Policy Plan* 27: 32–41.

Lieberman, E. 2003. *Race and Regionalism in the Politics of Taxation in Brazil and South Africa*. New York: Cambridge University Press.

Lindblom, C. E. 1959. "The Science of Muddling Through." *Public Administration Review* 19: 79–88.

Lipsky, M. 1980. *Street-Level Bureaucracy*. New York: Russell Sage.

Lowi, T. 1964. "American Business, Public Policy, Case-Studies, and Political Theory." *World Politics* 16: 687–713.

Lowi, T. 1972. "Four Systems of Policy, Politics, and Choice." *Public Administration Review* 32(4): 298–310.

Mason, N., T. Jayne, and N. van de Walle. 2013. "Fertilizer subsidies and voting behavior: Political economy dimensions of input subsidy programs." Paper presented at Agricultural and Applied Economics Association Annual Meeting, Washington, DC: August 5, 2013.

McCombs, M., and D. L. Shaw. 1972. "The Agenda-Setting Function of Mass Media." *Public Opinion Quarterly* 36: 176–187.

McIntyre, D., J. Doherty, and L. Gilson. 2003. "A Tale of Two Visions: The Changing Fortunes of Social Health Insurance in South Africa." *Health Policy and Planning* 18 (1): 47–58.

Meier, K. J. 2009. "Policy Theory, Policy Theory Everywhere: Ravings of a Deranged Policy Scholar." *Policy Studies Journal* 37: 5–11.

Midgal, Joel. 1988. *Strong Societies and Weak States: State-Society Relations and State Capabilities in the Third World.* Princeton, NJ, US: Princeton University Press.

Miguel, E. 2004. "Tribe or Nation? Nation Building and Public Goods in Kenya versus Tanzania." *World Politics* 56: 327–362.

Miliband, R. 1969. *The State in Capitalist Society*. London: Weidenfeld & Nicolson.

Minot, N., and T. Benson. 2009. *Fertilizer Subsidies in Africa: Are Vouchers the Answer?* Issue Brief 60. Washington, DC: International Food Policy Research Institute.

Mitchell, T. 2002. *The Rule of Experts: Egypt, Techno-politics, Modernity.* Berkeley: University of California Press.

Mohmand, S. 2012. *Policies without Politics: Analysing Nutrition Governance in India*. India Country Report. Brighton, UK: Institute of Development Studies.

Morris, M., V. Kelly, R. Kopicki, and D. Byerlee. 2007. *Fertilizer Use in African Agriculture: Lessons Learned and Good Practice Guidelines.* Washington, DC: The World Bank.

Natalicchio, M., and M. Mulder-Sibanda. 2010. *Making Nutrition a Development Priority in Africa: What Does It Take?* Working Paper. Washington, DC: World Bank.

Nelson, J. 1984. "The Political Economy of Stabilization: Commitment, Capacity and Public Response." *World Development* 12: 983–1006.

NEPAD (New Partnership for Africa's Development). 2003. Comprehensive African Agricultural Development Programme. Midrand, South Africa: NEPAD Secretariat.

———. 2010. Accelerating CAADP Country Implementation: A Guide for Implementors. Midrand, South Africa. Accessed October 1, 2014. http://caadp.net/sites/default/files/documents/Resources/CAADP-guides-and-technical/Accelerating%20CAADP%20Country%20Implementation_A%20guide%20for%20implementors.pdf.

Nisbett, N., S. Gillespie, L. Haddad, and J. Harris. 2014. "Why Worry About the Politics of Childhood Undernutrition?" *World Development* 64: 420–433.

OECD (Organisation for Economic Cooperation and Development). 2008. *Survey of Donor Approaches to Governance Assessment*. Paris.

Olper, A. 2007. "Land Inequality, Government Ideology and Agricultural Protection." *Food Policy* 32: 67–83. Olper,

A. and J. Swinnen. 2013. *Mass Media and Public Policy: Global Evidence from Agricultural Policies.* Policy Research Working Paper 6362. Washington, DC: World Bank.

Parsons, W. 1995. *Public Policy*. Aldershot, UK: Edward Elgar.

Pelletier, D., E. Frongillo, S. Gervais, L. Hoey, P. Menon, T. Ngo, R. Stoltzfus, A. M. Shamsir Ahmed, and T. Ahmed. 2012. "Nutrition Agenda Setting, Policy Formulation and Implementation: Lessons from the Mainstreaming Nutrition Initiative." *Health Policy and Planning* 27: 19–31.

Pierson, P. 2000. "Increasing Returns, Path Dependence, and the Study of Politics." *The American Political Science Review* 94 (2): 251–267.

———. 2004. *Politics in Time: History, Institutions, and Social Analysis.* Princeton, NJ, US: Princeton University Press.

Pinstrup-Andersen, P., ed. 2014. *Food Price Policy in an Era of Market Instability: A Political Economy Analysis.* Oxford, UK: Oxford University Press.

Pinstrup-Andersen, P., and D. D. Watson II. 2011. *Food Policy for Developing Countries.* Ithaca, NY, US: Cornell University Press.

Polsby, N. 1963. *Community Power and Political Theory.* New Haven, CT, US: Yale University Press.

Poulton, C. 2012. *Democratisation and the Political Economy of Agricultural Policy in Africa*. Future Agricultures Consortium Working Paper 43. Brighton, UK: Institute for Development Studies.

Quist, D., and I. H. Chapela. 2001. "Transgenic DNA Introgressed into Traditional Maize Landraces in Oaxaca, Mexico." *Nature* 414: 541–543.

Ragin, C. 1987. *The Comparative Method: Moving beyond Qualitative and Quantitative Strategies.* Berkeley. CA, US: University of California Press.

Resnick, D. 2014. "The Political Economy of Food Price Policy in Senegal." In Food Price Policy in an Era of Market Instability, edited by P. Pinstrup-Andersen, 296–318. Oxford: Oxford University Press.

Ricker-Gilbert, J., T. Jayne, and G. Shively. 2013. "Addressing the 'Wicked Problem' of Input Subsidy Programs in Africa." *Applied Economic Perspectives and Policy* 35(2): 322–340.

Rokkan, S. 1999. *State Formation, Nation-Building and Mass Politics in Europe: The Theory of Stein Rokkan*. Oxford: Oxford University Press.

Ruel, M., H. Alderman and the Malnutrition and Child Nutrition Study Group. 2013. *The Lancet* August: 536–51.

Ruggie, J. G. 1998. "What Makes the World Hang Together? Neo-utilitarianism and the Social Constructivist Challenge." In *Constructing the World Polity*, edited by J. G. Ruggie, 12–13. New York: Routledge.

Sabatier, P. A. 1988. "An Advocacy Coalition Framework of Policy Change and the Role of Policy-Oriented Learning Therein." *Policy Sciences* 21: 129–168.

———. 2007. "The Need for Better Theories." In *Theories of the Policy Process*, edited by P. Sabatier, 3–21. Boulder, CO, US: Westview Press.

Sabatier, P., and H. C. Jenkins-Smith, eds. 1993. *Policy Change and Learning.* Boulder, CO, US: Westview Press.

Sabatier, P., and C. Weible. 2007. "The Advocacy Coalition Framework: Innovations and Clarifications." In *Theories of the Policy Process*, edited by P. Sabatier, 189–222. Boulder, CO, US: Westview Press.

Sahn, D. E., P. A. Dorosh, and S. D. Younger. 1997. *Structural Adjustment Reconsidered: Economic Policy and Poverty in Africa.* New York: Cambridge University Press.

Schlager, E. 2007. "A Comparison of Frameworks, Theories, and Models of Policy Processes." In *Theories of the Policy Process*, edited by P. Sabatier, 293–320. Boulder, CO, US: Westview Press.

Schmitter, P. 1974. "Still the Century of Corporatism?" *Review of Politics* 36: 85–131.

Schneider, A., and H. Ingram. 1997. *Policy Design for Democracy.* Lawrence, KY, US: University of Kentucky Press.

Silva, J., V. Levin, and M. Morgandi. 2013. *Inclusion and Resilience: The Way Forward for Social Safety Nets in the Middle East and North Africa.* Washington, DC: The World Bank.

Simmons, B., and Z. Elkins. 2004. "The Globalization of Liberalization: Policy Diffusion in the International Political Economy." *American Political Science Review* 98 (1): 171–89.

Simon, H. 1972. "Theories of Bounded Rationality." In *Decision and Organization: A Volume in Honor of Jacob Marschak*, edited by C. B. McGuire and R. Radner, 161–176. Amsterdam: North-Holland.

Snodgrass, D. R., and E. B. Rice. 1970. *The Use of Program Loans to Influence Policy.* Evaluation Paper 1A. Washington, DC: United States Agency for International Development.

Soss, J. 2005. "Making Clients and Citizens: Welfare Policy as a Source of Status, Belief, and Action." In *Deserving and Entitled: Social Construction of Public Policy*, edited by A. L. Schneider and H. M. Ingram, 291–328. Albany, NY, US: SUNY Press.

SUN (Scaling Up Nutrition). 2014. "SUN Countries." Accessed October 10, 2014. www.scalingupnutrition.org/sun-countries.

Swinnen, J., P. Squicciarini, and T. Vandemoortele. 2011. "The Food Crisis, Mass Media and the Political Economy of Policy Analysis and Communication." *European Review of Agricultural Economics* 38 (3): 409–426.

Thelen, K. 2003. "How Institutions Evolve: Insights from Comparative Historical Analysis." In *Comparative Historical Analysis in the Social Sciences*, edited by J. Mahoney and D. Rueschemeyer, 208–240. Cambridge, MA, US: Cambridge University Press.

Tsebelis, G. 2002. *Veto Players: How Political Institutions Work.* Princeton, NJ, US: Princeton University Press.

USAID (United States Agency for International Development). 2013a. *Feeding the Future Guide to Supporting Sound Policy Enabling Environments.* Washington, DC.

———. 2013b. *Institutional Architecture for Food Security Policy Change:* Ghana Draft Report. Washington, DC.

van de Walle, N. 2003. "Presidentialism and Clientelism in Africa's Emerging Party Systems." *Journal of Modern African Studies* 41 (2): 297–321.

Waterbury, J. 1992. "The Heart of the Matter? Public Enterprise and the Adjustment Process." In *The Politics of Economic Adjustment: International Constraints, Distributive Conflicts, and the State*, edited by S. Haggard and R. R. Kaufman, 182–220. Princeton, NJ, US: Princeton University Press.

Weyland, K. 2005. "Theories of Policy Diffusion: Lessons from Latin American Pension Reform." *World Politics* 57 (2): 262–295.

Wildavsky, A. 1984. *The Politics of the Budgetary Process*, 4th ed. Boston: Little, Brown.

World Bank. 2013. *Ethiopia's Productive Safety Net Program (PSNP) Integrating Disaster and Climate Risk Management*. Washington, DC.

World Bank. 2014. "Land Governance Assessment Framework." Accessed November 1, 2014. http://web.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTPROGRAMS/EXTAR DR/EXTLGA/0,,contentMDK:22793966~menuPK:9163253~pagePK:64168427~piPK:64168435~theSiteP K:7630425,00.html.

WHO (World Health Organization). 2013. *Global Nutrition Policy Review: What Does It Take to Scale Up Nutrition Action?* Geneva.

Zahariadis, N. 2007. "The Multiple Streams Framework: Structure, Limitations, Prospects." In *Theories of the Policy Process*, edited by P. Sabatier, 65–92. Boulder, CO, US: Westview Press.