Feed the Future Innovation Lab for Food Security Policy

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What Drives Policy Change? Evidence from Six Empirical Applications of the Kaleidoscope Model

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Objectives

Interest in policy reform has grown recently in developing countries. Since policy environments shape the incentives, decisions and actions of key consumer and industry groups, policies become central determinants of economic performance as well as progress towards key agricultural, nutrition and food security goals. As a result, achievement of sustainable development goals will depend heavily on good understanding of developing country policy processes and outcomes. Yet, most past efforts to study policy processes have focused on developed country settings.

The Kaleidoscope Model (KM) responds to the need for improved understanding of key factors shaping policy outcomes in developing countries. To that end, the model provides a framework for formally testing what factors provoke the episodes of policy reform that punctuate long periods of policy inertia.

Two large bodies of experience have informed the structure and content of the Kaleidoscope Model. Academic theories about public policy and political economy provide a rich and nuanced perspective on policy change, although empirical studies in this genre have primarily focused on developed country policy systems (Resnick et al. 2015). By contrast, donor-led policy reform efforts have focused on developing country policy systems, with its broader array of political systems. Yet, donor forays into policy formulation typically have focused on a handful of standardized approaches for generating policy change, including policy conditionality, policy-relevant empirical research, promotion of policy champions and mutual accountability frameworks. Resnick et al. (2015) provides a detailed review of both bodies of evidence and their influence in shaping the KM. More recent attention to policy change in Africa is being driven by reflections on the first generation CAADP investment plans and alignment with the continental agenda 2063, renewed commitment to CAADP through the Malabo Declaration. As African countries wrestle with less than optimal progress on key strategic development targets, opportunities arise for greater reflection and potentially policy change. Guidance for stakeholders involved in these country processes serves to support the policy changes required to achieve current targets.

Drawing on these bodies of evidence, the KM inductively derives a set of variables that prove consistently important across multiple policy arenas and country settings. In doing so, the KM addresses a series of questions related to the genesis, design, and commitment to a particular set of interventions by national and international policymakers. Testable propositions about key drivers of policy change center on the 16 hypotheses enumerated in the center of Figure 1.

Key Highlights

- *The Kaleidoscope Model (KM) assesses key factors that drive policy change.*
- *This brief distills findings from 50 policy reform episodes, including 38 micro-nutrient policies and 12 agricultural input policy reforms.*
- *These case studies identified four major opportunities for stakeholders interested in supporting policy reform:*
  - *evidence,*
  - *advocacy,*
  - *financial support and*
  - *institutional reform.*
- *In picking promising arenas for engagement in policy reform, interested stakeholders should look for settings in which these four elements converge.*

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Empirical Evidence

Six initial case studies provide the proving ground for field testing the KM and its associated research methods (see Babu et al. 2016; Haggblade et al. 2016; Hendriks et al. 2016; Mather et al. 2016; Resnick et al. 2016a,b). By examining concrete instances of policy change in different developing countries, the case studies aim to explore the KM's relevance across differing political and policy systems. Since differing policy domains involve different constituents, decision makers and policy institutions, half of the case studies analyzed human micro-nutrient policies while the other half explored changes in agricultural input subsidy policies (Table 1).

Table 1: Case study sample of policy change episodes

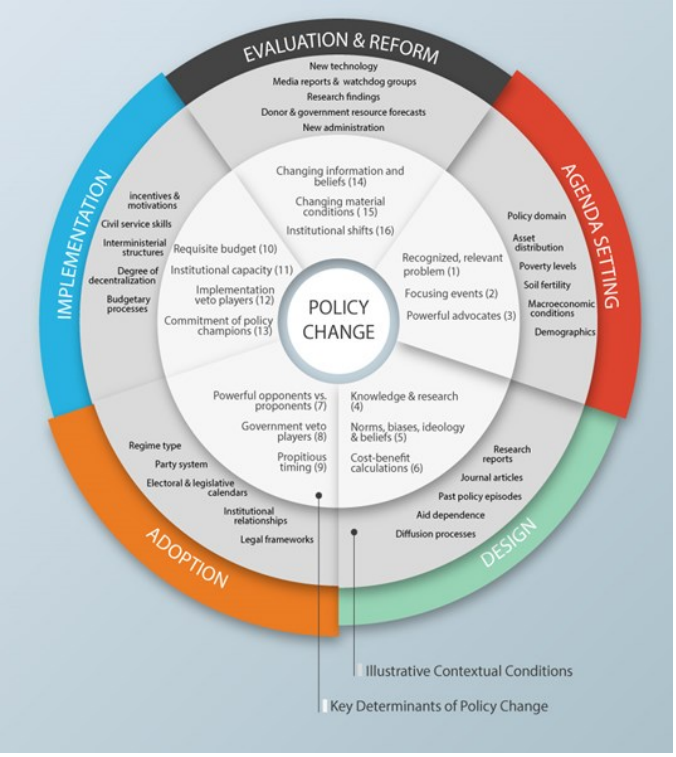
Country	Number of policy change episodes studied	
	micro-nutrients*	fertilizer subsidy**
Ghana		2
Malawi	12	
South Africa	10	
Tanzania		6
Zambia	16	4
Total	**38**	**12**

* Micro-nutrient policies: supplementaiton, fortification, bio-fortification

** Fertilizer subsidy policies: government distribution, e-vouchers, private trader distribution

In the micro-nutrient policy arena, the case study teams examined 38 specific instances of attempted policy reform. Of these, 35 resulted in affirmative policy decisions approved by relevant authorities. Implementation of 16 of these policies (supplementation and bio-fortification) involved purely public sector executive structures, while 19 (food fortification mandates) depended on private agribusinesses to implement public nutritional mandates. Among the 12 agricultural input subsidy policy reform efforts studied, 11 resulted in affirmative policy decisions by relevant authorities. Public sector agencies delivered subsidized commodities to farmers under 4 of these policy modalities, while 8 involved market-mediated delivery by private traders.

Figure 1: The Kaleidoscope Model of Food Security Policy Change



In addition to secondary literature, the data for the formal KM hypothesis testing relied on intensive process tracing methods based on extensive field interviews with key participants in the policy processes. Resnick et al (2017) outline formal testing criteria for each of the 16 key Kaleidoscope Model variables (KMVs), while Table 2 below summarizes the percentage of instances in which each variable significantly influenced the policy outcome.

Results

Policy reform requires a burst of energy to overcome the inertia of existing vested interests. At the agenda-setting stage, evidence from these fifty episodes of policy reform indicates that three main factors routinely provoke rethinking of current policy positions (Table 2). High-profile focusing events (KMV1) enable powerful advocates (KMV2) to place recognized, relevant problems (KMV3) squarely in the view of decisions makers and the general public. In the case of micro-nutrient policies, international advocates led by UNICEF convened the 1990 World Summit for Children at the UN General Assembly, while a coalition of nutrition advocates followed up with a series of international summits (on universal salt iodization, for example) followed by several Lancet special issues documenting the pervasiveness of

Table 2: KM Hypothesis tests (percent of cases in which variables proved significant)

Policy stage		Kaleidoscope hypotheses	Policy Domain	
			Micro-nutrients	Fertilizer subsidy
Agenda setting	1	Focusing event	82%	58%
	2	Powerful advocates	84%	100%
	3	Recognized, relevant problem	84%	100%
Design	4	Knowledge, research and ideas	89%	58%
	5	Norms, biases, ideology, beliefs	16%	100%
	6	Cost-benefit, risk calculations	55%	75%
Adoption	7	Powerful opponents vs. proponents	68%	92%
	8	Government veto players		
		+ affirmative decision	88%	100%
		- exercise veto	12%	0%
	9	Propitious timing	3%	27%
Implementation	10	Requisite budget	61%	82%
	11	Institutional capacity	53%	100%
	12	Implementing stage veto players		
		+ facilitate implementation	87%	45%
		- stymie implementation	13%	55%
	13	Commitment of policy champions	50%	91%
Evaluation, reform	14	Changing info and beliefs	50%	82%
	15	Changing material conditions	42%	82%
	16	Institutional changes	32%	18%
Number of cases			**38**	**12**

micro-nutrient deficiencies as well as potential solutions. With agricultural input policies, high-profile advocates (often country presidents) responded to the world food and petroleum price hikes of 2008 by initiating or scaling up politically popular input subsidies.

At the design stage, forces driving the formulation of new policies differ across policy domains. The design of agricultural input subsidy modalities depends to a large extent on norms, core beliefs and ideology (KMV5), in particular deeply held beliefs about the fairness (or unfairness) and efficiency (or inefficiency) of private markets. In contrast, micro-nutrient supplementation policies have proven less controversial and more frequently founded on international best-practice medical and nutritional scientific research and knowledge (KMV4) as well as empirical evidence concerning the costs and benefits (KMV6) of alternative solutions.

Decisions to adopt a new policy depend on two primary factors: the relative power of proponents and opponents (KMV7) and agreement of government veto players (KMV8). Both of these variables proved important in the majority of both micro-nutrient and input subsidy policy changes reviewed.

Implementation depends fundamentally on the availability of requisite budget resources (KMV10), institutional delivery capacity (KMV11) and the ongoing commitment of policy champions (KMV13). With input subsidy programs, budget and implementation capacity constraints have proven especially acute. Indeed, changing budgetary resources (including donor support) frequently trigger reforms. In micro-nutrient supplementation policy reforms, budget and implementation capacity constraints have proven less dominant, piggy backing on health system delivery systems. In the case of fortification policies, the bulk of these reforms involved food fortification mandates,

which rely on private -- rather than public sector -- delivery and consumer -- rather than government -- financing. Across the policy domains studied, budget and implementation capacity constraints pose major constraints on the monitoring and evaluation of these programs as well as on compliance. Despite their importance, these elements do not always receive careful consideration in the design and implementation of these programs.

Reform of existing policies results from three major causes. Changing material conditions (KMV15) have proven important in micro-nutrient policies, as when early iodization efforts in all three Southern Africa countries resulted in not only the expected rapid reduction of iodine deficiency disorders but also in an unexpected emergence of excessive urinary iodine. This changing reality, in turn, triggered a reduction in mandated fortification levels in Malwi and Zambia. Changing information and beliefs (KMV14) have proven critical to agricultural input subsidy reforms, particularly evidence on leakage, poor targeting and late deliveries. Institutional changes (KMV16) contributed to roughly one-third of policy reform efforts. New presidents, new governments and new agriculture ministers routinely open up opportunities for input subsidy reform. In micro -nutrient policy, a series of cross-ministerial institutional reforms have proven decisive, most notably with the creation of Malawi's Department of Nutrition and HIV and AIDS (DNHA) at the Office of the President, which afforded nutrition advocates unprecedented visibility and political access (Babu et al. 2016).

Practical Implications

Stakeholders

Governments, civil society advocacy groups and academics can all make use of these Kaleidoscope Model findings to orient and align their policy advocacy efforts. In addition, these case studies identify two powerful players not commonly included in the traditional political economy models derived from, and applied to, developed country contexts.

First are the donors. In the vast majority of the micro-nutrient and agricultural subsidy policy reforms reviewed, donors played a major role. They financed scientific research and presented it at high-level international conferences and other focusing events. In many of the cases studied, donors provided both budgetary support as well as technical assistance enabling implementation of these policies.

Private sector veto players emerge as a second important player in both micro-nutrient fortification and agricultural input policies. In many instances, developing country governments rely on private agribusiness firms to implement public policy, as with e-voucher fertilizer subsidies and food fortification mandates. In these cases, private sector implementing agents become key actors in the policy system, implementing stage veto players (KMV12) whose cooperation becomes essential in the execution of public policy. In the micro-nutrient policy reforms studied, one-fourth of all reform efforts foundered. In half of these cases (13%), private sector veto players (KMV12) prevented policy reform, while in the other half (12%) public sector veto players blocked proposed reforms (Table 2). With agricultural input subsidies, implementation problems plagued over half of all programs (55%), and the bulk of these problems emerged from the actions of private sector input suppliers or trader intermediaries. This suggests that policy advocates need to recognize the veto power of private sector players when engaging in policy reform efforts.

Opportunities for effective engagement

These case studies have identified four major opportunities for interested stakeholders to support policy reform: • evidence, • advocacy, • financing and • institutional reform.

Credible empirical evidence empowers advocates (KMV2), sustains focusing events (KMV1), raises problem recognition (KMV3), informs design options (KMV4, KMV6) and enables reform (KMV14). Each of these KM variables contribute to successful policy reform in 50 to 90% of the reform episodes reviewed (Table 2). These results confirm that better evidence helps, in many instances, to persuade policy makers to reconsider the status quo and refine policy stances accordingly

Advocacy similarly drives policy change at multiple points in the policy process. In our policy reform studies, powerful advocates shaped policy change – at the agenda setting, decision-making and implementation stages – in 50% to 84% of the cases studied. This underlines the potential utility of efforts to support stakeholder advocacy.

Financial support clearly matters as well. Sufficient budget resources (KMV10) and changes in the willingness of domestic and external funders to support specific policies (KMV15) have proven decisive in between 40% and 60% of the policy reform studies.

Institutional reform (KMV16) contributed to one-third of the policy changes studied (Table 2). Most of these reforms occurred organically, as the result of domestic political forces. Changes of governments and ministers of agriculture enabled many of the agricultural input policy reforms studied, while Malawi's launching of the high-level DNHA and South Africa's transition to a democracy spurred a series of micro-nutrient policy reform efforts. These outcomes suggest that timing and anticipation of coming political and intuitional transitions can help to identify promising moments to advocate policy reform.

Picking feasible arenas for policy reform

Successful participation in policy reform efforts requires a unique blend of opportunism, humility, preparation, focus, credibility and good timing. The KM case studies suggest a series of criteria that governments and interested stakeholders can apply to identify fruitful arenas for engaging in policy reform processes. Technical problems with inexpensive solutions (such as salt iodization) prove easier to solve than complex, expensive policies (such as fertilizer subsidies). Policy arenas with limited opposition – typically those without major rents and hence few entrenched financial interests – offer the greatest prospects for successful policy reform as do those such as supplementation that piggy-back on existing heath system infrastructure. Credible evidence helps to advance policy reform, but it proves most effective in policy arenas with well-accepted technical solutions and without large rents and highly motivated opposition. Across all policy domains, shifting administrations, the arrival of new decision-makers and institutional restructurings offer clear opportunities for policy reform. Ongoing work aims to use these results to refine criteria and procedures for identifying opportunities for successful policy reform (Sitko 2017).

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This brief summarizes the results of six case studies: Babu et al. (2016), Haggblade et al. (2016), Hendriks et al (2016), Mather et al. (2016), Resnick et al. (2016) and Resnick and Mather (2015).

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