



STATE CAPACITIES AND WICKED PROBLEMS OF PUBLIC POLICY

ADDRESSING VULNERABILITIES
THAT AFFECT HUMAN DEVELOPMENT

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Executive Summary

In public policy, there are more and more *wicked* problems—that is, multidimensional problems that require coordinated interventions by multiple departments, levels of government, and non-governmental actors, whose incentives may conflict with each other. These issues tend to be characterized by great complexity and uncertainty, for which measuring the performance of the agencies involved or the impact of their actions is not always straightforward. Therefore, to address these problems it is not enough to approve good policies: distinctive institutional and managerial capabilities are also required, innovating from traditional public management, which is more accustomed to dealing with linear and predictable problems.

This paper analyzes two wicked problems that are relevant for the Latin American and Caribbean (LAC) region: inequality and climate change. Despite the increased attention and resources applied to them in recent years, results are still insufficient. Therefore, new approaches are needed.

This study reviews the management challenges in addressing inequality and climate change and proposes reform options to do it more effectively. It also discusses the challenges and limitations inherent in each option, as well as the policy areas and contexts more appropriate to each. While there is no magic bullet, the paper presents available options through several regional and international cases that reflect their potential contribution. It is worth noting that several lessons from inequality policies, which have a more established literature and evidence base, are useful for generating ideas on climate, another wicked problem whose links to management capacities have received scant attention.

The reform options presented are framed along two main pillars: (1) those that seek to *align the incentives of stakeholders* to facilitate integrated, synergistic policies to address cross-cutting problems and 2) those aimed at *expanding the information available* to promote evidence-based decisions, especially when it is difficult to monitor the quality of services or accurately anticipate the impacts of interventions. The management reform options discussed herein include a strengthened

coordinating role of the Center of Government (CoG), to arbitrate between sectoral tradeoffs; the use of systems approaches to design integrated policies from the perspective of the citizen (rather than the institutions); greater managerial adaptation and flexibility for continuous learning and adjustment; the integration of information systems, breaking down administrative silos; a greater linkage between the funding of services and the achievement of results, and amplifying the voice of beneficiaries to influence the incentives of governments and service providers.

These management innovations address several recurrent difficulties faced by those who are implementing policies designed to combat inequality and climate change. Among the first are the duplication of effort and lack of synergies due to the absence of integrated strategies; the null (or even negative) impact of certain social interventions due to the low quality of the services delivered by providers; the “loss” of beneficiaries as a result of difficulties in sharing information from different providers, and the lack of effectiveness of certain interventions that require personalized treatments, which is limited by the rigidity of administrative procedures. In climate matters, the absence of a systems approach leads to sectoral policies, regulations and investments with contradictory effects on climate change; in turn, weak mechanisms for public accountability and participation of external stakeholders hinder incentives to align annual government programming and budgeting with the long-term goals assumed by the countries. The reforms proposed herein address each of these management challenges.

While the document focuses on inequality and climate change to illustrate the challenges and options for reform, these are also applicable to other wicked public problems characterized by multidimensionality, difficulties in aligning incentives, and challenges in monitoring and improving performance. Problems such as lack of economic competitiveness, gender inequalities, the situation of young people who neither study nor work, and the crisis of citizen trust in institutions share these “wicked” attributes. Therefore, the proposals herein are intended as a guide to orient the transformation of the LAC region’s public administrations, adapting them to the main challenges that their governments will face in the years to come.

CHAPTER

01

Introduction: Public Management of Complex Problems Affecting Human Development



STATE CAPACITIES AND WICKED PROBLEMS OF
PUBLIC POLICY: ADDRESSING VULNERABILITIES
THAT AFFECT HUMAN DEVELOPMENT

01

Introduction: Public Management of Complex Problems Affecting Human Development



There is a set of public policy problems that are often considered “wicked.”

There is a set of public policy problems that are often considered

“wicked.” Although the concept of wicked problems has been known for five decades, in recent years it has gained special relevance to refer to certain challenges that governments increasingly face. Rittel and Webber (1973) coined the term to highlight the difficulty of adapting certain techniques of modern scientific management, typical of engineering, to solve social problems. Unlike the problems dealt with by engineering, social problems are not linear but wicked. Among the attributes of wicked problems are the following (Weber and Khademian, 2008):

- They have complex cause-effect relationships, which makes it difficult to model and anticipate them.
- They present a high degree of complexity and uncertainty, and knowledge about them is incomplete or even inconsistent.
- They combine several connected subsets of overlapping problems, crossing different areas of public policy and levels of government.
- They involve a large number of stakeholders, usually with conflicting interests.
- Attempts to solve them frequently affect other policy areas and are therefore difficult to solve once and for all.

A similar distinction can be made between “complicated” problems and “complex” problems. The former present relatively linear and predictable cause-effect relationships and can therefore be addressed with tools already familiar to public administrations, such as logical frameworks and

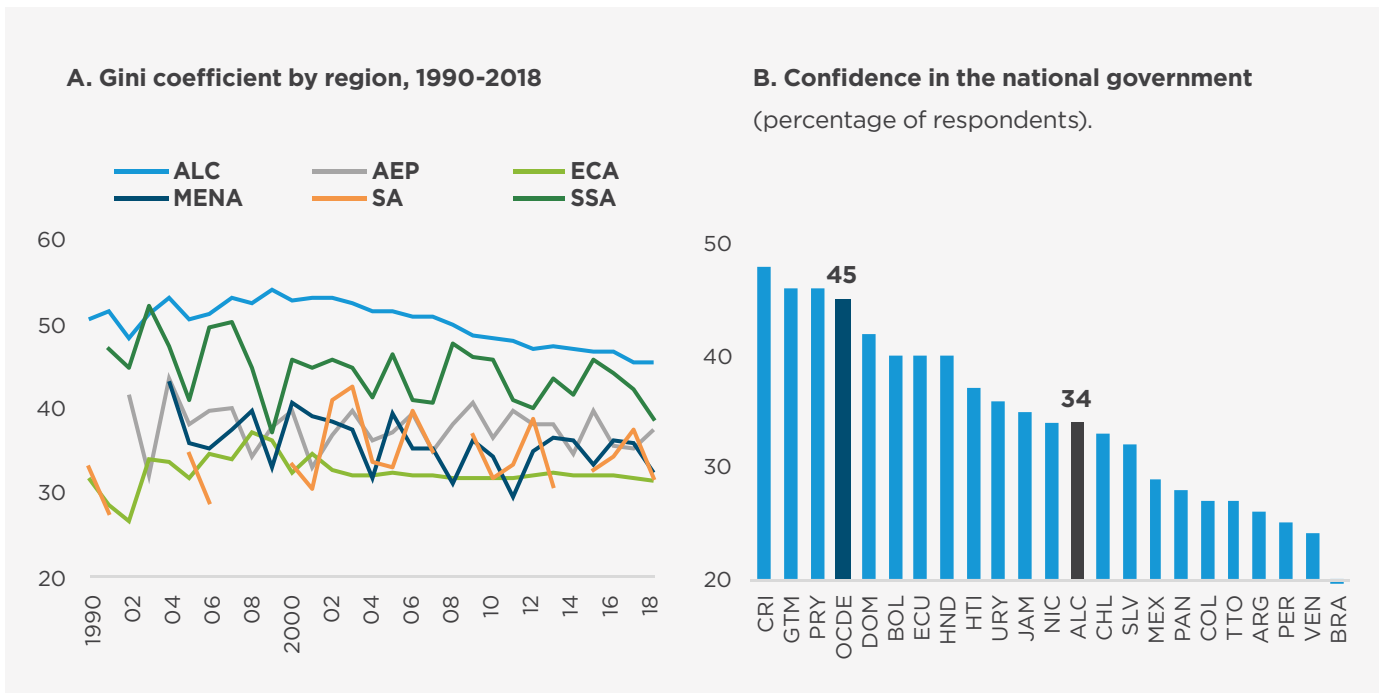
project management methodologies. In these problems, success depends on the reliable execution of a predefined plan. In wicked problems, on the other hand, the contingent and changing interaction between multiple variables reduces the predictability of the effects of interventions. These complex systems demand an approach that emphasizes collaboration among multiple actors, experimentation, learning, and continuous adjustment. Thus, the development of fiscal rules or the design of pension systems is complicated, but not complex. By contrast, a child's development, which is affected by multiple case-specific environmental, social, health, educational, and household factors, is a complex matter (Kamensky, 2011; Diamond, 2021). These types of problems are the focus of this paper.

Inequality and climate change present several of the attributes of complex or wicked problems. According to Machinea and Cruces (2006), policies that seek to reduce inequality “are by definition redistributive, usually cross jurisdictional boundaries, require a mobilization of resources throughout the territory, involve various political actors at various stages of the design and implementation process, are adopted to address a multidimensional problem, and have an important intertemporal component” (Machinea and Cruces, 2006: 20). Meanwhile, climate change can be considered the quintessential wicked problem (Neby and Zannakis, 2020), since it involves significant tradeoffs between different sectors. It also presents a clear intertemporal tradeoff; it is of high technical and multidisciplinary complexity; and it contains considerable uncertainty, since it is a complex physical system, with multiple feedback loops, interdependencies, and tipping points that generate exponential, non-linear changes. These are therefore two extremely challenging problems for public decision makers in Latin America and the Caribbean (LAC).

These are also two pressing problems for human development in the region where progress has been insufficient and new approaches are needed. LAC continues to be one of the most unequal regions in the world. Panel A of Figure 1 shows a slight evolution in the reduction of income inequality in the last two decades as measured by the Gini coefficient, but the level is still the highest compared to other regions. In turn, the COVID-19 pandemic reversed part of the progress made and generated an annual increase in inequality at a rate that exceeds that

of the 1990s (Acevedo et al., 2022). In any case, before COVID-19, there was already evidence of a slowdown or even stagnation in the reduction of inequality (Cruces and Gasparini, 2022). Busso and Messina (2020) estimate that, in the LAC region, 10 percent of the population captures 22 times more income than the poorest 10 percent, and 1 percent of the population keeps 21 percent of the income of the entire economy. Beyond income, the region suffers from horizontal inequalities determined by gender, race, and ethnicity, which, in turn, contributes to the deterioration of perceptions of social justice, interpersonal trust, and trust in institutions. Most countries in the region have low levels of trust in government, with figures well below the Organisation for Economic Co-operation and Development (OECD) average (Panel B of Figure 1). Trust in government is key to social cohesion, as it influences both people’s relationship with their government and the effectiveness of public policies (OECD-IDB, 2020; see also Keefer and Scartascini, 2022).

FIGURE 1 ▶ Inequality and Citizens’ Trust in the National Government



Sources: A) IDB team, based on World Bank World Development Indicators; B) OECD-IDB (2020): LAC (2020) and Gallup World Poll (2019).
 Notes: LAC = Latin America and the Caribbean; EAP = East Asia and the Pacific; ECA = Europe and Central Asia; MENA = Middle East and North Africa; NA = North America; SA = South Asia; SSA = Sub-Saharan Africa. Panel B data refer to the percentage of people who responded affirmatively to the question “Do you trust your national government?”.

Climate change presents a similar urgency for LAC countries. Climate change poses at least two types of major risks: its physical impacts and the risks inherent in the transition to low-carbon economies. With respect to physical impacts, there is evidence of an increase in the intensity and frequency of disaster events (droughts, floods, hurricanes, fires, etc.), which translate into human losses, economic harm, and additional pressure on public finances. It is estimated that the occurrence of at least one extreme weather event per year is associated with an increase in the fiscal deficit of 0.9 percent of gross domestic product (GDP) for low-income LAC countries and 0.8 percent for lower-middle-income countries (Delgado, Eguino, and López, 2021). The transition to low-carbon economies is an ongoing process derived from the international commitments of the Paris Agreement, which is reflected in regulatory, technological, and consumer preference changes (IRENA, 2021). A disorderly transition process can harm public finances, the labor market, and production. By 2030, the transition could eliminate 7.5 million jobs in LAC associated with fossil fuels and animal food production (Saget, Vogt-Schilb, and Luu, 2020).¹ Effective and coordinated climate action is therefore essential. And, as with inequality, there is evidence that current efforts are insufficient: the various initiatives adopted by countries have failed to significantly reduce emissions. A recent study identifies multiple “urgent” priority actions that must be taken to increase resilience to the impacts of climate change (World Bank, 2022).



The traditional organization of LAC public administrations makes it difficult for them to effectively manage these kinds of wicked problems.

In short, inequality and climate change are key problems in the region which pose distinct challenges for its public administrations. The traditional organization of LAC public administrations makes it difficult for them to effectively manage these kinds of wicked problems. First, government structures in the region are organized around sectoral agencies that are in charge of the public policy cycle related to a set of specific issues: education, health, infrastructure, and others. These agencies perform their functions within normative frameworks that define rigid procedures (even if they coexist with parallel informal and clientelist practices; see Ramos and Milanese, 2021). Such rigidity is useful for dealing

¹ This loss may be more than offset in other sectors by the new jobs that will be created as a result of decarbonization. The challenge is to generate a just transition that allows for the relocation of displaced workers and their communities.

with complicated problems in which public policy interventions have a determined and predictable impact. They are based on linear action plans, and the intervention inputs produce an expected outcome. For example, administering vaccines to children has the expected effect of reducing the incidence of vaccine-protected diseases.

Second, the organization of agencies is oriented to an autonomous and vertical implementation of policy interventions, which does not facilitate the joint participation of several agencies. Public management systems respond to this organizational pattern when the public budget stipulates sectoral allocations or when the civil service regime assigns civil servants to specific sectors. Management systems generally do not contemplate the existence of multisectoral budget lines or the deployment of civil servants to various sectors. This, coupled with sectoral organization, leads to siloed operations and discourages interagency collaboration to implement interventions that provide integrated responses to public problems that require broader participation.

Third, the procedural rigidity established by the formal regulatory frameworks of public agencies hinders innovation and experimentation in interventions. This is an obstacle to addressing wicked problems, insofar as their causes and symptoms are heterogeneous and even uncertain. This rigid and formal operation of public agencies does not promote the identification and abandonment of policies and programs that fail and their replacement by others that work better, nor does it reward the continuous search for innovation that leads to the discovery of better options. The characteristics of wicked problems of public policy, such as inequality and climate change (and other wicked problems such as lack of economic competitiveness, gender inequality, or the crisis of citizen trust in institutions), together with the siloed organization and operation of public agencies, make it necessary to rethink the configuration of public administrations in LAC to provide them with the necessary conditions for their agencies to implement interventions in a coordinated, joint, and flexible manner.

The following chapters elaborate on the assessment of these challenges and formulate reform proposals to address them. Chapter 2 explores the specific management challenges of inequality, and Chapter 3 proposes

reforms to address them. Chapter 4 presents the assessment for climate change, while Chapter 5 focuses on reform proposals in this area. In both cases, the reforms are structured along two pillars: those aimed at *aligning the incentives of actors* to address these multidimensional problems, and those aimed at *expanding the availability of information* required to address complex and highly uncertain issues. Several options appear relevant to both problems, suggesting their general applicability to wicked problems. Chapter 6 concludes.

CHAPTER

02

Management Challenges in Policies to Combat Inequality



STATE CAPACITIES AND WICKED PROBLEMS OF
PUBLIC POLICY: ADDRESSING VULNERABILITIES
THAT AFFECT HUMAN DEVELOPMENT

02

Management Challenges in Policies to Combat Inequality



It is therefore important to analyze how this investment is managed, especially given the difficulty of continuing to expand social spending in challenging macroeconomic and fiscal contexts.

Social policies are often challenging to implement because of the multiplicity of actors involved. In recent years, LAC countries have expanded social investment. In 2021, social spending in Caribbean countries reached its historical peak (14.1 percent of GDP), while in the Latin American subregion it stood at 13 percent, lower than the record of 2020 (during the pandemic), but well above the average levels of the previous decades (ECLAC, 2022). Despite this, as described in Chapter 1, improvements in the reduction of inequality have been modest or, in the last few years, nil. It is therefore important to analyze how this investment is managed, especially given the difficulty of continuing to expand social spending in challenging macroeconomic and fiscal contexts. Since the pioneering studies on implementation in public administration (Pressman and Wildavsky, 1973), it is known that the greater the number of actors involved in the implementation chain of a policy, and the greater the differences among them, the higher the risk that there will be problems in execution. In these cases, there are more links where obstacles, blockages, or implementation failures may arise. In social policy, this implies important implementation challenges, due to the frequent participation of a wide range of actors each with their own perspectives and incentives:

- Multiple ministries and central government agencies to address cross-cutting issues, either thematically (such as poverty, inequality, skills development, etc.) or by beneficiary groups (children, adolescents, older adults, people with disabilities, etc.).
- The joint action of different levels of government, combining, for example, central government policy design and financing with local service delivery, distributed throughout the territory.
- The action of private and non-governmental organizations in the delivery of services, government-contracted both for fiscal reasons

and because of their territorial presence and knowledge of local needs (evident, for example, in early childhood care services).

- The role of the beneficiaries themselves (parents, students, community associations, etc.) in the co-creation of outcomes (from employment and learning to health) and in overseeing the delivery of services.

However, policies designed to reduce inequality include a wide range of interventions and, therefore, their institutional and managerial challenges also vary. Even if we consider only social policy, leaving aside tax and fiscal reforms that could reduce inequality, the set of possible interventions is diverse. The first distinction worth making is between policies that provide goods or resources (cash transfers, food distribution, etc.) and those that provide services (education, health, care, etc.). Services require a “strategic interaction” (Cortázar, 2006); therefore, to obtain the result, the beneficiaries must complement the action of the provider themselves (e.g., learning does not depend only on the teacher but also on the student). This implies that the provider must be able to “process” the beneficiary, interpret his or her needs and demands, and apply the intervention based on his or her own judgment of the characteristics of the situation. This interaction, therefore, adds complexity to implementation that is not present to the same extent in policies based on providing goods or material resources.

In addition, it is possible to consider two typologies that allow us to classify the different social policies and clarify their implementation challenges. The first was proposed by the World Bank in its 2004 World Development Report, and the second is included in an IDB study on social policy (Martínez Nogueira, 2006).

- **The World Bank (2004) constructs a typology around two key variables: (i) the homogeneity or heterogeneity of beneficiaries and (ii) the ease or difficulty of monitoring interventions.** When beneficiaries’ needs are homogeneous (e.g., immunization), government interventions are usually standardized; on the other hand, when their needs vary, or when their preferences are considered critical to the effectiveness of the intervention,

individual choice may be facilitated by means of income transfers, vouchers, tax credits, or capita. As for the second dimension, there are some interventions that the central administration can monitor with relative ease (again, a vaccination program) and others that are less visible (i.e., what happens in a doctor-patient consultation). In these cases, it may be an appropriate option to enable the beneficiaries themselves (or their families or communities) to carry out external monitoring.

- **Martínez Nogueira's (2006) typology refers to the following two dimensions: (i) the nature of the tasks and (ii) the interaction with the recipients.** The first distinguishes between easily programmable tasks (through rules and regulations, operational manuals, job descriptions, etc.), such as income transfer interventions or vaccination, and those that are less programmable, requiring customization of actions according to the attributes of the beneficiaries (e.g., child or elderly care services). The second dimension differentiates between interventions with significant interaction between frontline operators and beneficiaries, where even co-creation of the desired outcomes is required (again, as in care services), and interventions where interaction is minimal (again, as in cash transfers).

It is worth noting that these classifications coincide with general knowledge on policy implementation. Since Downs (1966), it has been postulated that the complexity of the functions and interventions carried out by a government agency is linked to the capacities it needs to develop. In Latin America, for example, it has been observed that the robustness of the information and monitoring systems of different ministries depends, in part, on the types of programs they must execute and the size of the executing organizations (Martínez Guzmán, 2020).

From these classifications, it is possible to identify which interventions have greater managerial and implementation complexities and which have fewer. Interventions such as income transfers present comparatively fewer challenges. If beneficiaries are correctly targeted, their implementation is fairly straightforward, with the participation of few actors in the implementation chain and limited interaction between providers and



This multiplicity of actors increases the risk of a breakdown in the implementation chain and also the likelihood of overlaps, contradictions, or inconsistencies in state action.

beneficiaries. This may explain their popularity in recent years, since even governments with relatively weak capacity have adopted them. By contrast, interventions such as care policies (for children, the elderly, people with disabilities, etc.) seem to present the greatest challenges, as they are interventions with diverse beneficiaries, heterogeneous tasks, intense interactions, and monitoring difficulties. In these interventions, the quality of services must be ensured while giving discretion to providers to interpret the needs of each beneficiary at any given time, with tailored and non-standardized actions, and without simple monitoring instruments administered by the central administration. These interventions usually involve multiple actors, from the central government (e.g., several ministries with responsibilities for children), subnational governments, social or community providers, and the families themselves, who are a key element in ensuring the desired results (such as early childhood development). This multiplicity of actors increases the risk of a breakdown in the implementation chain and also the likelihood of overlaps, contradictions, or inconsistencies in state action.

As will be discussed in Chapter 3, interventions with simple implementation chains may be an option to consider, but they are only available for certain types of objectives or policy areas. Based on the discussion above, governments could replace their care-oriented policies (or other equally complex policies, such as those aimed at local development or building community partnerships) with simple income transfers, with the beneficiaries procuring these services for themselves. As will be discussed in Chapter 3, this may be a feasible alternative in some contexts, but not in others, where, for example, the fragility of non-governmental providers would make it difficult to fully replace state provision. Thus, in general, governments must improve their capacity to implement those interventions that, without a clear alternative, require significant institutional and managerial challenges.

Therefore, the following subsection delves into the implementation challenges for a particularly demanding area of social policy from an institutional and managerial standpoint: early childhood development (ECD). ECD was selected for two reasons: (1) its relevance and added value in strategies to reduce inequality and (2) the magnitude of the implementation challenges it usually presents. As indicated in the

next chapter, there is evidence of the persistent effect of differences in childhood experiences on lifetime outcomes, which is a key driver of economic and social inequality. In turn, interventions for ECD are among the most complex to manage within social protection policies, because they combine heterogeneous beneficiaries, activities that cannot be planned in detail, intense interactions with users, and monitoring difficulties, attributes that are also shared with other social policy sectors (care for the elderly, care for youth at risk, promotion of women's financial autonomy, etc.); therefore, these interventions illustrate the importance of managerial capacities for achieving results. However, in Chapter 3, when addressing reform options in the face of these challenges, we will also present examples referring to other social interventions, and we will seek to draw lessons for social policies more broadly.

2.1. Implementation Challenges in Early Childhood Policies

International evidence concludes that early investments in child development bring benefits that accumulate throughout life and persist for future generations, making it one of the most cost-effective bets to break the vicious cycle of inequality (Clark et al., 2020; Irwin, Siddiqi, and Hertzman, 2007). Therefore, by 2020, around 70 countries already had a national ECD policy framework. It includes multisectoral packages of programs and services in a wide range of sectors, such as protection, health, nutrition, care, early education, and cognitive and emotional development (UNICEF, 2020). ECD policies have potentially positive impacts on other key dimensions of social inequality, such as the distribution of caregiving tasks and gender equity. It is worth noting that, even from a perspective limited to monetary poverty, poverty in the LAC region has a clear intergenerational bias: child poverty rates are much higher than those of the elderly (UNICEF, 2019). Therefore, addressing the situation of children is key to reducing inequality in the region.



Management capacity is associated with indicators of childhood development.

Even though in LAC countries the measurement of ECD indicators is not very systematic, there is evidence that institutional and management capacity is significantly associated with some of these indicators, such as survival. The indicators used to measure ECD are usually classified within five categories related to children's rights (UNICEF, 2018): (i) survival (mortality) and prosperity (growth, physical and mental health, psychosocial condition); (ii) learning (cognitive development, positive parenting); (iii) protection from violence; (iv) safe and clean environment; and (v) fair life chances (skills development). In LAC countries, there are sufficient data to analyze the statistical association with government quality only in the survival dimension. In this aspect, the statistical analysis (detailed in the annex) reveals that, even after controlling for traditional determinants of the infant mortality rate, such as female literacy, health spending, per capita income of the country, and urbanization, an improvement in management capacity (as measured by a bureaucratic quality index) is associated with a significant reduction in infant and under-five mortality rates.

The channel linking government quality to outcomes in ECD is the capacity to implement policies in an effective, equitable, and sustainable manner (Berlinsky and Schady, 2015). As will be described in the following paragraphs, the management challenges detected in this study have led, in several cases in the region, to duplication of effort, zero (or even negative) impacts for beneficiaries, and discontinuity of key services, among other important problems. Behind these failures are two crucial aspects for ECD policies, which are also relevant for other anti-inequality policies, such as elder care, employment, gender equity, and others, namely:²

- **How to manage integrated interventions.** ECD is an interconnected and sequential process, combining multiple attributes that must be present (prenatal care, nutrition, health, education, housing, water and sanitation, parenting, etc.). These aspects are traditionally the responsibility of different ministries, agencies, and levels of government, which makes it difficult to address the multidimensional

² Obviously, there are other factors relevant to the success of policies, such as political contexts, political will, economic and social contexts, budgetary constraints, and knowledge gaps (Atinc and Gustafsson-Wright, 2013; Vargas-Barón, 2015). In any case, the focus here is on institutional and managerial challenges.

needs of each child comprehensively. Even if each entity were to optimally provide their respective services, there are sequences and complementarities among the sectoral interventions for each child that demand a coordinated intervention with common design elements, to ensure the effectiveness and efficiency of interventions beyond what could be achieved by implementing fragmented sectoral interventions. For example, ECD intervention chains guarantee the comprehensiveness of benefits—that is, that all benefits reach all beneficiaries—if all programs use a single registry or a single database to avoid leakage and loss of beneficiaries in the transfer from one intervention to another. This ensures that benefits are not duplicated and that the set of benefits is adapted to the needs of each child (needs that may change and be incorporated little by little as information in the single registry).

- **How to manage quality services.** There is evidence that positive impacts of ECD interventions occur only when the latter are of high quality. Otherwise, their effect may be neutral or even negative.³ Ensuring quality is not straightforward, as many ECD interventions that require flexibility of implementation at the frontline are difficult to observe and monitor and are often provided by subnational governments or non-governmental organizations (NGOs) with disparate capacities. For ECD interventions—and those in other policy areas that must deal with wicked problems—to be effective, well-designed provider incentives and adequate investment in performance information is key to exercising good discretion.

Several factors condition the possibility of implementing integrated ECD policies. The classic organization of public administrations in vertical silos, each with its own mandates and resources, discourages horizontal coordination. Entities have little incentive to do so: coordinating could imply relegating their own priorities, sharing their resources, allocating them to interventions where the main political gain falls to others, and

³ For example, a recent evaluation of a preschool program in Tennessee, United States, found a negative impact on the later educational performance of beneficiary children (Durkin et al., 2022). Similarly, the universalization of child care in Quebec, Canada, led to a reduction in children's non-cognitive skills, and worse outcomes later in life, including an increase in criminality (Baker, Gruber, and Milligan, 2019). One possible explanation is that, if the services provided are of low quality, children's development is lower than it would have been without them (e.g., being left in the care of a relative).

other problems. This leads to the usual fragmentation of policies with an impact on child development, despite the fact that these policies share similar objectives and/or beneficiaries. For example, a programmatic review carried out in the United States detected 45 interventions from different departments and agencies only considering the federal level of government (GAO, 2012); in Argentina, at least 31 interventions of this type were identified, also only at the federal level (ONP-UNICEF, 2019). Coordination between levels of government is even more challenging given the autonomy of subnational governments to develop their own policies. Moreover, political incentives can make coordination more difficult (e.g., if governments of opposite political parties are involved).

The weak connection between strategic planning and budgeting also hampers comprehensiveness. Despite the increasing expansion of “integrated” ECD plans and comprehensive strategies in many countries, in practice it is difficult to implement them as written. One reason for this is that resources continue to be allocated according to organizational criteria,⁴ without a focus on the results that different entities could achieve if they worked together. In some cases, the lack of programmatic structure of the budget makes it impossible to discern the costs associated with the achievement of certain objectives. As presented in Chapter 3, there are countries (e.g., Peru) that, applying performance-based budgeting for ECD, seek to better align the resources with expected objectives, but in most countries this disconnect is profound (The Dialogue and UNICEF, 2021). This is consistent with more general analyses of budgeting in LAC countries (Guess and Savage, 2021).

Without coordination, this fragmentation in policy design is also expressed at the time of implementation. The experts’ perspective is that there is little exchange of information (e.g., on children in vulnerable situations and other such issues), sharing of resources (facilities, personnel, back office, etc.), harmonization of criteria or requirements, and shared approaches to specific cases. All this leads to overlap, inefficiencies,

⁴ Financing of ECD programs varies in the region. For example, in terms of child development centers (or similar), some governments cover all costs and offer services free of charge to vulnerable families; others provide infrastructure and allow centers to charge a differentiated fee; and a third group provides a subsidy per child served. In more simplified models, the government provides a cash transfer so that vulnerable families can pay for services from local providers.

inequities, gaps in coverage, and reduced impact of interventions. Uncoordinated interaction between interventions aimed at the same beneficiaries can reduce their impact. For example, there is evidence that a parenting support home visiting program reduced the effects of a simultaneous preschool access program because they overlapped (Rossin-Slater and Wüst, 2020). From the beneficiaries' perspective, the absence of integrated approaches is seen in the frequent interruptions or disruptions in coverage at "transition" ages (e.g., between care and educational services),⁵ as well as in the difficulties involved in navigating programs and services with different administrative and eligibility requirements (Clark et al., 2020; IDB, 2019; ODI, 2012; The Dialogue, 2020).

The challenge of ensuring quality services depends on two main characteristics of service providers: their capacity and their intrinsic incentives. These attributes often conflict with each other. In ECD, it is often necessary to provide personalized services and, therefore, to grant a significant degree of flexibility to the providers. For example, caregivers must be able to determine a child's specific needs at any given time and act on them, even if they are the purview of another provider or area of government or fall outside of the provider's scheduled activities. This is common in social programs that deal with vulnerable populations with wicked problems (multiple interdependent needs), whether they are children, adolescents, or older adults.⁶ Such discretion may be necessary to ensure quality services, but it can also backfire if frontline staff lack the skills or motivation to apply it.⁷ These attributes may be in tension: the model of service delivery by families and community organizations is often characterized by high motivation and commitment but less professionalization, while the state may have greater capability to deliver



In early childhood development, it is often necessary to provide personalized services and, therefore, to grant a significant degree of flexibility to the providers.

⁵ For example, in Colombia, the shift from daycare to preschool implies that children receive less food support (IDB, 2019). Since, in turn, the day becomes shorter, parents are encouraged to delay entry into preschool. These incentives could be realigned with greater coordination of policies and services for each stage of early childhood development, considering the transitions between the different stages.

⁶ Lowe (2013) notes the paradox of performance management systems that establish precise metrics for social workers and sometimes discourage activities that are needed in specific cases but not measured by the system. For example, he notes that social workers dealing with at-risk youth must establish a personal bond of trust to effectively support them, but such flexibility is generally not encouraged or enabled.

⁷ There is extensive literature on the role of "street-level bureaucrats" (Lipsky, 2010) in policy implementation, which is beyond the scope of this document. These are the personnel who interact directly with the citizens who receive public programs and services and who, depending on the type of intervention in question, have levels of discretion in their execution for each specific situation. In social policy, it usually includes teachers, social workers, nurses, and others.

services but may have less intrinsic commitment to quality care. In general, the professionalization of ECD services in the region is low, with a significant share of services being provided informally by members of the community or the neighborhood who lack professional training, as exists in other sectors (health, education). Even when there are more established NGOs, their institutional capacities and sustainability are heterogeneous. In turn, these are services in which the providers' performance is not easy to observe, measure, or monitor, due to territorial dispersion and the scarcity of available indicators.

Even if the budgetary and human resources were available to provide direct state provision, this model also presents challenges. The main advantage of the direct service delivery modality (through state child development centers or home visits by public officials) is that it allows for stricter monitoring and quality control, while the indirect modality tends to have greater coverage⁸ (due to the existence of community organizations even in areas of weak state presence), but less capacity to set common quality standards. Some models may work better than others in different contexts, although the evidence is incipient. For example, there is evidence that family-to-family support and participatory learning derived from community involvement are less effective in settings with high urban migration and informal settlements (Clark et al., 2020). Vulnerable or at-risk children often require more complex interventions, which implies a higher degree of staff specialization.

The challenge of improving quality is also compounded by the limited development of systems for data collection, progress monitoring, evaluation of results, and timely and transparent reporting to facilitate both the supervision of interventions and follow-up of providers' performance. For example, in LAC countries, only Colombia and Jamaica have an ECD report in the Systems Approach for Better Education Results- Early Childhood Development (SABER-ECD) system implemented by international agencies to provide information on key ECD indicators and identify opportunities for ECD policymakers to implement more effective

⁸ Direct state provision is also likely to be more expensive. In Ecuador, for example, as of 2019 the cost of the 131 state-provided child development centers was three times higher than that of the more than 1,800 indirectly provided centers, resulting in lower per capita spending on care in centers operated through agreements (Vásconez, Rojas, and Rodríguez, 2020).

systems of care. In most countries, although data collection systems exist, they do not necessarily include programmatic information; at most, they include operational information on ECD interventions (which is consistent with a public sector organizational model centered on fiduciary control, and focused on verifying compliance with regulations, technical standards, or implementation guidelines). Although, from a design point of view, several ECD programs detail the expected outcomes for service beneficiaries, they rarely include means of verification to ensure delivery and beneficiary satisfaction.⁹ Without this information, policymakers and public sector managers cannot monitor either the performance of their staff or the effectiveness of interventions. In turn, empirical evidence collected through evaluations of ECD programs is usually based on small interventions, whose effectiveness when scaled up is not known. For all of the above, both for public policy decision makers and beneficiaries (who must decide how and which services to access) there are important information challenges regarding the quality of the available interventions, as well as the performance of the service providers.

In summary, the integration and quality of ECD interventions appear as two key challenges that must be addressed by strengthening public management. This includes the way that interventions are planned and budgeted; horizontal and vertical coordination mechanisms; management arrangements with NGO service providers; the capacity to monitor service delivery and ensure compliance with regulations and quality standards; the availability of personnel trained in the key dimensions of ECD; and the ability of citizens to demand quality services based on the information received, among other elements. As shown by the cases reviewed in this chapter, these management challenges have led to duplication of effort, failure to take advantage of synergies, low (or no) impact of interventions, and discontinuity in services offered to beneficiaries in need. Chapter 3 presents strategies and options for addressing management challenges. In particular, it focuses on possible reforms of the incentives of actors (e.g., to achieve coordination with others, to provide quality services, etc.) and

⁹ In Ecuador, for example, the technical standard of the Ministry of Economic and Social Inclusion (MIES), which regulates child development centers, includes the services provided free of charge according to the prioritized dimensions of children's development. However, it is difficult to monitor, in the more than 2,000 centers, the results, satisfaction, and even compliance with free services for vulnerable families, and sometimes cases of co-payment have been found (Vásconez, Rojas, and Rodríguez, 2020).

of the information available to decision makers (e.g., to monitor service delivery, to make evidence-based decisions, etc.).

Finally, it should be noted that these challenges are replicated in different areas of social policy. Many dimensions of social inequality (e.g., gender inequalities, young people who neither study nor work, care for the elderly, lack of local development in depressed areas or informal neighborhoods, among others) also require complex interventions, with the participation of various public and community actors, and when quality is difficult to measure, monitor, and promote. Therefore, several of the challenges illustrated by ECD should be considered relevant to the other dimensions mentioned.

CHAPTER

03

Reform Options for Managing Policies to Combat Inequality



STATE CAPACITIES AND WICKED PROBLEMS OF
PUBLIC POLICY: ADDRESSING VULNERABILITIES
THAT AFFECT HUMAN DEVELOPMENT

03

Reform Options for Managing Policies to Combat Inequality

It is possible to address the diverse challenges of integrated interventions and high quality of services through different institutional and managerial reforms. This chapter proposes 12 possible reform options. They have been identified using the following methodology:

- A review of the literature on social policies in the LAC region and globally, with a special focus on those that are more complex to implement (e.g., care and ECD policies, but also more general social, educational, and health services).
- Dialogues and interviews with officials and subject matter experts.
- More general knowledge about managerial challenges in other public policy areas that are relevant to social policy.

However, there is no “silver bullet” option, since each one introduces its own challenges, and can be more or less relevant in different contexts.

Therefore, this chapter should be seen as a portfolio of reforms that each decision maker and public manager should analyze in accordance with the demands and possibilities of his or her particular situation. The presentation of the challenges inherent in each reform alternative is not intended to discourage managerial innovation, but, on the contrary, to contribute to its successful implementation, so that the risks revealed by international experience and broader knowledge of public administration can be anticipated and mitigated. Chapter 6 (which contains the conclusions) provides some preliminary guidance in this regard.

The reform options have been grouped on two main pillars in which institutional frameworks can have an influence: the *incentives* they generate and the *information* they make available. As seen in the previous chapter, the organizational design of the government in the region

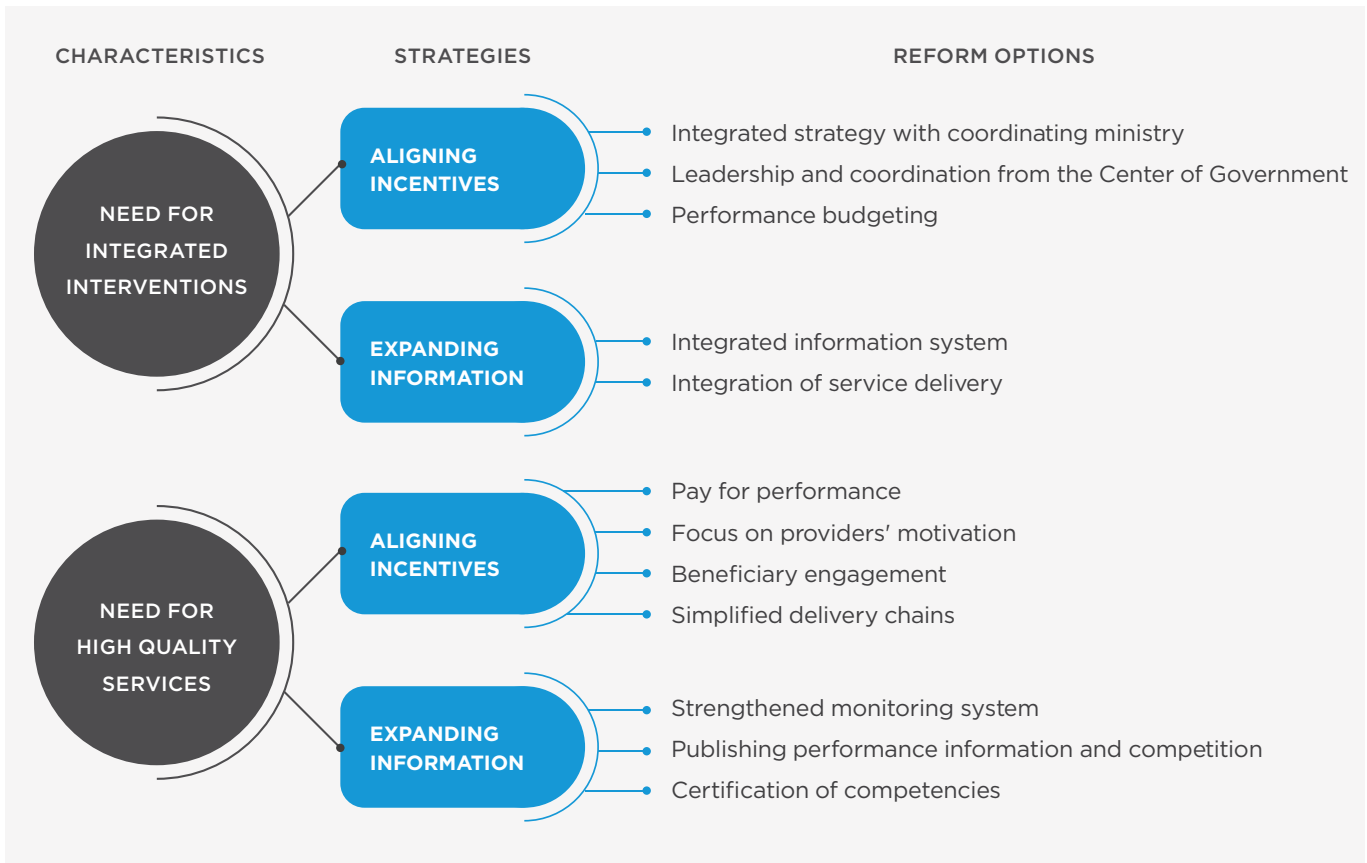
does not create the conditions for the various agencies in charge of the programs that make up social policy to have an interest in subordinating their own priorities to a coordinated comprehensive strategy. In turn, service providers may have divergent interests and preferences vis-à-vis decision makers and beneficiaries. Therefore, *changing the incentives* of these actors can contribute both to facilitating a comprehensive approach to interventions and to improving the quality of services.



A change in the information available and accessible to different stakeholders can contribute to changing accountability functions.

On the other hand, the previous chapter also showed the challenges faced by decision makers in terms of information on the type of interventions required by each beneficiary and the quality of the services produced, as well as the limitations of the data received by beneficiaries on access to services and the quality standards that they can require. A change in the information available and accessible to different stakeholders can contribute to changing accountability functions. Therefore, *expanding the information* available to decision makers as well as to beneficiaries constitutes the second pillar of reforms. Figure 2 summarizes the strategies and the reform options for implementing them.

FIGURE 2 ▶ Reform Options to Address Management Challenges



Source: Authors' elaboration.

3.1. Changing Incentives to Stimulate Coordination

Reform Option 1: Integrated Strategy with the Coordinating Ministry

A common tool to motivate coordination is the establishment of an integrated strategy led by a coordinating ministry. This type of strategy seeks to bring together the range of interventions already in place, as well as to fill gaps not yet addressed. For the strategy to be effective, the coordinating entity should have sufficient authority (political, planning, budgetary, etc.) to align the incentives of all agencies to participate in

a coordinated approach (and avoid, for example, competition among them for resources). In the area of care, in 2016 Uruguay established the National Integrated Care System (SNIC), with the aim of articulating the interventions of different entities aimed at dependent people over 65 years old, children from 0 to 3 years old, and people with severe disabilities. The SNIC was formalized by an act of Congress, creating an interministerial body (the National Care Board)¹⁰ to set its strategic direction. This Board is chaired by the Ministry of Social Development, where the executive body (the National Care Secretariat) also operates, reflecting the key role of this ministry in the overall coordination of the SNIC, leveraged by the existence of a law that supports it and also by the participation of key entities of the CoG (Planning and Budget Office of the Presidency, Ministry of Economy and Finance) in the Board, in addition to the sectoral entities to be coordinated. The law also established a Care Consultative Committee, made up of academia, workers' representatives, civil society, and the private sector involved in the provision of ECD services. This coalition with NGO actors also reinforces the pressure to align institutional incentives. In the preparation of the national budget, the Board forwards to the Executive the budget allocated to the SNIC within the budget of each entity that comprises it, which also contributes to aligning the incentives of the actors. This model, based on the constitution of a coordinating agency, maintains the incentives of each agency related to the execution of the interventions under its responsibility—all agencies maintain their functions and resources for the delivery of the services they are responsible for providing—but substantially modifies the accountability relationship. Agencies move from being accountable for the quantity and quality of the services provided—and the budget executed—to accountability that measures how these services contribute to the goals established for the SNIC. This is reinforced by the fact that the Board defines the budget proposals for each agency within the SNIC.

Integrated strategies are growing strongly, especially in the area of early childhood. The Chile Grows with You (Chile Crece Contigo, or ChCC) program is a pioneer case highly valued by experts and in the specialized

¹⁰ According to the law creating the National Integrated Care System (SNIC), the Board is made up of the Ministries of Social Development, Economy and Finance, Labor, Education and Health; the Planning and Budget Office of the Presidency, and other autonomous agencies.

literature, which has yielded positive impacts on ECD indicators (Clarke, Cortés Méndez, and Vergara Sepúlveda, 2020). This comprehensive child protection strategy is coordinated by the Ministry of Social Development and was established in 2009 by an act of Congress, which (as in the case of SNIC) strengthens its institutional continuity. As of 2021, ChCC was comprised of nearly 20 programs and interventions from different entities (Ministries of Health and Education, National Board of School Aid and Scholarships, National Board of Kindergartens, Integra Foundation), in addition to the Ministry of Social Development. Since the creation of ChCC, other countries in the region have established similar integrated strategies, such as the National Network of Child Care and Development (Red Nacional de Cuido y Desarrollo Infantil, or REDCUDI) in Costa Rica, Uruguay Grows with You (Uruguay Crece Contigo) (as a subsystem of SNIC) and the Zero to Always Strategy (Estrategia De Cero a Siempre) in Colombia (De Achaval and Aulicino, 2015). At the subnational level, in 2014, the Argentine province of Salta established the Ministry of Early Childhood. Although it had no implementation role, it sought to coordinate childhood programs of entities such as Education and Health.

One challenge of these integrated strategies is their implementation and effective “landing.” According to one interviewee, some countries have embarked on developing these comprehensive approaches to early childhood, but without basic planning and programming skills, which reduces their ability to coordinate and seek efficiency through multidimensional interventions. In this sense, several strategies merely state general principles, but without defined goals and associated deliverables (The Dialogue, 2020). In addition, with a single exception, there are no real integrated early childhood budgets in the region (as detailed below), despite the fact that budget allocation is the strongest incentive within public organizations.¹¹ An effective strategy requires an alignment of planning and budgeting, tools that in several LAC countries are conceptually and organizationally separate and weakly linked.¹² In

¹¹ In successful cases such as Chile Crece Contigo (ChCC), interviews have revealed the key role of the Ministry of Finance in effectively achieving coordination through the budget, especially in the initial stages.

¹² This function of alignment between planning and budgeting has begun to be developed by some ministries of finance in the region due to the need to coordinate increasingly multisectoral public programs as described in Arenas de Mesa and Mosqueira (2021).

turn, and especially in federal countries, this landing should also reach subnational levels, which are often responsible for service provision and where bureaucratic capacities tend to be weaker or more heterogeneous.¹³

Another challenge mentioned by several interviewees is the difficulty for the coordinating entities of effectively aligning government action in a cross-cutting manner. Often, coordinating ministries are not sufficiently empowered to guide the actions of other ministries of equal hierarchy that also have greater implementation capacities. This is a relatively frequent phenomenon in coordinating ministries, not only in the social area (Alessandro, Lafuente, and Santiso, 2014). In some cases, the coordinating entity is not even a ministry, but a lower-ranking office. For example, in Argentina, the National Strategy for Early Childhood First, of 2019, established the Undersecretariat for Early Childhood, a third-level entity, as the implementing authority. In such cases, effective coordination capacity is further reduced. In general, even when integrated strategies exist, “something that is repeated in the different countries is the lack of clarity of the lead agency and, in the cases where there is a defined institutional framework, there is little autonomy and political power, and few resources” (The Dialogue, 2020: 5). Therefore, if this reform is chosen, clear leadership of the coordinating body must be ensured.

This alignment challenge is especially noticeable if a broad definition of the ministries to be included in an integrated strategy is adopted. Often, “social cabinets” are made up of the entities traditionally linked to social policy, such as Social Development, Health and Education. But when seeking to address deprivation in vulnerable geographic areas or working with specific age groups (e.g., unemployed youth), more structural solutions may require the involvement of ministries such as production, labor, infrastructure, housing or similar. In such cases, the challenges for a coordinating ministry of social development seem even more difficult, since actions of practically all ministerial portfolios must be linked, including some with high political and budgetary weight (Repetto, 2010).

¹³ An additional challenge in federal countries mentioned by one interviewee is that the prioritization of an issue by the federal government, expressed as an increase in budgetary resources, sometimes implies a reduction in investment in that issue by subnational governments. Thus, the net effect of prioritization is attenuated.

Reform Option 2: Leadership and Coordination from the Center of Government

A second reform option seeks to circumvent the aforementioned difficulty by establishing the coordination in the Center of Government (CoG). The CoG comprises the units of direct support to the president, which do not play a sectoral implementation role but rather a cross-cutting planning, coordination and monitoring role. It usually includes secretariats or offices of the Presidency or the prime minister, chiefs of staff, presidential advisors, and other similar agencies and officials (Alessandro, Lafuente, and Santiso, 2014; Shostak et al., 2023). Because of their proximity to the head of the executive branch and their neutrality among sectoral ministries, the entities that comprise the CoG can potentially serve more effectively as coordinators that can effectively incentivize the alignment of the ministries and agencies. In fact, it is common to several of the most relevant early childhood strategies that, in their initial stages, they had formal or informal leadership from the Presidency (Vargas-Barón, 2015). In Chile, despite the prominent role of the Ministry of Social Development, prioritization by the Presidency was an important factor in its initial momentum (it is worth noting that the then-president was a pediatrician). The CoG has also encouraged these initiatives in countries such as Colombia (where the Intersectoral Commission for Early Childhood, coordinator of the “De cero a siempre” initiative, is based in the Presidency), Costa Rica, and Uruguay. Outside the region, the case of New Zealand is noteworthy. There, the Prime Minister is also the “Minister for Child Poverty Reduction,” precisely to prioritize this effort and favor the alignment of the ministries involved. Brown, Kohli, and Mignotte (2021) indicate that, normally, the responsibility for child welfare falls under ministries of education, health or social welfare, but if it is a priority for a government leader who wants to achieve rapid progress, then it makes sense to establish a designated unit within the CoG.



It is common to several of the most relevant early childhood strategies that, in their initial stages, they had formal or informal leadership from the Presidency.

This alternative presents its own challenge: how to sustain prioritization from the CoG. Indeed, CoG units and officials are often pressured by the multiple priorities, urgent problems, and crises that affect presidents and prime ministers. Although the delivery units¹⁴ or similar offices that have

¹⁴ Delivery units are small, empowered, highly technical teams charged with supporting the achievement of cross-cutting priorities (see Lafuente and Gonzalez, 2018).

been created in recent years in several countries seek to maintain the focus on the government's strategic priorities (Barber, 2007), and in some cases have achieved remarkable results, it is also true that many CoGs in the region have high turnover of officials, in addition to the need to attend to changing circumstances. In Peru, for example, the Delivery Unit of the Presidency of the Council of Ministers made the reduction of chronic child malnutrition one of its priorities and sought to align the interventions of the multiple national and subnational entities involved. Despite the progress made, political instability and turnover of officials prevented the continuity of its efforts. On issues such as social inequality and ECD, which require sustained momentum (and usually several presidential terms), ensuring the focus of the CoG is not a simple task. One option to consider is the formation of broad coalitions with civil society and the private sector to sustain pressure and incentives for results even when CoG teams change. In turn, the formalization by law of certain key planning, coordination, and monitoring processes can contribute to institutionalization, as occurred in the United States with the Performance and Results Act of 1993 and its update in 2010, which consolidated certain management practices led by the CoG despite changes in government. Finally, it is possible to establish the requirement that, in the policy design process, ministries and agencies must take a systems perspective (see Box 1). This also de-emphasizes the CoG's role in intervening in multiple policy areas, as it transfers the obligation to adopt an integrated approach to the entities themselves.

▶ BOX 1.

Policy Design from the Citizen's Perspective Using a Systems Approach

The CoG can promote a systems approach to policy design based on detailed information on the beneficiary's perspective. This approach is gaining popularity in multidimensional policy areas, where the impact on individuals or communities depends on many factors that need to be addressed holistically. Several areas of social policy have this characteristic. One of them, as discussed in Chapter 2, is early childhood development (ECD).^a In this regard, a study by the Inter-American Development Bank (IDB) postulates that ECD policy analyses have generally been programmatic (*What is the impact of program X on variable Y on child development?*), whereas the systems approach involves understanding how different interventions (health, education, social protection, etc.) from different levels of government interact to create outcomes (Kagan et al., 2016). Therefore, rather than planning specific interventions, change should be addressed systemically, considering how each initiative interacts with the others (OECD, 2017a).

This option implies setting aside institutional boundaries and thinking about the issue from the perspective of the beneficiary's needs. In early childhood, for example, a recent review by the British government found that the supply of existing programs and services requires parents to navigate a complex web of services implemented by different ministries (Whitehead, 2021). In other words, the supply is designed considering the convenience or perspective of the implementing institutions rather than the actual experience of those who use the services.^b Moreover, this offer is the sum of successive initiatives promoted by different entities over the years and does not reflect a coherent design that takes into account the comprehensiveness and interconnections of the ECD. Therefore, there may be gaps in coverage of services, duplication of tasks, unverified assumptions, and other consequences that reduce the impact

(continues on the next page)

Box 1 (continuation)

of interventions. Mapping the real user experience makes it possible to rethink the existing menu of programs in its comprehensiveness.

Other approaches share this holistic perspective, such as “collective impact” or “place-based” approaches. These approaches seek to combine the interventions of multiple entities to address complex, multi-causal social challenges in an integrated manner, usually within a limited geographic area (Crew, 2020). For example, Performance Partnership Pilots (P3s) for “disconnected youth” in the United States give local decision makers greater flexibility to implement and integrate multiple programs and services funded by different public agencies for out-of-school and out-of-work adolescents (Lester, 2016). Similarly, several initiatives targeting the most at-risk early childhood (such as Sure Start in the UK or Promise Neighborhoods in different U.S. cities) aim to coordinate numerous interventions (health, education, housing, community development, etc.) in the most underserved areas, thus ensuring a collective impact in the first years of life. An example in the LAC region is Jamaica’s Community Renewal Programme, an integrated, multilevel intervention deployed in 100 vulnerable areas of the country, with interventions aimed at economic growth, physical and social transformation, security, and youth development. Due to its cross-cutting nature, the CoG (Planning Institute) coordinates the program.

Systems approaches present their own implementation challenges, which correspond to the sectoral organization of the public sector. First, it is easier to map the experience of beneficiaries than to redesign the supply of services from scratch. In practice, existing organizations and programs tend to endure because both the beneficiaries of such interventions and their implementers have incentives to defend their continuation. In turn, services must continue to be provided; they cannot be abruptly discontinued. In addition, there are several reasons (division of labor, budget management, political and legal responsibility, accountability, etc.) that give meaning to the “vertical” ministerial structure of public administrations. Secondly, phenomena such as inequality arise from multiple interacting systems. Even if ECD policies are reviewed systemically, they also pertain to (and have an impact on) other

(continues on the next page)

Box 1 (continuation)

systems. Parental leave policies are relevant for ECD, but also for gender equality and the labor market. Therefore, it is not possible to decide about such policies only from an ECD perspective, as the other systems at stake must also be considered. Furthermore, the entities providing ECD services (e.g., health centers) also provide other services. Therefore, it is biased to analyze only their specific contribution to the “ECD system.” Finally, it may be challenging to evaluate integrated policies, as it may be more difficult to isolate the specific effect of the individual interventions that comprise them.

^a At the other end of life, aging is also a multidimensional issue, impacted by numerous and varied disciplines and policy areas: health care, nutrition, housing, socialization, lifelong learning, mobility, etc. (OECD, 2017a).

^b A variant of this option is to review the “system” from the perspective of those who *provide* the services. For example, the British government undertook the exercise of rethinking the education system from the teachers’ perspective and found the existence of a complex web of services, information, and requirements from the central government, local governments and other actors, which made it difficult to prioritize teaching tasks (Hope and Knight, 2021). The redesign adopted on the basis of this assessment made it possible, for example, to reduce the number of applicants who drop out of the process before becoming teachers.

In some cases, a coordinating sectoral ministry may sustain the initial impetus from the CoG. In Argentina, in 2016, the Chief of Cabinet of Ministers established an interministerial committee to address the problems of young people in vulnerable situations and signaled the priority of this issue in the presidential agenda. As one of its lines of work, in 2017 the National Plan for the Prevention of Unintended Pregnancy in Adolescence (ENIA Plan) was formulated, coordinated by the Ministry of Social Development, with the inclusion of actions by that entity, the Ministries of Health and Education, and provincial governments. Despite the fact that the Chief of Cabinet later discontinued his role in the coordination of sectoral cabinets, the ENIA Plan continued, even after the change of government at the end of 2019. The active consultative participation of external actors (international agencies, NGOs, etc.) may have been a contributing factor in the Plan’s sustainability. A recent evaluation found that the Plan had had positive impacts on reducing teenage pregnancy (Vázquez, 2023).

Establishing collective responsibility for achieving cross-cutting objectives could be an important innovation. Typically, integrated strategies define goals that correspond to the ministries and agencies involved. However, determining who is responsible for achieving the overall goal is a challenge. The most common option is for primary responsibility to lie with one ministry, but this tends to discourage collaboration by the other agencies, lowering their incentive to coordinate. New Zealand adopted a novel approach to 10 cross-cutting priorities, several of them in the social policy area (increasing early childhood schooling, increasing secondary school completion, reducing long-term unemployment, etc.). In this case, all participating ministries were given collective responsibility for the achievement of the objectives. The government decided to publish the targets and to report periodically on progress to encourage the commitment of the ministries.¹⁵ Obviously, the approach presents the risk of punishing entities that have performed well if others have not. However, experience suggests that when the group of ministries is small, this risk is limited; in fact, New Zealand achieved significant results on the objectives mentioned above. In contrast, on those objectives pursued through intervention of many ministries, the risk increases. Thus, also in the case of New Zealand, the results were less outstanding (Scott and Boyd, 2017). In addition, the CoG acted as coordinator or facilitator in the inter-ministerial groups established for the 10 priorities mentioned, thus helping to unblock obstacles to working together and sharing information on good management practices.

Reform Option 3: Performance-based Budgeting

Faced with the challenges mentioned above, a third complementary option consists of establishing a results-based budgeting framework. In this way, the allocation of resources acts as an incentive for ministries to align behind the prioritized cross-cutting objective. A case of interest is Peru's Performance-based Budgeting for Early Childhood Development

¹⁵ Whenever the focus is placed on results, which by definition do not depend entirely on government actions, there is a risk of punishing entities for factors beyond their control. The alternative is to focus on *outputs* that depend on government action, but then the risk is to deliver goods or services that do not truly solve problems ("successful failures", in Andrews' terms, 2021). When possible, one option is to focus on products for which there is a proven causal connection to outcomes (e.g., the link between vaccination and immunization), but this option is not always available.

(Presupuesto por Resultados para el Desarrollo Infantil Temprano, or PpRDIT) (The Dialogue and UNICEF, 2021). Initially, outcome targets were set for 2021 and 2026, and then the outputs required to achieve them were determined, so that each output would have a set of specific interventions from different ministries (seeking joint delivery if those ministries share beneficiaries or have similar or complementary purposes; for example, if they are offered in the same center). Governance over this process is the responsibility of the Ministry of Development and Social Inclusion, although in close coordination with the Ministry of Economy and Finance, due to its specific role, technical specialization, and empowerment within the government. This Ministry, in turn, has enjoyed a stability in recent decades that other entities in the Peruvian government have not; according to one interviewee, the continuity of the technical staff has been a relevant factor in enabling developments such as PpRDIT.

Performance-based budgeting (PBB) can contribute not only to aligning resource allocation with government prioritization, but also to changing a variety of public management practices. PBB provides valuable information for different stages of the policy and budgeting cycle, which includes program implementation (Ho, 2018; Joyce, 2003). It can enable smarter application of resources across organizational units and subunits during implementation; foster more informed dialogues on performance achieved and areas for improvement; incorporate outcome objectives in contracting for services; and encourage coordination across entities to reduce duplication of effort, among other possible actions to improve management.



In contexts where evidence is scarce or contradictory, making this attribution is not easy, especially for objectives of a certain complexity (such as that of enhancing ECD, which is a multidimensional phenomenon).

This option is also not without its challenges and, in fact, its effective application is limited in the region. First, it requires very robust evidence to construct theories of change of the results to be achieved. In other words, it is necessary to determine to what extent different interventions contribute to a shared objective, so as to allocate resources according to these contributions. In contexts where evidence is scarce or contradictory, making this attribution is not easy, especially for objectives of a certain complexity (such as that of enhancing ECD, which is a multidimensional phenomenon). Second, and connected to the above, there is a capacity challenge, both in terms of the budget authority and in the executing ministries (e.g., to build logical frameworks, distinguish outcomes from

outputs, identify causal chains, etc.), so this may not be a feasible option for weaker administrations. Third, while PBB models assume that entities that are not contributing to the achievement of results should be affected in the next budget allocation, this is a politically complex action, as it may imply, for example, removing funding from popular programs or those with well-organized beneficiaries. It is also challenging from a conceptual point of view, since it implies assuming that the identification of causal relationships between resources, activities, and results is easily identified in advance. Therefore, in practice, this is often not applied as theory would indicate. In the area of children, only the Peruvian case presents an integrated budget (The Dialogue and UNICEF, 2021).¹⁶

3.2. Expanding Information to Encourage Coordination

Reform Option 4: Integrated Information System

One possible mechanism to facilitate coordination and reduce the need to monitor the services provided is to precisely identify the requirements of each beneficiary and thus be able to guide the actions of each entity. Key services to respond to inequality are more useful for some beneficiaries than for others, depending on the service and the varied situations of the recipients. Uncertainty with respect to this heterogeneity weakens coordination since the actors do not have enough information to allocate resources among themselves. Uncertainty can be overcome by the judgment and discretion of the providers. But if their training is weak and the fiduciary environment does not allow delegation of discretion, this solution is difficult. Another alternative is to collect systematic information on each beneficiary. Integrated social information systems,

¹⁶ This does not include cases where budget expenditures for children are tagged (e.g., for Argentina, UNICEF, and ONP, 2020) but where budget allocation is still allocated by ministry/agency rather than by shared purpose or outcome.

which combine multiple databases, are already well developed in the region. These systems are aimed at targeting and identifying beneficiaries, following them, and monitoring and evaluating interventions, among other tasks (Azevedo, Bouillion, and Irarrázaval, 2011). In turn, they provide a multidimensional perspective of the universe of people they include. A coordinating entity could indicate to the different ministries and agencies which actions are required for each individual or household, and in what sequence, according to their specific needs. In this way, quality and timely information on beneficiaries would help the comprehensiveness of social interventions at the time of their implementation.

An example to highlight is nominalized monitoring systems in early childhood policies. In Colombia, the Early Childhood Integral Development Follow-up System (SSDIPI), formerly known as the Child-to-Child Follow-up System, is built using information from the interventions that make up the Integrated Care Route that each child should receive, as defined by the Intersectoral Commission for Early Childhood. This makes it possible, for example, to detect if a certain benefit has not yet been delivered as planned, from which a timely alert is generated. Meanwhile, the Ministry of Early Childhood (2014–19) of the Province of Salta, Argentina, implemented a dashboard aimed at measuring prenatal variables, parental capacities, and child development (communication, socio-individual, motor, problem solving), where it detailed the types of actions required for each case (visits by health agents, parenting workshops for parents, personalized training activities for children, etc.). Thus, in its coordinating role, the Ministry of Early Childhood sought to guide the executing ministries to maximize the impact of their respective actions. Outside of social policy, in recent years, several countries have made progress in defining national data strategies or policies, with a governing body (Chief Data Officers or similar), to promote interoperability of information among agencies.

This option presents challenges in the periodic collection of information and in the real capacity to put it to use for decision making and implementation of interventions. First, for the dashboard to allow coordination and follow-up, continuous updating of information is required. This can be achieved if service providers share the data that they each generate or collect in the same system, assuming that the technological capabilities and institutional frameworks are in place to

enable such interoperability.¹⁷ Thus, this reform complements some of the other reform options previously mentioned, such as the one referring to the CoG. Additionally, in the case of more advanced information, such as that collected in Salta, this implies periodic visits to households, with the associated costs and challenges, especially in remote areas. However, the costs of this collection may be lower than those incurred to hire high-capacity service providers and provide them with wide discretion in the allocation of benefits to households according to their needs. Second, the coordinating body administering the dashboard must have the real capacity to guide the actions of the implementing ministries according to the needs identified through the monitoring. Given the coordination challenges discussed in the first reform option, this can be a major difficulty, as these ministries (education, health, etc.) manage their own resources according to their institutional prioritization, while the coordinating bodies generally lack direct implementation capabilities. This tension—between the traditional sectoral imperatives of public organization and the demands of the multidimensional and complex challenges of inequality—is repeated in all of the strategic options.

Reform Option 5: Integration of Service Delivery

The fragmentation of programs and services poses a challenge in terms of information for citizens as well. As previously indicated, the multiplication of social services provided by different entities, with their own and variable eligibility requirements, presents users and beneficiaries with the challenge of navigating a complex bureaucratic maze. This administrative burden (Herd and Moynihan, 2018) that states impose on citizens can limit the effectiveness and impact of interventions. Therefore, reducing information costs for citizens, or simplifying the information they require to access programs, seems to be a promising avenue to improve interaction between social providers and beneficiaries. This is even more

¹⁷ Even under the assumption that the government has effectively identified and registered all providers. According to some interviewees, this is not always the case for food services, early childhood services, etc. It is worth noting that, in some cases, governments monitor a limited set of indicators, arguing that this allows them to get closer to the more substantial objective of interest. For example, in Scotland, compliance with children's dental check-ups was monitored as a proxy indicator on parenting practices (OECD, 2017a).

the case when such administrative burdens tend to fall especially on the most disadvantaged individuals and families (Auyero, 2012).

One option for mitigating the information burden is providing social services in integrated centers. First, these spaces can facilitate beneficiaries' access to services by minimizing the information burden. Second, they make it possible to exchange data between the providers of the different services, since the services are brought together in the same center. In this way, the situation of each individual or family can be considered holistically, considering the multiplicity of dimensions that affect their well-being, rather than resorting to fragmented interventions that only consider a sectoral or disciplinary perspective. For example, in the area of children, the British government promotes a “hub” approach (both virtual and physical) to connect parents with the variety of services that their children should receive in their early years (civil registration, health, education, etc.), as well as to provide them with comprehensive counseling (UK Department for Education, 2021). In turn, as not all centers can include all the necessary specialties and disciplines (e.g., in rural areas), these hubs are intended to be networked.



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Several factors appear to impact the likelihood of achieving true service integration. With respect to early childhood centers, for example, several factors have been identified as contributing to effective implementation (Ionescu, Trikić, and Pinto, 2019), namely: the existence of a shared vision with respect to the objectives to be achieved; identifiable leadership to implement the vision; staff training (which may include shared professional competencies); the types of services to be integrated, in response to real demands of the population; communication and information exchange protocols among participating areas; and the ability to allocate resources in an integrated manner. Evidently, the alignment of such factors seems to require leadership from the CoG to generate incentives among the participating areas.

In any case, several experiences with this type of center have presented difficulties (Bernal, 2015), suggesting the need to clarify their organization and functions.¹⁸ First, one of the main challenges facing integration is merging services provided by agencies with their own objectives and resources, and which therefore lack incentives to hand these over to initiatives that are not under their direction. Second, as one interviewee noted, if centers with a range of social services become the only interface for beneficiaries, they may become overwhelmed and ineffective. For example, if when attending childhood issues these centers must receive families, diagnose specific services they might need, intervene if necessary or refer them to other areas, while ensuring timely attention, and so on, the chain of services is likely to fail at some stage. Moreover, as another interviewee pointed out, since the vast majority of children already attend schools and hospitals, it is worth considering in which contexts these centers make a difference and do not imply additional costs (in terms of capital expenditure for the construction of infrastructure and in terms of human resources). They might be more useful, for example, when they are specifically aimed at children in vulnerable situations who do not yet attend school, as is the case of the Early Childhood Centers for children aged 0 to 4 in the city of Buenos Aires (UNICEF, FLACSO and CIPPEC, 2016).

¹⁸ A large number of LAC countries have established children's centers, albeit with different characteristics, whose aim is the comprehensive development of children (Aulicino and Díaz Langou, 2015; Araujo, López Boo, and Puyana, 2013). However, most of these spaces are managed by a single institution (in general, ministries of human development or similar entities), and intersectoral synergies are limited. An in-depth case study conducted in Buenos Aires reveals that there are referrals and exchanges of information between these centers and health and education entities, but they take place because of individual initiatives rather than a systematic policy of service integration (UNICEF, FLACSO, and CIPPEC, 2016).

3.3. Changing the Incentives of Service Providers

Reform Option 6: Pay for Performance

A well-known mechanism for modifying the incentives of service providers is to link financing to performance. In the LAC region, an intervention designed with performance incentives and positive impacts on child health is Argentina's Plan Nacer (later called Plan Sumar) (Cortez et al., 2012; Gertler, Giovagnoli, and Martínez, 2014). The Plan included these types of incentives at two levels:

- In transfers from the federal government to the provincial governments, based on the achievement of goals agreed upon by both jurisdictions, including output indicators (such as the number of people served) and outcome indicators (such as the percentage of children born with low birth weight).
- In transfers to health care providers (hospitals, clinics, etc.), based on the delivery of services that meet sufficient quality standards. It should be noted that providers have significant flexibility to use resources in areas considered to be priorities.

In recent years, social impact bonds (SIBs) and the contracting of services according to social outcomes provided by private or civil society organizations have gained importance. In these types of contracts or agreements, funding is not linked to the fulfillment of certain activities, or the number of people covered, but exclusively to the achievement of outcome or impact objectives (Beeck Center, 2016). Thus, certain incentive problems mentioned in Chapter 1 are addressed, since the performance of providers is aimed at achieving results (they are only paid for them), beyond the inputs used and the outputs generated to achieve them (which the providers themselves must procure). Therefore, the providers must obtain the capital to finance the service, generally through private investment or, in some cases, from multilateral agencies. At the international level, there are examples of job training programs that link

financing to the number of beneficiaries who actually obtain and retain jobs; youth reintegration programs based on school completion goals, or child welfare programs with objectives such as the time period until the child in transit finds a permanent home. In LAC countries, there are experiences of SIBs already implemented or in the formulation stage in Argentina, Chile, Colombia, Mexico, and Peru (Agusti Strid and Ronicle, 2021). For example, the SIB *Empleando Futuro* in Colombia, implemented in 2017, achieved positive and sustained results over time, improving the probability that young people would access formal employment (Casas et al., 2021). In sectors such as early childhood services, where private and civil society providers often play a prominent role, this type of mechanism may be a more promising option than in sectors where state provision is more consolidated (Gustafsson-Wright and Gardiner, 2016).

These mechanisms can encourage the provision of higher-quality services and a focus on results, but addressing the challenges and risks of their implementation is key. First, there is the challenge of effectively converting outcomes of interest into quantifiable targets and indicators;¹⁹ for certain services, which require integrated and personalized treatment on a case-by-case basis (e.g., that of at-risk adolescents), attempting this can be problematic or even counterproductive (Lowe and Wilson, 2016). Second, the actual feasibility and costs of collecting, analyzing, validating, and periodically auditing performance information must be considered. Third, it is essential to address and mitigate possible perverse incentives, such as service providers focusing on the simplest cases rather than on those who need the service most (cream-skimming), thus making it more feasible for them to meet the target. Discouraging this behavior requires robust verification systems. Finally, the question arises as to whether it is really possible to enforce contracts: if a provider stops operating because it does not receive the funding, are there alternative providers, or would beneficiaries be deprived of the service? This may be particularly sensitive in areas with more underserved populations, where there is a dearth of potential providers (Berlinsky and Schady, 2015). At the same time, the slow progress of SIBs suggests that these bonds face challenges of scale to truly attract the interest of investors to secure the initial capital.

¹⁹ As previously discussed in reform option 2, the respective advantages and disadvantages of using output or outcome indicators should be considered. Plan Nacer combines both types of indicators.



In organizations with very poor performance, there is evidence that goal setting can serve to raise minimum standards of performance and service quality.

More generally, it is important to understand in which contexts the use of performance goals with associated incentives is most appropriate.

In organizations with acceptable performance, setting quantitative goals may discourage innovation and the pursuit of excellence, and thus foster a culture of “formal” goal achievement or simply to meet the required threshold. But in organizations with very poor performance, there is evidence that goal setting can serve to raise minimum standards of performance and service quality (Davies, Atkins, and Sodhi, 2021). Therefore, this option requires consideration of the type of organization in which payment by results would be applied.

Reform Option 7: Focus on Provider Motivation

An alternative option is to select providers that already have incentives aligned with those of the intervention, both at the organizational and the individual level. If an NGO will provide the service, it is possible that certain providers already have (because of their own institutional mission) the incentive to maximize the impact for the beneficiaries, rather than their own profit (Salamon, 2002; World Bank, 2004). Thus, it would be expected that, a priori, a community organization would be better aligned, at least in this aspect, than a for-profit organization. On the other hand, if a government agency provides the service, the focus may be on motivating its employees. Thus, in the recruitment and hiring processes, these organizations should prioritize the selection of candidates with values that coincide with public service. They should also incorporate this priority in personnel management, with policies that encourage the participation of civil servants and promote incentives intrinsic to the task (Ritz, Brewer, and Neumann, 2016).

However, the challenges inherent in this option may be even greater than those in other alternatives. First, it may be complex to distinguish between truly community-based organizations, committed to the program’s mission, from those that are set up to access government contracts. Second, even if the right organizations are identified in terms of their motivation, they may lack other key attributes, such as the managerial competency to implement the program; it is not all a matter of motivation, but also of capacity. The education system may not directly produce enough people

with the required skills. Finally, civil service systems are often rigid, so it is not simple to start a recruitment process from scratch to implement an intervention with civil servants specifically selected for it. Therefore, it is more likely that existing civil servants will have to be motivated under existing civil service rules.

Reform Option 8: Beneficiary Involvement

External monitoring and accountability may be an appropriate option, especially for services where internal monitoring is more complex. As discussed in Chapter 2, some social services are difficult for the central administration to observe and follow up on, such as what happens in the doctor-patient relationship or between child caregivers and children. In such cases, enabling and empowering service users (or their families) can allow for external accountability that aligns providers' incentives. This has been called the “short route to accountability” (World Bank, 2004), which goes directly from beneficiaries to providers, bypassing the public administration.²⁰ It could even go a step further and involve users in the co-creation of interventions, as in the Parent-Child Coalitions in Manitoba, Canada, which bring parents together with educators, health professionals, and community organizations to develop early childhood interventions. This pathway is especially important in issues such as ECD, where families are as central to achieving goals as state interventions.

Obviously, not all users have the same ability to engage and demand quality services. In the most vulnerable areas, recipients may have fewer resources to demand appropriate accountability from providers. Moreover, the variable level of involvement implies that the sample of people participating in these instances may be unrepresentative of the general beneficiary population, which may result in bias that is difficult to identify and mitigate. Therefore, government action to level the playing field between beneficiaries and providers appears to be essential, for example, by providing accessible information on the performance of different

²⁰ Decentralization of implementation to local levels of government could facilitate external accountability, but, as Keefer and Khemani (2005) point out, this only occurs if voters consider the quality of services in their voting decisions. If other considerations (social polarization, clientelism, etc.) prevail, this assumption would not be verified.

providers. This would increase the number and representativeness of beneficiaries making their voices heard (see Reform option 12).

Reform Option 9: Simplified Implementation Chains

As described in Chapter 2, delivery chains with multiple actors tend to generate greater implementation challenges; therefore, whenever feasible, attempts should be made to simplify them. Several social policy interventions (e.g., caregiving, local development, housing, etc.) often involve multiple ministries, levels of government, and NGOs. The number of actors and linkages involved and the likelihood of discrepancies among them increase the likelihood of implementation failures. Therefore, one alternative is to subsidize demand without seeking to organize supply. Through cash transfers, vouchers or similar mechanisms, governments could ensure that all beneficiaries have the resources to procure services on their own. From the state perspective, the implementation capacities required are much less demanding.

However, this option would only be feasible for certain objectives and in certain contexts. There may be an insufficient supply of services from non-governmental providers, such providers may not be properly aligned with the objectives and values to be promoted, or they may lack the capacity to provide quality services. In such situations, guaranteeing demand would not be sufficient to generate an adequate supply. Obviously, this analysis must be carried out on a case-by-case basis and according to the objective to be achieved. At the same time, this reform option may make it difficult to estimate the effective need for services (for example, to anticipate the proportion of parents who will opt for a certain type of educational offer), which would under- or overestimate the real demand.



In certain contexts, an alternative is to subsidize demand without seeking to organize supply.

3.4.

Expanding Information to Improve Service Delivery

Reform Option 10: Strengthened Monitoring System

Linked to several previous options (especially Option 4), improved information and monitoring systems can contribute to higher-quality services. Some of the previous options, such as establishing performance incentives for providers, require information systems that enable performance monitoring and evaluation. These strengthened systems also make it possible to intervene quickly when deviations in performance appear, so that corrections and adjustments can be made. In sectors such as education, for example, the digitization of school attendance records allows early detection of possible dropout cases, compared to traditional paper records. In turn, there is evidence that providing school managers with information on the performance of their schools, even without additional incentives, increases the use of data for management and impacts their students' performance on tests (de Hoyos, Ganimian, and Holland, 2019). While Option 4 highlighted the role of information in facilitating coordination, here we highlight its more direct contribution to optimizing quality.

However, the mere existence of information is usually not enough: it must be accompanied by systematic routines for reviewing and using the data. To continue with the example of school managers, it was found that if, in addition to providing them with information, they are trained in management techniques (how to formulate and monitor improvement plans, etc.), the impact on performance is even greater (de Hoyos, Ganimian, and Holland, 2020). In addition to strengthening the monitoring of the providers themselves, central monitoring should be strengthened, both to disseminate good practices and to ensure internal accountability, which entails certain consequences if performance is lower than expected. This creates a powerful incentive for providers. Delivery-oriented management models are mainly based on these systematic monitoring routines from the CoG. In the LAC region, there are relevant applications in

social policy, such as the improvement of educational performance in the state of Pernambuco, Brazil (see Box 2).

▶ BOX 2.

Strengthened Monitoring for Educational Improvement in Pernambuco, Brazil

In 2008, the government of the state of Pernambuco adopted a management model based on defining priorities and measurable goals, aligning resources behind these priorities, and intensive progress monitoring, with the intervention of the CoG to unblock obstacles and decompress bottlenecks (Alessandro, Lafuente, and Shostak, 2014; Lafuente and González, 2018). As of 2011, educational improvement became one of the three main priorities of the state government. To channel it, the Pact for Education was presented, which included sectoral public policy reforms and also strengthened monitoring from the CoG.

The Secretariat of Planning and Management (SEPLAG) was in charge of monitoring, together with the Secretariat of Education, a range of process, output, and outcome metrics, to detect underperforming schools and direct improvement efforts toward them based on timely evidence. SEPLAG also formed a team (the Núcleo de Gestión por Resultado, a delivery unit composed of about 10 professionals), dedicated to supporting educational teams in adopting management solutions and resolving performance bottlenecks.

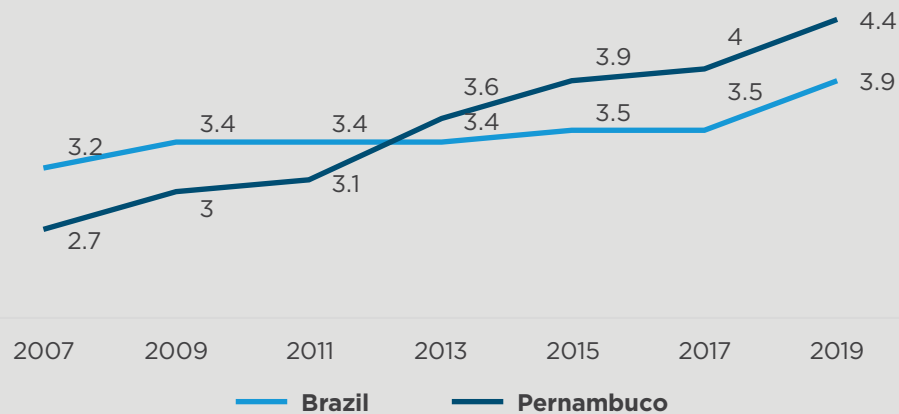
Multiple educational indicators saw rapid improvement. In terms of elementary school dropout, in four years, Pernambuco went from ranking 18th among the 27 Brazilian states to having the third lowest dropout rate. In terms of student performance, it went from persistently performing below the national average in national standardized tests to being among

(continues on the next page)

Box 2 (continuation)

the best-performing states, and even registering the best performance in certain years of high school (see Figure R2.1).

FIGURE R2.1. ▶ Pact for Education in Pernambuco



Source: See <http://ideb.inep.gov.br/> (accessed August 16, 2022).
Note: The results correspond to the secondary education level in state-run schools.

The challenges in this option are related to the capabilities and costs of generating and sharing quality information, and to the existence of management processes to make use of it. For monitoring to be effective, investment must be made in producing sufficiently updated and disaggregated information in order to understand the real situation of each provider and thus intervene in a timely manner. This implies the cost of collecting and digitizing information and also of auditing (field visits, mystery shopping, etc.), not to mention the data analysis capabilities required. According to one interviewee, a possible mitigation of these costs (especially in rural areas) is the activation of community agents, already present in the area, who—with some training and the necessary funding—can collect information. In turn, information from different sources should become inter-operable. In any case, the rapid dissemination of information and communication technologies (smartphones, tablets, internet connections, etc.) has significantly reduced the cost of generating

information compared to a few years ago. In fact, digitization of the administrative processes of program implementation makes it possible to resort to computerized records, traditionally paper-based, for use in real-time monitoring. It can be even more difficult to ensure that management processes are in place to put the data to use, with high-level officials able to make decisions when performance is insufficient. The expansion of delivery units in both the CoG and line ministries may be an auspicious sign in this regard. The challenge is to ensure that the appropriate information is available to key decision makers at the respective levels: generally, process and output data for operational managers, and outcome data for policy decision makers at the political level.

Reform Option 11: Publication of Performance Information and Encouragement of Competition

If performance standards are established and measured, an additional step is to open this information to the public and, if feasible, encourage competition among providers. Publishing performance information can lead to better decisions on the part of beneficiaries and provide an important incentive for service improvement. In the United Kingdom, which implemented an aggressive policy of opening up this information, including the use of “league tables” of hospitals and schools according to their level of delivery of goals, there is evidence of positive impacts on these services (Bevan and Wilson, 2013; Gaynor, Moreno-Serra, and Propper, 2013). The first mechanism for this improvement is reputational: providers do not want to appear to be providing poor service. A second mechanism, present in some cases, includes the possibility for beneficiaries to choose among providers (e.g., through the use of vouchers). This competition, combined with public performance information, should bring about improvements in services. In fact, it can help circumvent the dilemma between output or outcome indicators discussed above, if outcome targets are set and providers are given sufficient flexibility to achieve them through the most appropriate processes and outputs for each context.

This option also poses challenges for its successful implementation. First, it may face resistance from providers, especially if they feel that the performance indicators do not adequately reflect their task or do not

address particular characteristics of their situation. In certain policy areas (such as health) there seems to be more consensus than in others (such as early childhood services) as to which key performance metrics should be used; therefore, this option may be more appropriate for the former but not the latter. Second, this alternative may generate an unintended “segregation” effect, with the most informed users concentrating on the best evaluated services and the least informed on the others, which would widen the gap between the two. Therefore, if the information is published, it should be widely disseminated so that it does not reach only the users with the greatest possibilities of accessing it. Third, even when the publication of information improves performance in one outcome of interest, it may have counterproductive effects on others by creating distorted incentives for providers. For example, it has been documented that publishing educational performance at the school level improves performance, but it may incentivize schools not to retain lower-performing students, so as to keep the “cream” of the student body in future measurements (Aman, Cilliers, and Kaffenberger, 2019). Thus, improvement in the performance indicator may be accompanied by higher dropout levels. Similarly, in health care, providers may prioritize those metrics that receive greater diffusion while neglecting other aspects of quality of care that are less measurable, although they are equally relevant (Propper, Burgess, and Gossage, 2008). Therefore, if this option is implemented, it is essential to address a wide range of performance indicators, given the possibility of there being a perverse incentive to relegate what is not monitored (for example, by measuring that providers have covered a sufficient proportion of the potential beneficiary population, and not selecting the easiest to serve). Finally, as noted in Reform option 7 (pay for performance), consideration should also be given to the effective availability of alternative providers to enable real competition, which may not be available for some services in all areas. Or, even if there are multiple providers but they switch to competing on price rather than quality, the effect of improved services would not be verified (Braginski, 2018).

Reform Option 12: Competency Certification and Training

Unlike sectors such as health and education, “human services” (caregiving, ECD) often lack well-established professions and

career ladders, but the government can indicate to beneficiaries the competencies of personnel through certification mechanisms. A key attribute for providing quality services is having skilled personnel. In sectors such as health and education, there are scales that define selection criteria, performance evaluation mechanisms, training and coaching policies, and career advancement rules. In caregiving and ECD services, on the other hand, there are usually no well-defined career paths. In fact, in several countries, informal and temporary labor relationships predominate in this field, with frequent turnover, which hinders adequate training and performance management (not to mention, in turn, the inequality they foster, especially in terms of gender, since the vast majority of those who provide these services are women). Given the difficulty and cost involved in establishing, at least in the short term, similar career paths for caregiving services, one alternative would be for the government to define and certify a set of key competencies that reflect the knowledge and skills required, so that provider organizations can communicate to beneficiaries information on their organizational and human capacities. This would also allow the development of training instruments in line with the competency framework, to level disparities and weaknesses detected in the provision of certain services (such training is essential for certification to be a truly effective instrument). In the field of early childhood development, for example, there is a growing regional consensus on what this framework could be (The Dialogue, INN, and OAS, 2021).

CHAPTER

04

Management Challenges in Climate Change Policies



STATE CAPACITIES AND WICKED PROBLEMS OF
PUBLIC POLICY: ADDRESSING VULNERABILITIES
THAT AFFECT HUMAN DEVELOPMENT

04

Management Challenges in Climate Change Policies

Climate change is often considered a “super-wicked” problem. While there are multiple public policy problems that can be characterized as wicked (social inequality, economic competitiveness, financial crises, among others), climate change appears to be the most wicked problem (Neby and Zannakis, 2020). There are at least five reasons that justify this characterization:

1. Climate change implies significant tradeoffs between sectors.

While addressing climate change gives rise to more and more opportunities (see Box 3), it also requires the allocation of significant costs among different sectors and economic and social actors, thus generating winners and losers. This reallocation emerges as a theme in almost every policy challenge, but never so forcefully. For a country to reach a certain greenhouse gas emission reduction target (mitigation), the proportions of that reduction that will come from different sectors (energy, agriculture, industry, transportation, housing, etc.) must be defined, as well as the technologies to be used to achieve the reduction, and who will be responsible for paying for it. Evidently, each sector has an incentive to pass the costs onto others and not to assume them in its own activities. Therefore, without an actor capable of making decisions about this intersectoral tradeoff, it seems difficult to achieve these goals. This decision making could also involve the ability to compensate sectors or geographic areas (e.g., communities whose local economy depends on coal mining) that will have to face a transition to other types of activities to contribute to the collective goal. The concept of “just transition” implies paying attention to other dimensions (inequality, poverty) that could be affected by decarbonization efforts (Delgado, Eguino, and Lopes, 2021).

▶ BOX 3.

Emerging Opportunities in the face of Climate Change

Although the analysis in this chapter focuses on the difficulties faced by public management in allocating the costs of the climate transition, it should be noted that in recent years, as a result of technological change, opportunities for action have been expanding. In fact, in some cases the greatest short-term cost is the lack of action, potentially reversing traditional incentives in this area. This includes a significant reduction in the price of clean energy. For example, between 2010 and 2020, the cost of lithium batteries fell by almost 90 percent, and it is expected that by 2024 electric cars can be produced at a similar price and margin as internal combustion engine vehicles (Bloomberg NEF, 2021). All major automakers have announced their intention to abandon the sale of internal combustion engine vehicles by 2040 at the latest. Therefore, countries that do not invest today in adapting their infrastructure will face challenges in the not-so-distant future (although this is associated with the intertemporal tradeoff; see point 2 of this first part of this chapter).

Along with the opportunities derived from clean energy are the creation of new jobs (with a potential net generation of 15 million “green” jobs in LAC countries by 2030) (Saget, Vogt-Schilb and Luu, 2020) and the convergence between adaptation policies and the reduction of vulnerabilities of disadvantaged groups. There are also other immediate benefits (clean air, fewer associated illnesses, etc.) from mitigation initiatives (see IMF, 2021).

While these opportunities offer the potential to smooth the costs of the climate transition, they also complicate the task of managing the transition. On the one hand, the opportunities are in a constant state of evolution. On the other hand, they appear in certain sectors and not in others. This has implications for the need to improve coordination and

(continues on the next page)

Box 3 (continuation)

collaboration (as well as decision making) among the sectors affected by new technologies, and—in addition—highlights the importance of adopting flexible practices in policy design and implementation.

2. There is also an intertemporal tradeoff. Despite the opportunities mentioned above, in general, both mitigation and adaptation actions (i.e., the changes required to alleviate the impacts of climate change) imply accepting present costs (e.g., capital costs for necessary investments) to avoid or minimize higher costs in the future. There is consensus that the net economic effect of climate change actions is positive (see IDB studies for Peru and Costa Rica: Groves et al., 2020; IDB, 2021), because the cost of inaction would be much higher,²¹ but several of the benefits appear much later than their main costs (NAO, 2020). This obviously poses a challenge for governments that, in general, have an incentive to bring the benefits forward, aligning them with the electoral cycle, and to postpone the costs of policies.²² Even professional bureaucracies, which are not driven by the electoral cycle, have an interest in prioritizing present benefits (in terms of programs, budget, responsiveness to sectoral interest groups, etc.) over long-term future benefits. Policies that only bring inherent long-term benefits present two challenges for public management. On the one hand, the incentives of public officials are more closely linked to the results they achieve in the shorter term. On the other hand, the very impossibility of achieving benefits in the short term reduces the information available on

21 There are multiple future costs to consider. In addition to the strictly physical ones, countries that do not adapt to the transition will face technological backlogs, lost tax revenues, reduced export markets, and “stranded assets” in long-lived infrastructure (fossil fuel-based power plants; unused oil, gas and coal fields; oil, gas and coal transmission and mining, transportation and processing infrastructure that will have to be decommissioned before the end of their useful life, etc.; Bistend et al., 2019).

22 There are situations in which this is not the case. For example, several Latin American countries have adopted fiscal rules that require greater savings in periods of fiscal bonanza, thus making these resources available for potential future times of tightness (which may correspond to other administrations). It should be noted that in fiscal matters there is a short-term incentive for creating these institutions (improving market confidence) that is not present in climate matters. Although there may be other mechanisms that motivate governments to adopt similar institutions in climate matters (e.g., reputational reasons), the short-term incentives are lower than in the case of adopting fiscal rules.

the performance of public officials, which makes monitoring more difficult. For example, it is difficult to evaluate the performance of officials responsible for adaptation to natural disasters with a low probability of occurrence.

3. This is a multidimensional and cross-cutting challenge. Climate change policies require the coherent action of multiple ministries, agencies, regulatory bodies, and levels of government, in addition to the role played by the private sector and the general public. Within governments, ministries responsible for policy areas such as environment, energy, transportation, industry, housing, science, and foreign affairs, among others, carry out policies that impact climate. In the private sector, companies involved in energy generation, agricultural production, manufacturing, construction, transportation, and logistics, among others, have an impact on climate. These actors usually have different incentives and information regarding the dimensions of the problem and the appropriate policies to address it. While mitigation can be driven by specific pricing policies, such as a carbon tax, even in such cases there are sectoral policies under the responsibility of multiple ministries that are required to accompany the conversion of economic activities (production, labor, education policies, etc.); the promotion of new technologies; the adoption of relevant regulations (emissions, technological, production, and land use standards, etc.); the implementation of works for the necessary new infrastructure; and the promotion of changes in consumer behavior, among many other interventions that must be aligned and synchronized in time. In turn, adaptation often demands action by subnational governments, by virtue of the local specificities of climate impacts (Worker, 2017). Local governments are also key to mitigation efforts as they often regulate sectors such as transportation, land use, and housing. For all these reasons, the goals set by countries require coherent action by different actors, who may have divergent interests, mandates, or perspectives on the issue. In fact, the lack of coherence is currently a palpable challenge in several LAC countries, which allocate significant budgetary resources to combat climate change (in sectors such as energy, transportation, agriculture, natural resources, and disaster management), while diverting even more resources

to programs and projects that have the potential to aggravate the climate problem (Ferro et al., 2020). This situation highlights the urgency of having incentives and organizational mechanisms for coordinated and collaborative management of the different sectors, levels of government, and public and private actors. The need for coordination and coherence appears even within each public organization: for example, ministries such as agriculture and industry have conflicting incentives within the entity itself, since, on the one hand, they seek to promote certain activities and, on the other, they should ensure the reduction of the emissions they generate.

- 4. Climate change presents enormous uncertainties.** The impact assessment of public policies usually assumes linear cause-effect relationships between interventions and their consequences, but this relationship is more difficult to observe in complex systems (such as climate), with multiple feedback loops and interdependencies, and exponential changes when tipping points are crossed that can generate irreversible transformations. Furthermore, there is still uncertainty about the most cost-effective path to carbon neutrality (NAO, 2020). There are additional uncertainties about the levels of risk of occurrence of extreme hydrometeorological events (and their impacts); about what technological evolution will be like in the coming years and decades; and about the behaviors of other climate actors, including businesses, citizens in general (e.g., modifications of sustainable consumption patterns), and governments of other countries (level of effective implementation of climate commitments and regulatory changes) (Kunreuther et al., 2014). Indeed, governments do not know whether any policies they adopt will be continued or reversed by their own successors. Finally, there is uncertainty about how quickly the financial sector will internalize the costs of climate change and assign a price to them, which will have an impact on different economic sectors (e.g., on the valuation of oil-producing companies, commodities with a high carbon footprint, real estate in coastal areas, etc.). This situation represents different challenges for existing governance arrangements. For example, uncertainty makes planning and policy design difficult and requires the use of forward-looking scenario methodologies. It also calls for the creation of collaborative governance mechanisms to facilitate

broad consensus and reduce uncertainty about the eventual reversibility of adopted policies.

5. Climate change requires advanced technical expertise in multiple disciplines. As will be highlighted below, dynamic public management, capable of responding to rapid evolution in the nature of both the problem and the solutions, requires more technical capacity than the management of fixed programs. This requirement is even more so in the case of climate change. The complex interrelationships that occur in this area are a field of study for environmental sciences, physics, big data statistics, and other disciplines. One outstanding challenge is that many public entities need multidimensional knowledge to deal with climate policies, but the traditional vertical organization of public administration often places this knowledge in a few silos. Another challenge encompasses the development of evidence-based policies on climate change, which involve levels of expertise not usually found in public administrations. This poses a problem for human resource management systems, which will need to provide mechanisms for career mobility to attract such expertise to the public sector. This technical complexity, in turn, fuels intersectoral tensions, since each actor can argue, with some degree of evidence, that others should bear the main costs of mitigation and adaptation.



Climate change has been considered an example of the well-known “tragedy of the commons” or “prisoner’s dilemma”.

To these factors could be added one that goes beyond the scope of this study: the difficulty of reconciling international collective action against climate change. Climate change has been considered an example of the well-known “tragedy of the commons” or “prisoner’s dilemma”: although all countries would benefit from a reduction in emissions, no country has the incentive to do so on its own (except perhaps the largest), since its contribution to total emissions is miniscule (Irwin, 2009). The rational thing to do, especially for smaller countries, is to be a “free rider” and benefit from the reductions made by others. If everyone thinks this way, no one reduces emissions, and the problem gets worse.

This study focuses on analyzing the adjustments that public management must make to carry out climate change policies, whose main challenges are associated with collective action dilemmas, conflicting incentives,

and incomplete information, which hinder their implementation. While, in principle, individuals or economic actors may lack incentives to reduce their own emissions—and comply with climate change policies—this can be addressed by public management actions to adopt incentives and information mechanisms that reward and reduce the transaction costs of compliance, reduce risks (such as “freeriding”), and provide credible data on costs and impacts. On the global scale, however, there is no supranational state to resolve the dilemma that exists among countries.

The mechanisms that can be used in interactions between states to modify these incentives (such as international treaties) are beyond the scope of this study, which focuses on the institutional and managerial reforms that each state can adopt individually. In any case, it is worth bearing in mind this additional challenge posed by addressing climate change. Obviously, to the extent that technological advances open the door to new opportunities thanks to the lower cost of clean energy (see Box 3), this dilemma may subside or even disappear. Indeed, since countries must inevitably make investments in adaptation, which increase in the absence of effective mitigation actions, there may be an incentive to set shared rules for reducing polluting gases.

Despite being a “super wicked” problem, little is still known about the best institutional and managerial strategies to enhance climate change interventions. In recent years, multiple public policy options have been developed, both for mitigation and adaptation, to deal with this phenomenon. However, little is known about the institutional and managerial capacities required to successfully implement these policies. In fact, the main challenge today does not seem to be finding policy alternatives, but rather having the capacity to implement the policies already discussed and designed, especially with regard to the multisectoral and long-term challenges linked to the transition. This paper seeks to contribute to closing the knowledge gap on institutional capacities for implementation.

Given the characteristics of the problem, this chapter proposes two major pillars of reform, focusing on incentives and information. The intersectoral and intertemporal tradeoffs, as well as the multidimensional nature of the issue, require changing the incentives of the actors to

implement comprehensive and coherent interventions. With today's prevailing incentives within most governments, it will not be possible to implement such integrated policies, and fragmented or even contradictory efforts will continue to prevail. The good news is that, as presented in the next chapter, there appear to be options that would allow such incentives to be modified. Meanwhile, the uncertainties and technical complexities of the problem call for changes in the management of the information available to decision makers to increase the likelihood of adopting policies based on the best available evidence. The next chapter details specific reform alternatives that would help to realize these strategies.

CHAPTER

05

Reform Options For Managing Climate Change Policies

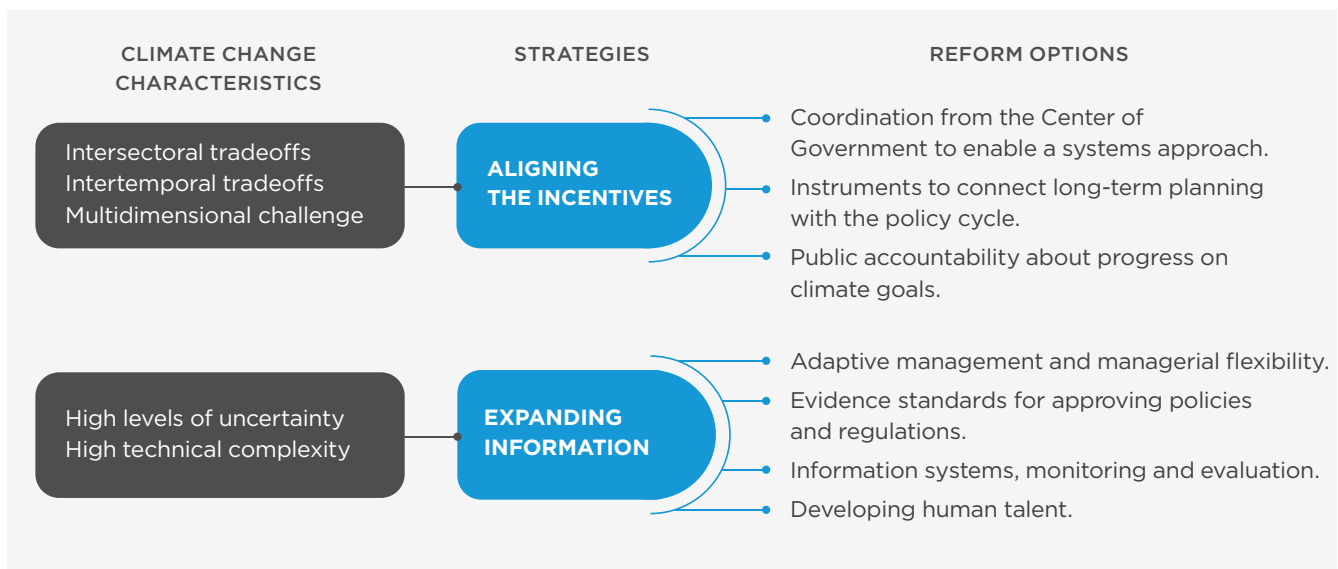


STATE CAPACITIES AND WICKED PROBLEMS OF
PUBLIC POLICY: ADDRESSING VULNERABILITIES
THAT AFFECT HUMAN DEVELOPMENT

05 Reform Options For Managing Climate Change Policies

This chapter presents seven reform options that could lead to the implementation of the two key thrusts of this report: (1) *aligning the incentives of key actors* and (2) *expanding the information available to decision makers*. Figure 3 summarizes the logic of this proposal, from the challenges of climate change management (its “super wicked” nature) to options for institutional and managerial reform. We have sought to present reform options that are internally consistent and that, in all cases, could enhance their impact when combined. For example, coordination from the CoG should contribute to the coherent implementation of long-term climate plans, and public accountability for progress should strengthen incentives for successive governments to maintain focus on these objectives. In turn, several of these options have already been discussed for addressing inequality (Chapter 3), confirming their general usefulness in addressing wicked problems.

FIGURE 3 ▶ Climate Change Characteristics, Strategies, and Reform Options



Source: Authors' elaboration.

Although the evidence on climate is still incipient, there are indications that the absence of several mechanisms proposed here limits the possibility of moving forward. For example, although several countries have set up formal interministerial climate coordination bodies, the lack of effective leadership from the CoG (which could be expressed, for example, through the active participation of the senior-most political authorities of the Executive Branch) has limited their impact. Similarly, in general, the long-term plans approved by countries still show little connection with annual programming and budgeting (as can be seen in the persistent subsidies for carbon-emitting activities; Ferro et al., 2020), since there are no binding tools that connect both temporalities, as has been done in some European countries. In turn, and with exceptions such as Chile (which includes the “social price of carbon” in the public evaluation and pre-investment process; Farías, 2022), consideration of climate impacts in the policy and regulatory approval process is scarce. Thus, the strategies presented here would help incorporate such impacts systematically in decision-making processes. Finally, weak public accountability has also constrained the pressure to meet agreed upon targets. In summary, regional and global experience suggests that the absence or fragility of all these mechanisms is a limiting factor for the achievement of results.

Reform Option 1: Coordination from the CoG to Ensure a Systems Approach

As noted when describing the approach to inequality, coordination challenges are a classic problem in public sector organizations, particularly with respect to multidimensional issues. In the absence of coordination, inconsistencies or contradictions between sectoral policies may arise, as well as gaps or voids for which no single entity is responsible. One ministry, for example, may define policies aimed at reducing emissions and others encourage or promote polluting activities, neutralizing or reversing the former’s efforts (and using significant public resources in the process; see Ferro et al. [2020] for more details on this situation in several LAC countries).

In general, there are different possible levels of coordination (Metcalf, 1994), as well as horizontal and vertical coordination. A minimum level of



In the absence of coordination, inconsistencies or contradictions between sectoral policies may arise.

coordination to reduce the risk of contradiction involves communication and exchange of information between entities (e.g., on their respective plans). An additional step involves mutual consultation prior to making decisions. Up to this point, coordination is purely horizontal and voluntary, among peers. However, this form of coordination is often not sufficient to produce coherence in government action. Even if the different organizations involved share information and consult each other, there are several reasons that make contradiction among them feasible: different perspectives or priorities on the same issue (for example, according to their disciplinary specialty); the need to address the interests of diverse, often conflicting, social groups; factors involving bureaucratic politics (political disputes, disputes over mandates, resources, public visibility, etc.), and others. On climate issues, the primary responsibility for policies usually lies with ministries of environment or similar (Fozzard, 2019). However, these are often comparatively weak institutions in political terms, with few levers to induce coordination from their peers in other ministries (finance, industry, trade, agriculture, etc.) (Bailey and Preston, 2014).²³ Box 4 presents an in-depth analysis of climate coordination challenges for one LAC case: Mexico.

²³ Despite this weakness, one interviewee indicated that environment ministries may have sufficient resources (derived, for example, from their role in international climate institutions and networks) to “resist” the CoG’s attempts to take over coordination of the issue. This situation may be unlocked through a mutually beneficial partnership between the CoG and these ministries, as suggested below.

▶ BOX 4.

Coordination Challenges in Mexico

In Mexico, addressing climate change requires coordinated action involving almost the entire federal public administration (FPA) of the country. By 2022, the FPA was composed of 19 ministries, 15 of them with formal responsibility for climate change policy (LOAPF, 2021: art. 26; LGCC, 2020: art. 45 and PECC, 2021).

The climate change regulatory system establishes 15 national coordination bodies. These bring together more than 20 actors (15 of the 19 ministries) and 10 other types of actors that are indirectly involved (e.g., the states) (LOAPF, 2021: art. 26; LGCC, 2020: art. 45 and PECC, 2021). The General Law on Climate Change (Ley General sobre el Cambio Climático, or LGCC) assigns some general responsibilities on the same issues to the three levels of government. This implies that the federal, state, and local governments must coordinate with each other to implement their policies.

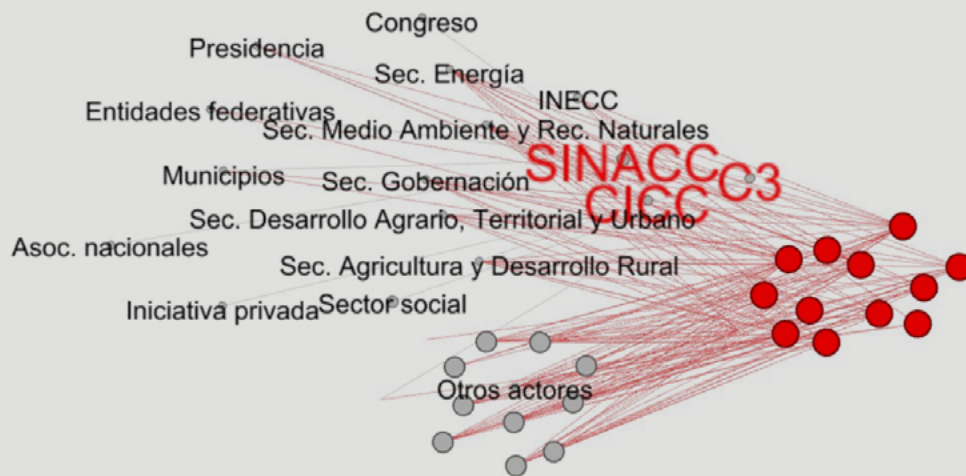
The main coordinating body is the National Climate Change System (SINACC) (arts. 38–44 of the LGCC). This coordinates the actions carried out by the three levels of government to address vulnerability and risks to the effects of climate change. It brings together the Inter-Ministerial Commission on Climate Change (CICC), the Congress, the states, the municipalities, the Climate Change Council (C3), the Evaluation Coordination, and the National Institute of Ecology and Climate Change (INECC). Likewise, the CICC is the permanent mechanism for coordination among FPA agencies and entities and generates the National Climate Change Strategy (arts. 60–64 LGCC, DOF-SEMARNAT 03/06/2013), which is the main planning instrument on this issue. Finally, since Mexico has 32 states and more than 2,446 municipalities, the coordination challenge becomes even more complex.

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Box 4 (continuation)

There is a complex network of connections among actors. On average, 10 different actors participate in each coordinating body. The central coordinating bodies are the SINACC and the ICAC. However, there are five additional actors: four that participate in 12 of the 15 bodies: 1) the Ministry of Environment and Natural Resources (SEMARNAT); 2) the Ministry of Agriculture and Rural Development; 3) the Ministry of Energy; 4) the Ministry of the Interior; and 5) the INECC, which is the decentralized agency that coordinates and conducts research on climate change, evaluates national policy in this area, and provides technical support to SEMARNAT to implement it.

FIGURE R4.1. ► Network of Coordinating Bodies and Actors in the Mexican Case



Source: Chudnovsky et al. (2022).

In Illustration R3.1, the coordinating bodies are shown in red, and the three main ones are highlighted. The actors are shown in gray and those most important in climate change policy are highlighted (for illustrative purposes, a smaller number of gray nodes are shown).

In terms of analysis, the Mexican legal system is described as a solid institutional body. Its strength is that its content coincides with the objectives of the United Nations Framework Convention on Climate

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Box 4 (continuation)

Change (UNFCCC) and those of the Paris Agreement. It addresses all the commitments emanating from both, and it also contains specific regulations corresponding to the country's climate challenges.

The complexity of the number of actors and functions contemplated in legal frameworks usually represents a challenge for the coordination required to implement wicked policies such as those on climate change. First, the plethora of agencies and functions raises the costs of coordinated action (with plans, objectives, and targets), as it demands concurrence of functions of multiple entities. Second, the presence of diverse functions, authorities, and responsibilities can generate conflicts of responsibility, which reduces incentives for collaborative action. Third, this multiplicity makes the organization and availability of information on budgetary resources more complex, which is reflected in a disconnect between the budget and the responsibilities assigned. In budgetary matters, the most evident example is observed in the INECC, since, with a limited budget, it participates in 26 of the 169 specific actions stipulated in the Special Climate Change Program (Programa Especial de Cambio Climático, or PECC). This program is the main planning instrument; it defines government actions aimed at complying with international commitments, such as the Nationally Determined Contributions (NDCs).

There are also possible conflicts in the distribution of roles in relation to subnational governments. See, for example, the case of waste: special waste is the responsibility of the states, while solid waste is the responsibility of the municipalities. This may result in the dilution of responsibilities, creating an additional obstacle to coordination among actors, since the lack of accountability restricts the incentives of each actor.

As a general conclusion, progress has been made thanks to the existence of an institutional architecture for coordination, but there are challenges to make coordination effective. The regulation of climate change encompasses so many spheres and juxtaposes so many mandates that it is essential to establish coordination of legal authority between the Federation, federal entities, and municipalities. Of course, this is only a

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Box 4 (continuation)

legal analysis and, therefore, provisional. However, if complexity is already evident in the formal rules, the expectation of their fulfillment in terms of real coordination is not very auspicious.

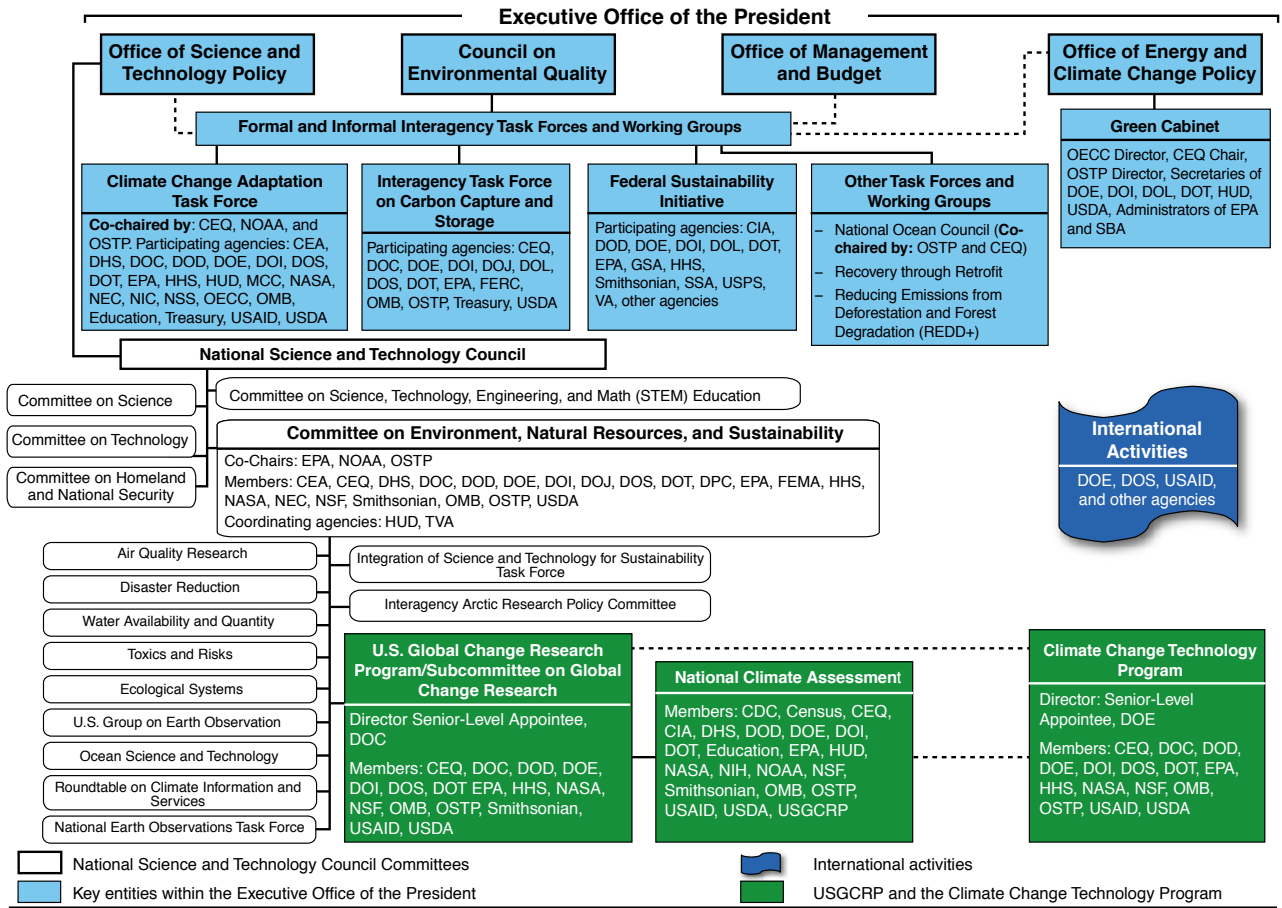
Note: This box was prepared by Mariana Chudnovsky and Tomás Damerou.

In view of the multiple coordination challenges that exist among the entities with responsibilities in this area, there is a need for vertical coordination to act as an arbiter among them and minimize their inevitable discrepancies. One powerful mechanism is defining a shared vision and strategy for the government as a whole, with clear objectives for all ministries and agencies. But even if such a common vision were to be consolidated, a process must be established to operationalize or translate it into coherent policy decisions and synchronized implementation. Ministries and agencies have little incentive to submit to this process; each would prefer to make its own decisions, in accordance with its perspective, priorities, and interests on each issue. Moreover, no ministry would have an incentive to assume the costs associated with emissions reduction. Therefore, the management of this process cannot be entrusted to the ministries or sectoral agencies themselves. Responsibility must fall to a sufficiently empowered actor, who does not have a particular sectoral interest and who is guided by the interest of the government as a whole. The institutions, units, and officials of the CoG possess these attributes.

The CoG needs to establish a shared vision and objectives across government; otherwise, it may even exacerbate uncoordinated government action. In the United States, initial attempts to address climate change in a cross-cutting manner resulted in an accumulation of coordination bodies led by different CoG units. As can be seen in Figure 4 (GAO, 2011), in the early 2000s, different units of the Executive Office of the President established their own interdepartmental committees or working groups to address aspects of the climate challenge. Paradoxical though it may be, there was a fragmentation of coordination, which hindered the existence of a coherent or joint initiative. In fact, the Government Accountability Office (GAO) (GAO, 2011) reported difficulties

for the different committees to even access information about each other's work. It is possible that the same incentives that make coordination between ministries difficult were operating between units of the CoG itself, so that each was defending its own bureaucratic turf. The case highlights the imperative to ensure a shared vision, and also the risk of enabling a proliferation of coordination bodies not ultimately linked together through a CoG body. It should be noted that, in 2021, the U.S. president created the position of the National Climate Advisor, operating in the Executive Office of the President. He took as a model similar figures in the areas of national security and economic policy, with the aim of coordinating the efforts of the entire government on this issue. Among LAC countries, Costa Rica is a case in point: its National Decarbonization Plan 2018-50 was launched with significant leadership from the Presidency, together with the corresponding sectoral entity (Ministry of Environment and Energy) and with the support of the Ministry of National Planning and Economic Policy (MIDEPLAN) and the Ministry of Finance. The Plan, for example, catalyzed the subsequent formulation of specific programs and policies in key sectors (transportation, energy) and foresees the formation of an inter-sectoral coordination body, based in the Presidency, to oversee implementation (Delgado et al., 2021).

FIGURE 4 ▶ Fragmentation of Initial Coordination Efforts in the United States, 2011.



Source: GAO (2011).

For all these reasons, a systems approach should be sought, with a whole-of-government and even a whole-of-society view of the issue.

Even if the CoG succeeds in aligning incentives to favor coordination, it also requires clarity on what the government seeks to achieve, specifying common goals, individual goals and their contribution to the common ones, and adequate follow-up mechanisms. In its strategy to achieve carbon neutrality by 2050, the UK government has adopted a “systems approach” (HM Government, 2021; see also Prime Minister’s Council for Science and Technology, 2020). This perspective seeks to address the multiple economic, social, and environmental dimensions linked to climate change, and how each impacts on the others. In this way, it



An additional benefit of an integrated approach is the possibility of providing greater certainty to the private sector about the vision shared by all areas of government.

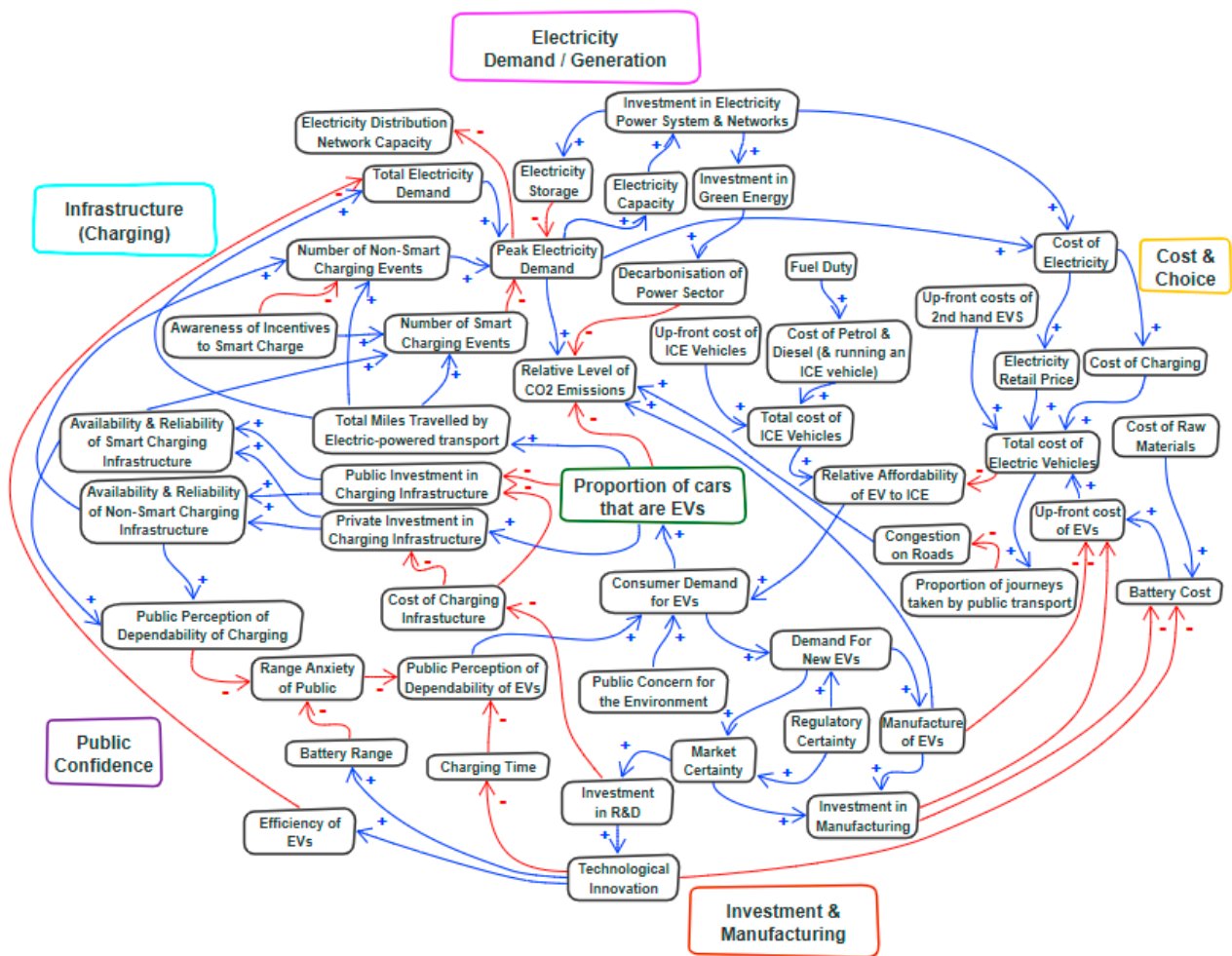
seeks to facilitate the inclusion of different ministries and agencies (as well as non-governmental actors) in the joint goal of carbon neutrality, even those whose primary responsibility has a different focus. To this end, inter-ministerial discussion bodies have been set up,²⁴ one of which is chaired by the Prime Minister himself. Efforts have been made to make explicit and map the interdependencies between the different components of the system, and different scenarios have been modeled according to the actions taken in each sector. An additional benefit of an integrated approach is the possibility of providing greater certainty to the private sector about the vision shared by all areas of government, thus encouraging the required climate investments.

The implementation of this systems approach is potentially challenging in terms of complexity. Figure 5, derived from the above-mentioned strategy (HM Government, 2021), outlines the interactions and feedback involved in the development of electric vehicles, including elements of electricity demand and generation; investment and manufacturing; infrastructure (such as charging stations); citizen confidence in these vehicles, and others. In other words, in the consideration of a single initiative (the promotion of electric vehicles) within the portfolio of actions included in the climate policy, multiple and complex interactions are already identified. Note the difference, for example, with the linear sequences between input, process, output, and outcome of more traditional instruments such as logical frameworks, which generally omit the feedback among these elements. If the figure were extended to the whole of climate action, the map would become unreadable. And if the impacts of these actions on other government priorities were incorporated, it would practically cover all possible issues. In any case, there are tools to synthesize interactions in a more aggregated way, which could facilitate this task and thus make it easier to understand the impacts of each initiative. Beyond its complexity, Figure 5 shows how specific climate change policies, such as the development of electric vehicles, imply the need for numerous concurrent products for the growth of a given market, which in turn implies the intervention of multiple agencies whose functions are indispensable in

²⁴ A pending challenge is how to incorporate autonomous bodies that play a key role in mitigation (e.g., certain regulatory agencies), as well as local governments, whose provisions on issues such as transportation, land use and housing also have a high impact (NAO, 2020).

creating such products. The systems approach is useful, at the very least, to identify the products needed to implement specific policies and the interventions/functions of the agencies required to do so, as well as the need for a body to link them together. The absence of such an approach prevents the participating entities from having a common vision.

FIGURE 5 ► The “Systems” Approach in UK Climate Policy



Source: HM Government (2021).

An additional difficulty that should be addressed is the effective possibility of the CoG leading this agenda in practice. Although most LAC countries have formally created climate change cabinets or interministerial committees, evidence on their actual functioning is very limited. While CoG involvement creates incentives for ministries and agencies to accept coordination, sustained leadership from the center can be difficult to achieve. In general, CoG units must address several government priorities, many of them urgent. It is therefore difficult to ensure that they focus on climate change. For example, in the United Kingdom, the interministerial climate change committee led by the Prime Minister hardly met in the months following its formation, as government leaders had to focus on the COVID-19 crisis (Sasse et al., 2021). In turn, CoG units tend to experience frequent turnover of personnel, which may bring about changes in the issues prioritized. Turnover also makes it difficult to acquire leadership skills and basic levels of knowledge about the climate agenda (although the CoG does not seek to replace the expertise present in line ministries or agencies, it does require basic mastery of the subject to be able to truly guide the processes).²⁵ In the LAC region, most countries have permanent interministerial coordination bodies on climate issues (European Commission, 2019), but in several cases, the only trace of them on the web is the law that created them, and (if they exist) the minutes, agreements, and commitments made are not published.

In short, it is not enough simply to formally house the coordinating responsibility in the CoG, but rather a sustained commitment and the development of sufficient capacity to do so (NAO, 2020). Forming a dedicated unit may be one option for this. Of course, political will is needed to advance any government objective, but perhaps even more so in the case of a wicked and cross-cutting problem such as climate change. To this end, it may be useful to establish a delivery unit responsible for coordinating and monitoring climate policy (Prime Minister's Council for Science and Technology, 2020). This entity can provide the managerial and technical support required for the effective functioning of an interministerial climate change committee led by the CoG. Sustainability can also be achieved with measures aimed at altering the incentives of

²⁵ One possible option is for the CoG to provide leadership in convening key stakeholders and to rely technically on the Ministry of Environment or other similar ministry (Elliot et al., 2019).

the coordinating units (e.g., the creation of collaborative governance institutions, where the presence of the private sector and civil society drive the government’s incentives to keep the climate change agenda on track). Evidence of this can be seen in other policies, such as those described in the chapter on inequality.

The CoG’s leadership may become less necessary once the climate agenda becomes mainstreamed in the plans of all ministries and agencies. If climate impact considerations eventually take root in all sectoral policies, the role of the CoG may become less critical, or its coordinating role may become easier. But how to achieve this? The next option explores ways to link long-term objectives set by governments to short-term planning and budgeting.

Reform Option 2: Instruments to Connect Long-Term Planning to the Policy Cycle



Long-term plans can serve this purpose if they emerge from broad consensus, if they define precise and measurable objectives, and if they are put into practice in budgetary programming.

As pointed out in the previous chapter, climate change poses an intertemporal dilemma: sustained action is required, starting in the present, to minimize future costs. This is one of the attributes that makes this phenomenon a complex and wicked issue. Even if a government decides to assume the present costs of climate action, it will not be able to avoid the uncertainty surrounding the sustainability of these actions; among other things, future governments may discontinue them. This uncertainty is an additional disincentive for present action. However, one possible mechanism to reduce it is the approval of long-term plans that define a path for policies in subsequent governments as well. As detailed in the following paragraphs, long-term plans can serve this purpose if they emerge from broad consensus, if they define precise and measurable objectives, and if they are put into practice in budgetary programming, generally through binding provisions enacted at the legislative level.

The vast majority of governments have already developed climate planning instruments. Virtually all countries (including all LAC countries) have submitted short- and medium-term NDCs detailing how they plan to reduce their greenhouse gas emissions to contribute to the common goal of carbon neutrality by 2050. Under the Paris Agreement, countries

must report on progress every two years and update their plans every five years. A smaller group of countries (35 in October 2021)²⁶ submitted long-term strategies (LTS) with 30-year time horizons. While each LTS has its own format, these typically include quantitative greenhouse gas reduction targets, sectoral strategies with identifiable milestones, implementation mechanisms, and monitoring instruments (Elliot et al., 2019). Several LAC countries have also adopted other long-term commitments, such as carbon neutrality by 2050, generating at least 70 percent of energy from renewable sources by 2030, and specific sectoral targets on forestry, agriculture, and water, among others (IMF, 2021).

Long-term planning is necessary to address the intertemporal tradeoffs described above, creating incentives to sustain climate efforts.

These plans incorporate information and analyses that make the consequences of postponing measures that bring immediate costs more transparent, since previously established intermediate targets for reducing polluting gases must be met. In turn, as the product of robust analysis and information, and thanks to wide dissemination, these plans can provide greater certainty about the sustainability of policy decisions in the face of changes in government, as they would highlight the increased political costs incurred if they were abandoned. Indeed, sound plans, which enjoy greater acceptance among the public and political actors, strengthen the confidence of private actors to commit to long-term investments. Therefore, potentially, instituting long-term climate planning is an institutional reform with positive impacts (see IDB and DDPLAC [2019], for more details on the experience of several LAC countries). Examples of the sustainability of public policies when addressed through consensual long-term plans (such as long-term infrastructure planning) can be found in OECD (2017b).

An essential element for successive governments to provide continuity to the long-term plan is the generation of broad consensus at the time it is formulated (OECD, 2019). A narrow legislative majority can be reversed in an electoral cycle.²⁷ A narrow legislative majority can be reversed in

²⁶ See link: <https://www.climatewatchdata.org/lts-explore> (accessed October 29, 2021).

²⁷ For example, Australia's 2011 Clean Energy Act, which established a price for carbon emissions, was passed by a minority government and repealed three years later by a new administration.

an electoral cycle. In the cases of Denmark and Sweden, climate laws were enacted with large legislative majorities, reflecting a widespread consensus, and are therefore difficult to reverse. A comprehensive discussion process, including consultation with key economic and social stakeholders (and including sectors likely to be resistant to change, such as those dependent on carbon-based activities), can enhance the legitimacy of the plans and thus their sustainability. There are different mechanisms for organizing such discussions; in some cases, the use of the Chatham House Rules²⁸ can be helpful in maintaining confidentiality and encouraging frank positions, including the provision of smaller spaces in which sensitive issues can be discussed. Direct citizen involvement is also an important mechanism (see Reform option 3).

However, the search for consensus should not mean that the plan's objectives become too general or ambiguous. Generic or vague objectives, whose progress cannot be rigorously documented, are difficult to manage properly or to measure and monitor. They would therefore not inspire confidence in economic and social stakeholders. The accumulated experience of management by objectives, both in public and private organizations, indicates that success must be clearly defined.²⁹ Therefore, the search for broad consensus should not be at the expense of the specificity of the objectives to be achieved. The clarity of the latter and the responsibilities for enforcing their delivery are also key to public accountability, which is a powerful additional incentive to be considered (see Option 3). At the same time, the existence of explicit goals does not imply that long-term strategies should be rigid; a flexible updating and iterative mechanism should be established to incorporate new information and technical advances as they arise (Jaramillo and Saavedra, 2021).

For long-term plans to have these desirable effects, it is essential to ensure their connection with short-term planning, the policy cycle, and budgeting. Here, there are still weaknesses worth highlighting. Countries

²⁸ According to the Chatham House Rule, participants in a meeting may freely use and disseminate what was discussed, but without attributing the ideas discussed to any participant.

²⁹ See, for example, Borgonovi, Anessi Pessina, and Bianchi (2018), who emphasize that one of the pillars of management studies, theories, and practice is that “nothing can improve if it is not measured. This statement is almost universally accepted.” See also Behn (2014): “The leadership team must specify the public purpose it seeks to achieve.”

in the LAC region have ample experience with ambitious long-term plans in many areas of public policy that end up having almost no impact on government decision making. This type of instrument would not be useful for the challenges of climate change. It is therefore necessary to connect long-term aspirations with more familiar short- and medium-term tools. In this regard, there are significant weaknesses. Of the 157 countries that have included comprehensive emission reduction targets in their NDCs, only 58 have done so through national policies or laws. And, of those 58, only 17 have targets that match those defined in the NDCs (Nachmany and Mangan, 2018). This lack of alignment between international commitments and national action hinders the presence of planning and budgeting that would actually achieve internationally committed targets. As one interviewee highlighted, international commitments are sometimes taken on by areas of government that lack the capacity to then align whole-of-government policies behind those goals. In fact, they may take on commitments without prior consultation with the entities that should contribute to their achievement.

Some countries have established mechanisms by law that link long-term plans with the actions of successive governments. Several European countries present cases and instruments that should be considered:

- Through the Climate Change Act 2008, the United Kingdom set a long-term emissions reduction target (strengthened in 2019) and required governments to submit interim targets every five years, which must be expressed in legally binding “carbon budgets.” Therefore, once these total targets are set out, governments must determine what proportion of the reductions will come from different sectors. However, progress to date has been less than expected in the first carbon budgets, prompting changes to the strategy adopted by the government (Sasse, 2021).
- In Sweden, the 2017 Climate Act established an emissions neutrality target for 2045 and, to achieve it, requires governments to submit to Parliament the following: (i) action plans every four years, specifying the next measures to be adopted and by when, and (ii) together with the Budget Act, an assessment of the measures implemented and an analysis of future measures to be adopted.

The Law also details intermediate targets for 2020, 2030, and 2040, both in terms of overall reduction of polluting gases and for specific sectors.

- The Danish Climate Act 2019 sets targets for 2030 and 2050, and requires governments to set intermediate targets every five years, which should be increasingly demanding. It also indicates that sectoral indicators (agriculture, transportation, construction, energy, industry) must be established. In addition, it establishes that, before sending the Budget Bill, governments must submit a climate policy plan to Parliament, with data on the monitoring of targets and, if performance has been lower than expected, what new initiatives are proposed to correct it.

It is worth noting that all of these provisions are legally binding. Although the experiences of Sweden and Denmark are recent and therefore their long-term effect cannot yet be known, they constitute some of the most demanding institutional standards at the global level for implementing long-term international commitments in short- and medium-term national plans. In LAC countries, Medium-Term Fiscal Frameworks can be an instrument to facilitate the implementation of longer-term climate goals.

In turn, when the objectives are put into practice in the planning and programming of public entities, it is key that they are prioritized and not relegated behind other institutional objectives (which may sometimes be in conflict with them). Climate action will be effective when its objectives are incorporated centrally and systematically into the activities of all areas of government. But it is not enough to include some climate objectives among the dozens (or hundreds) of institutional objectives of the entities; in such cases, their influence is likely to be diluted, and the entities will prioritize their more traditional objectives and those specific to their sectoral mandate. According to Ang (2019), this has happened in China when environmental targets were incorporated in local governments. Because they represented only a handful of the 112 targets set by the central government for local governments, local governments prioritized the achievement of other targets, on the understanding that they would not be penalized for a few failures to comply. In fact, several of the other objectives (such as increasing industrial production) may be in tension with



It is not enough to include some climate objectives among the dozens (or hundreds) of institutional objectives of the entities; in such cases, their influence is likely to be diluted.

the achievement of environmental goals. The existence of contradictions or conflicts in an institution's mandate is a common challenge for public administrations (see Aucoin, 1997; Carrigan, 2018). In such situations, entities may sacrifice some objectives to maximize others. Ministries with a sectoral mandate to drive certain activity (industrial, agricultural, energy, etc.) may focus their priorities solely on this and relegate anything that might limit their maximization (e.g., climate impact considerations).

It is therefore key that central planning and budgeting areas ensure sufficient prioritization of climate targets when monitoring institutional performance. One option to achieve this is to connect climate targets to other priorities, especially if they have a shorter-term impact. For example, climate targets can be associated with improving air quality, as in China, or with national security, as in the United States and France (Bailey and Preston, 2014); also, the creation of new green jobs can be linked to the technological innovation required for emissions reduction.

Some progress has also been made in LAC countries, although challenges remain. Countries such as Chile, Costa Rica, Guatemala, and Suriname have defined financing and investment plans to implement their long-term strategies. However, by 2019, only 19 percent of the countries in the region had a financing strategy for their NDCs. Therefore, progress in specifying the means of implementation of the commitments is considered “a pending and key issue for implementing actions to achieve climate goals” (LEDS-LAC, 2019: 7).

Reform Option 3: Public Accountability on Progress Toward Targets

Citizen monitoring is a valuable potential incentive to sustain governments' focus on climate goals. Indeed, the action taken by several governments globally, despite the collective action problem described in Chapter 4, can be attributed to citizen pressure. In several countries, this is evidenced by the electoral growth of political parties oriented primarily to environmental issues (McBride, 2022). Therefore, facilitating citizen monitoring and public accountability contributes to changing government incentives and to favoring the prioritization of climate objectives. The information needed for management is not likely to be identical to that

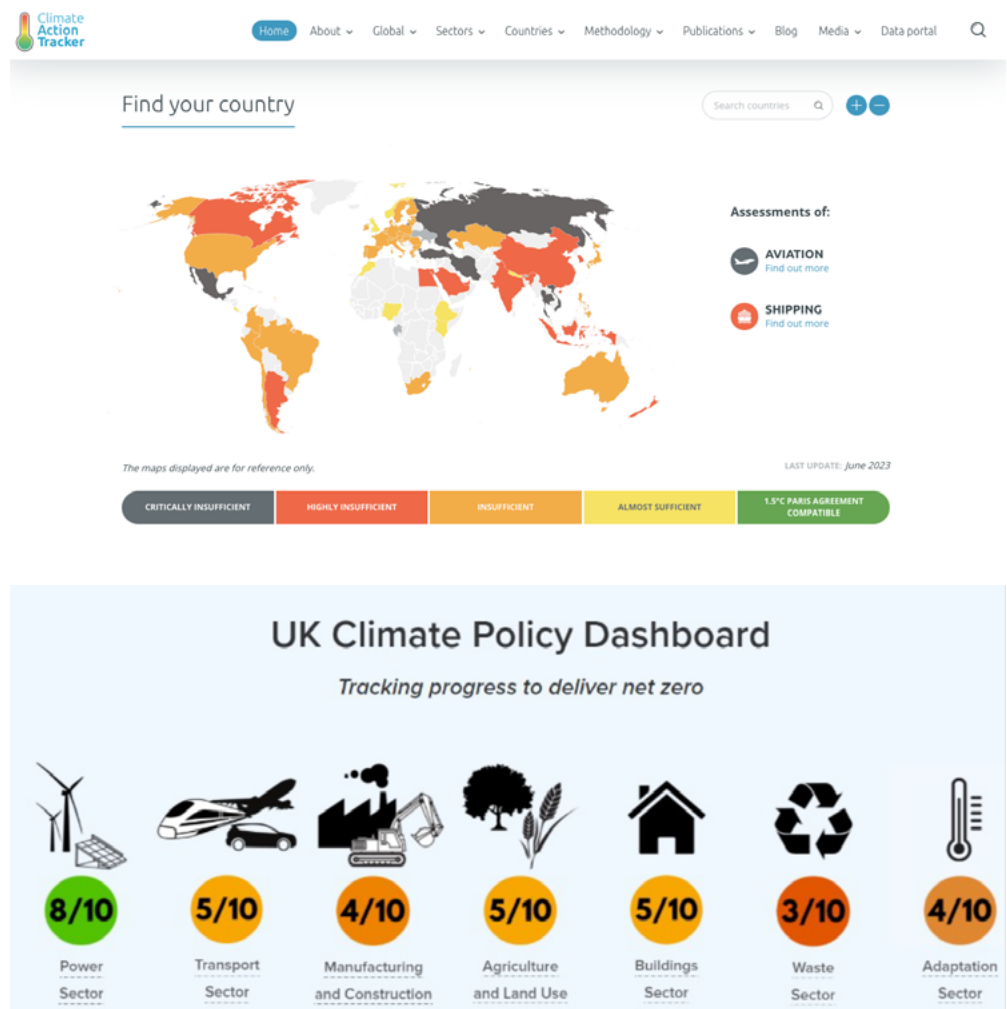
which must be disclosed to the public. For example, information for internal monitoring usually contemplates the execution of government activities and operations to detect eventual delays at an early stage; undoubtedly, these are valuable data for public managers and for the follow-up of the CoG, but public accountability should focus on the fulfillment of output and outcome goals. These are different exercises. The principles and tools of accountability are similar to those described in the chapter on inequality; here, their practical adoption for climate is discussed.

Most governments have set climate targets, but in the absence of public accountability, the cost of non-compliance is too low. In multiple areas of public policy, the publication of measurable and quantifiable targets is an attempt by governments to strengthen citizen trust (Alessandro et al., 2021; Boswell, 2018; Keefer and Scartascini, 2022). On the one hand, this is true because it signals a real commitment of governments to certain objectives, and on the other, because quantification is associated with greater objectivity in the evaluation of performance. With respect to climate, most national governments, and even many local governments, have set measurable targets. However, for targets to have an impact, regular and substantive accountability for progress is required. Publishing information on progress increases the political cost of non-compliance and thus creates incentives for governments to strive to meet targets. Accountability should also involve clear identification of who is responsible for the actions taken and the targets to be achieved (Delgado et al., 2021). Some climate outcomes do not depend solely (or even mainly) on what governments do, but the international commitments made contain intermediate and final outcome targets that are linked to, or at least influenced by, government policies and regulations (e.g., on emissions levels). These merit corresponding accountability in terms of performance.

Governments often publish little information on progress, although other actors fill the gap. While many countries have open data portals containing climate databases, this information is difficult for the general public to interpret. Accurate reporting of progress is even less frequent. For example, fewer than 40 percent of the 70 countries that submitted national adaptation plans effectively monitor their implementation, and only 20 percent have published progress reports (Leiter, 2021). Two of the countries with published reports are Latin American: Chile and

Mexico. Despite limited government action, several international and non-governmental organizations have developed online dashboards that allow monitoring of progress in a way that is accessible even to non-experts. Some of them even allow comparison between countries, which can enhance the “shaming” of those governments lagging behind and thus encourage greater commitment to the issue. Figure 6 presents some relevant examples.

FIGURE 6 ▶ Examples of Climate Target Tracking Dashboards



Source: www.climateactiontracker.org and www.policyconnect.org (accessed 8/11/2021).

Robust accountability mechanisms should address four key elements

(Higham et al., 2021). First, it must be clear *what* actors are expected to do or achieve, and by *when* (e.g., emission reduction targets, adaptation targets, prohibition of certain activities by a certain date, compliance with international obligations or standards, creation of governance bodies, etc.). Second, it is necessary to specify *who* is responsible for these objectives or actions, and to whom they must be accountable for their achievement (Legislative Branch, independent advisory bodies, citizens in general, etc.) Third, it is necessary to define *how* compliance will be measured. Finally, *what will happen* in the event of non-compliance (e.g., parliamentary or ministerial intervention; judicial decisions; instructions and fines by regulators, among other measures). In general, the latter aspect is the least developed in accountability frameworks created by national climate regulations. In its absence, the reputational or citizen pressure mechanism becomes an even more important incentive to achieve the objectives. Obviously, the challenge remains for citizens to really value the issue and, therefore, demand results, but (beyond public awareness campaigns) this seems to be beyond the scope of government action.



The UK Climate Change Act 2008, a pioneering effort in climate legislation, established the creation of an Independent Committee on Climate Change.

Given the possibly limited incentives for governments to collect and publish the information necessary for accountability, the creation of independent advisory and oversight offices can help in this regard. The UK Climate Change Act 2008, a pioneering effort in climate legislation, established the creation of an Independent Committee on Climate Change. Among its functions, the Committee was tasked with monitoring progress in reducing emissions and increasing climate resilience (it tracks nearly 400 indicators from a variety of sources, mostly governmental), and producing a report, which it submits to Parliament, to which the Executive must respond. Overall, the Committee has been an important factor in the emissions reductions achieved in the country since then (Averchenkova, Fankhauser, and Finnegan, 2018) and has helped sustain a long-term perspective and underpin ambition in the targets. Although it lacks formal authority over climate policy, this type of entity has demonstrated that it has the capacity to influence governments through the public pressure generated by its interventions. In the British case, the independence of the Committee is assured mainly by the country’s robust “informal institutionality,” since both the Committee’s budget and the selection of its

members depend on the government;³⁰ in countries with less entrenched informal practices, formal legislation should establish arrangements that guarantee its autonomy (appointment of members, duration of their mandates, budgetary independence, etc.). In this way, a truly independent body can play a fundamental role in the accountability process.

Establishing a systematic citizen engagement process can also be a valuable tool; in the region, Costa Rica is an important example. The Citizen Consultative Council on Climate Change (5C) is mandated to inform the design, implementation, and evaluation of climate policy, including auditing the progress of the country's NDC (the NDC itself was subject to a public consultation process). Comparative international experience considers it one of the most prominent cases of citizen engagement to maintain focus on climate commitments (see Worker and Northrop, 2018). It is worth noting that the 5C is complemented by the Climate Change Science Council (4C), which, as in the British case, is an independent advisory body composed of representatives from academia and experts in the field. It should be noted that, given the magnitude of the climate challenge facing Costa Rica, the economic interests of NGO actors and the general public are closely aligned, which may not be the case in all countries.

Reform Option 4: Adaptive Management and Managerial Flexibility

Climate change *mitigation* usually requires major policy or regulatory changes; *adaptation*, on the other hand, requires more continuous implementation of numerous interventions.³¹ While mitigation can be addressed with broad policy reforms (such as a carbon tax), adaptation strategies require a range of interventions that address the specific vulnerability of different geographic areas or social groups. To this end, and given some of the uncertainties outlined in Chapter 4, such as about the

³⁰ The UK's Independent Climate Change Committee has an annual budget of around US\$5 million, although this may vary, as it is allocated each year in the Budget Act. It is supported by a technical secretariat of around 35 staff with backgrounds in physical sciences, engineering, economics, etc., supplemented by external consultancies for specific issues. Although the members of the Committee are appointed by the government, they are experts of the highest level, mainly from the academic world.

³¹ Unlike ECD policies, the solutions and dimensions of climate change issues face a continuous flow of change.

occurrence and impact of extreme weather events, public administrations need to develop *adaptive management*, understood as management that continuously monitors the results achieved, learns what has worked (and what has not) and, based on this, adjusts its interventions according to the best available evidence. This implies encouraging innovation and experimentation to test and iterate new solutions. It also implies accepting the possibility of mistakes and of correcting or discontinuing unsuccessful interventions.

Public administrations in the region have largely been structured on traditions that discourage adaptive management. In the continental European administrative tradition, which has mainly served as a guide for Latin American states, the roles of government officials are defined in laws, regulations, and budgetary frameworks that strictly delineate their spheres of action. This formal tradition differs from the Anglo-Saxon one, which tends to promote managerial styles with greater margins of flexibility and autonomy for decision making (Biesbrok, Peters, and Tosun, 2018). Thus, in the LAC region, the drive for experimentation runs up against largely rigid planning, budgeting, and policy implementation processes. Of course, such procedural rigidity coexists with informal practices that deviate from the established rules (sometimes to give speed to the management itself). The coexistence of bureaucratic formalism with clientelist and even patrimonial practices is a historical characteristic of Latin American states (Ramos and Milanesi, 2021).

Promoting adaptive management involves a series of transformations in terms of capabilities, motivation, and opportunities to act in accordance with such management (Rogers and Macfarlan, 2020). First, it requires expanding the *capacities* to do so. Public managers must have certain skills and competencies aimed at learning, problem solving, and even tolerance of risk and uncertainty. Their work demands that they have sufficient time to reflect on progress and discuss corrections. They also need quality, timely, and disaggregated information to measure how implementation is progressing and to detect possible deviations and their causes. Second, in addition to having the right skills, managers need motivation to act adaptively. If performance incentives are fixed solely on the achievement of a specific goal, it is unlikely that a manager will set out to innovate with unfamiliar recipes and then accept that the results have been insufficient;

instead, contemplating a broader menu of indicators, including learning what works (and what does not) as an end in itself, can create room for innovation and greater risk-taking. Finally, the *opportunity* to act adaptively needs to present itself. This implies, for example, simplification of the processes for introducing corrections in the programs with respect to their original design or the possibility of approving budget modifications for them, which should not constitute an excessively cumbersome procedure. Similarly, public procurement processes should allow for sufficient flexibility to introduce corrections once implementation has begun.

In some countries, the autonomy of subnational governments can lead to greater experimentation and learning. Uniformity of policy design and implementation also hinders experimentation and piloting. Some countries, such as the Scandinavian countries, generally allow certain national policies to be initially tested only in some areas (as Finland has done with basic income policies and environmental taxes; see Bierbock, Peters, and Tosun, 2018). China also frequently experiments with certain policies first in a few cities or provinces, and only rolls them out nationally after evaluating their results. And even if the same policy is applied to the whole territory, it is feasible to use “planned variations” (Besharov, 2009) of its implementation to assess the effect of different implementation modalities.³² But there may be less room for piloting or experimentation in some countries. Alternatively, subnational governments can be a source of innovation. Because of the contextual nature of adaptation measures, which must address the vulnerabilities of each geographical location or population group, it makes sense to encourage and empower municipalities and states or provinces (in federal countries) to design and implement solutions that will then be evaluated and eventually replicated. In fact, the participation of community actors—who have relevant information and incentives aligned with the search for effective solutions—is also more feasible at the local level (see Box 5). Notwithstanding the above, it is worth considering that subnational governments also have an important role to play in mitigation. To date, 41 cities worldwide (10 of them in the LAC region) have submitted



Subnational governments can be a source of innovation.

³² Typically, impact evaluations seek to measure whether or not a given program had the desired effect. The alternative proposed by planned variations is to test different variants of the program (incorporating or discarding specific component interventions) to learn whether there are key elements to its success. This is particularly important in policy areas with high levels of uncertainty about what works. It is also important for programs that, because of political support, would not be discontinued even in the face of a negative evaluation, but whose implementation could be improved.

climate action plans compatible with the Paris Agreement to the C40 network of cities.³³

▶ BOX 5.

Adaptive Co-management at the Local Level

The so-called “adaptive co-management” (Olsson, Folke, and Berkes, 2004) combines the dynamic learning aspect of adaptive management with the attributes of collaborative governance between the public sector and NGO actors. Given the complexity and uncertainty that characterize ecosystems, this approach allows the incorporation of essential knowledge for effective public policy responses. For example, the authors highlight the cases of Sweden and the Netherlands in which local actors (fishermen) detected anomalies in water quality even before governments began to measure it with specific instruments. Enabling mechanisms to incorporate this information from the community, triangulate it with other sources of evidence, provide feedback, and process it into public policy responses facilitates the rapid adaptation of government interventions.

Reform Option 5: Evidence Standards For Approval Of Policies And Regulations.

For *mitigation* efforts, public regulations play a central role. Therefore, their formulation process is key. State regulations can set standards for emissions and technologies, ban certain products, or set permits for certain activities with climate impacts. But even when they have no specific climate purpose, government regulations on economic and social

³³ See: <https://resourcecentre.c40.org/> (accessed 12/11/2021).

activity can have significant impacts on carbon emissions. Strengthening regulatory processes is therefore a way to optimize efforts in this area. In particular, such processes can influence the following elements: (1) the information available to decision makers for the design and approval of regulations (e.g., on their expected climate impacts) and (2) the standards that must be met in terms of evidence on climate impacts to substantiate the regulations adopted. As noted in Farías (2022), meeting the emission reduction targets committed to by countries requires that public regulations consider climate impacts in a cross-cutting manner. Otherwise, regulations in different sectors (economic, energy, land use, etc.) may accelerate climate change rather than mitigate it.

The regulatory institutional framework in LAC still has important gaps.

With the exception of a few countries, some common trends in the region can be identified (Querbach and Arndt, 2017):

- Limited reforms of regulatory frameworks, aimed at simplifying procedures rather than strengthening the quality of decisions.
- Lack of an institutional framework within the CoG to supervise the regulatory process and act as its quality control of this process (external to the entities that produce the regulations).
- Weaknesses in stakeholder consultation: poor dissemination to the general public; short consultation deadlines; lack of information on regulations in preparation; absence of centralized websites to facilitate consultation (such as www.regulations.gov in the United States); poor dissemination of supporting materials for the proposed regulation (analysis documents, relevant data, impact analysis, etc.), and absence of specific feedback for comments received.
- Lack of requirement in terms of supporting evidence for the approval and review of regulations, with insufficient ex ante regulatory impact analysis (RIA) and meager ex post impact assessments.

Although these weaknesses go beyond the climate issue, it is possible to identify some specific reform options in this area (Farías and Lopes, 2019). First, to the extent that the use of RIAs is established, they should

be aligned with the carbon emission targets set by each country, to document the expected effects on them. Secondly, agreed methodological guidelines on how to measure climate impacts should be developed, as Canada did in 2020.³⁴ Finally, and in line with the above, the “social cost of carbon” should be standardized, estimating a common monetary value for each additional unit of greenhouse gas that enables or restricts each regulation. Taken together, these reforms would help raise the bar for regulators and require them to present objective information on the expected climate impacts of their proposed regulations. It should be noted that, although regulatory impact analyses are usually based on cost-benefit analyses aimed at identifying the option that maximizes expected utility, the uncertainties in climate matters may lead to other methodologies being preferable (such as robust decision making or climate risk-based decision analysis [CRIDA]), which seek to minimize risk in different possible scenarios. In general, robust options reduce the probability of future regret, are reversible and flexible, and have safety margins (Kalra et al., 2014).

More generally, regulatory gaps arise from the limitations of the CoG in guarding the public policy decision-making process from a *whole-of-government* perspective. One of the roles of the CoG is to establish policy approval processes that ensure that all relevant stakeholders (both inside and outside of the government) are consulted, as well as sufficient evidence, analysis, and contestability to avoid ad hoc or poorly informed decisions (Alessandro, Lafuente, and Santiso, 2014). In this way, the CoG constitutes an independent source of advice for the chief executive, enabling the review of sectoral initiatives from a whole-of-government perspective. In the Office of the Prime Minister of the United Kingdom, since 1974, there has been a policy unit responsible for analyzing the proposals submitted by the ministries, which ensures their alignment with the government’s general priorities, and verifies coherence among sectoral policies (Harris and Rutter, 2014). If this whole-of-government perspective is not applied, it is difficult for sectoral ministries (industry, agriculture, energy, transport, etc.) to consider the climate impacts of their policies, as discussed in Reform option 2. These considerations can be formalized in the decision-making process through guidelines such as

³⁴ See: <https://www.strategicassessmentclimatechange.ca/> (accessed 11/11/2021).

the “green paper” on assessment and evaluation of policies, programs, and projects established by the UK Treasury (HM Treasury, 2020), which guides ministries for policy formulation and includes, in that general framework, methods for analyzing and reporting the expected climate effects of their initiatives. Finally, it should be noted that the CoG’s quality control processes for policy formulation increasingly involve a check on the feasibility of implementing proposals. In regulatory (and especially environmental) matters, enforceability is a key attribute for their success, which must be verified in advance.

Reform Option 6: Information, Monitoring and Evaluation Systems

To complement the previous two options (4 and 5), the mechanisms for collecting and analyzing climate information need to be strengthened.

Both to experiment and learn about what works (and what does not) and to demand a higher level of evidence standards in policy making, the availability of timely and quality data is key. Data should cover current and projected carbon emissions (total at the national level and disaggregated by sector); the impacts of interventions; the likely risks; and emerging opportunities for action (Singh, Finnegan, and Levin, 2016). This information is also valuable for feeding into some of the reform options described above, such as public accountability for the delivery of adopted targets (Reform option 3), including the monitoring, reporting, and verification commitments made by countries in their NDCs.



The availability of timely and quality data is key.

The countries of the region still have a long way to go in terms of public data governance. Public administrations are major producers and collectors of information. However, there are often organizational and technological barriers that hinder the availability of the necessary information in a timely manner as an input for decision makers. For this reason, it is essential to strengthen the governance of public data, with rules and incentives that enable its sharing, standards that ensure its quality and comparability, and clear responsibilities to enforce these provisions. This requires cross-cutting leadership and a whole-of-government approach (OECD, 2021), which in some countries has been expressed in integrated data strategies (such as the U.S. government’s Federal Data Strategy, led by the CoG) and in the creation of governing

bodies on the matter, such as the chief data officers of New York, Chicago and Boston, among other cities (Wiseman, 2018). In LAC countries, by contrast, this agenda is still incipient. Currently, the main focus seems to be oriented to open data policies, but without strategies to optimize the use and exchange of information within public administrations.

Monitoring and evaluation (M&E) systems also tend to have gaps in terms of good practices. The latest available IDB measurement at the regional level indicates that, despite some progress, most countries do not have real M&E systems in place (Kaufmann, Sanginés, and García Moreno, 2015). On a scale of 1 to 5, monitoring activities present a development equivalent to 2, and evaluation activities barely reach 1.4. These averages, in fact, are slightly higher thanks to a few outlier cases, as most of the countries fall below these levels. Since that measurement, systems for monitoring government priorities have been consolidated in some countries, and practices and frameworks for policy evaluation have also been extended. However, for various reasons (low quality and credibility of the information, weak integration with other systems—such as the budget system—lack of participation of key actors, etc.), in general, the connection between the information provided by these systems and the decision-making processes is poor (Ospina, Cunill-Grau, and Maldonado, 2021). Therefore, their role in the generation of evidence-based policies is limited.

Obviously, weaknesses in data governance and M&E go beyond the climate issue, but innovations can be sought for this specific issue.

Mitigation and adaptation efforts demand different sets of data, including those related to sectoral economic activities, as well as socio-demographic data (e.g., on vulnerable groups), territorial data (physical assets, land use, etc.), historical incidence of climate phenomena, or climate models and projections, among others. Therefore, a strategy is required that considers the various information needs of decision makers at different levels. The use of monitoring as an input for adaptive management is logically oriented to climate change adaptation policies. In this sense, one of the main challenges at the managerial level, especially in large and diverse countries, is to consolidate local information on risks and vulnerabilities in an integrated manner (Vallejo, 2017). In other words, it is essential to move from monitoring specific interventions (each with its own measurement systems) to the possibility of carrying out an integrated

follow-up that guides the decision-making process in an informed manner, allocating resources where they are most needed. Therefore, without losing the local specificity of the indicators to be monitored, they should be comparable with each other (STAP, 2017). Finally, it is necessary to establish management processes that allow for periodic review of the data among key actors, to inform learning about what works (and what does not) and to introduce timely corrections. The CoG (see Reform option 2) is well positioned to lead such monitoring routines, as well as to facilitate the integration of information.

Reform Option 7: Human Resource Development

The design and implementation of climate policies poses a knowledge and skills challenge for public administrations in the region. As noted in Chapter 4, climate change is a complex phenomenon that involves understanding various scientific disciplines and considering the evolution and impact of different technologies (Pollitt, 2015). Due to the weaknesses of the civil service in most LAC countries (Cortázar Velarde, Lafuente, and Sanginés, 2014), it is difficult for civil service personnel to have the range of skills required for the design and implementation of quality mitigation and adaptation policies. And even if the required human resources are present, they are likely to be dispersed in different organizational silos according to their disciplinary specialty. Thus, there is a talent gap that needs to be addressed.

Due to the magnitude of the human resources gap, one instrument to consider is partnerships with experts from outside the public administration. When faced with novel challenges, and lacking the necessary capabilities to address them, governments often resort to outsourcing tasks to private actors, academics, and members of civil society. For example, the development of atomic energy in the United States, from the Manhattan Project onward, was managed through forms of “indirect government” (Kettl, 2002). Thus, the government could rely on the expertise available in companies, universities, laboratories, and research centers in the country. The main role of ministries and agencies at the central government, such as the Department of Energy, consists of the selection, management, and supervision of external suppliers. With respect

to climate, public administrations can resort to similar tools of collaboration with NGOs. Of course, this strategy has its own challenges and capacity demands. Administrations must be able to design and negotiate contracts with these actors in highly technical fields. Governments must have tools to monitor and evaluate their activities and deliverables, and they must be able to synthesize technical evidence and advice to translate it for decision makers who lack specific knowledge on the subject. Therefore, the selection and training of public personnel linked to climate issues should include these competencies.

In any case, public administrations must have at least a basic level of expertise. First, to dialogue and negotiate on a level playing field with external providers, a basic mastery of the issues is required (what are the most appropriate methodologies for different problems, what are the most recognized sources of evidence and expertise, how to interpret analyses and recommendations, etc.). Second, as one interviewee indicated, if the government lacks certain capacities, it runs the risk of becoming captive to the information and advice provided by actors involved in the field in question. Thus, when policies and regulations are prepared, it is common for the affected economic sectors to seek to exert influence, both privately and in the public sphere, with data and analysis to support their positions. If public decision makers lack their own sources of evidence and advice, they will not have the tools to weigh (and eventually refute) the biases of such sectoral sources.

Therefore, it is necessary to establish merit-based selection processes, specific training on the subject, and personnel performance management, encouraging climate specialization. The creation of formal and informal networks of public servants can also help connect the talent dispersed among different entities.³⁵ In turn, specific figures can be created, across the whole government or in each entity, linking the bureaucracies involved in the issue, such as senior scientists in Israel's ministries (see Schmidt, Teschner, and Negev, 2018). Finally, a climate-qualified civil service, by virtue of its own commitment to the issue, can increase pressure on governments to act on the issue. As one interviewee noted, in the various ministries of the

³⁵ See, for example, <https://www.civilserviceenvironmentnetwork.org/> in the United Kingdom.

countries of the region, these “policy entrepreneurs” (Kingdon, 1984) have been the main drivers of climate policies.

In addition to technical specialization, other skills must be developed.

As previously indicated, adaptive management requires innovation, experimentation, and learning skills that are not traditionally encouraged in public administration. In other words, there are “soft” skills that are complementary and equally necessary to the specific technical competencies of the disciplines that deal with climate. In short, the talent required to address climate change involves a new way of understanding the business of public service, distinct from the perspective focused only on strict compliance with predefined processes or interventions. Some of the principles of the agile government approach proposed by the National Academy of Public Administration of the United States describe the type of knowledge, skills, and behaviors that public officials should acquire to manage the implementation of climate change policies (N.A.P.A., 2020).³⁶

³⁶ See: <https://napawash.org/the-agile-government-center/overview>.

CHAPTER

06

Conclusions: An Agenda For Managing Wicked Problems



STATE CAPACITIES AND WICKED PROBLEMS OF
PUBLIC POLICY: ADDRESSING VULNERABILITIES
THAT AFFECT HUMAN DEVELOPMENT

06

Conclusions: An Agenda For Managing Wicked Problems



The pillars of public management reform discussed in these pages are applicable beyond the two topics selected.

This paper has focused on how to address the management challenges of two “wicked” problems: inequality and climate change. Both share characteristics that differentiate them from the linear problems for which traditional public administrations are best suited. Wicked problems are multidimensional, affect multiple interests in tension, and present information challenges and uncertainty. Addressing them often generates feedback loops and new issues to address, so they cannot be solved once and for all. These features are common to other pressing problems in LAC countries, such as the lack of economic competitiveness, gender inequality, and the crisis of citizen trust in governments. For this reason, the pillars of public management reform discussed in these pages are applicable beyond the two topics selected.

In both cases, several reform options aimed at realigning the incentives of stakeholders and expanding the information and evidence available to decision makers have repeatedly emerged. First, the importance of applying systems approaches, which analyze the problem holistically and capture its interdependencies, is more promising than leaving it to each ministry or agency to address it separately in a fragmented or partial manner. In turn, this requires the CoG to play a role in aligning incentives to facilitate such collaboration and provide information on which whole-of-government objectives are being pursued. Second, monitoring and public accountability are critical elements in increasing the incentives for central government and service providers to focus on agreed upon objectives, and in amplifying the voice of citizens and beneficiaries in the policy process. Third, enabling experimentation, learning, and continuous adaptation seems more promising than detailed planning in advance of every activity to be undertaken and product to be delivered. This also implies that public officials develop new skills and abilities, linked to innovation, the generation of knowledge about what works, and the flexibility to adjust the initial course. Finally, integrating the information

systems of the various data-producing entities contributes to the realization of several of these transformations.

In terms of inequality, it is clear that what is being implemented in LAC countries today is not enough. The good news is that, as this paper points out, there are options for reform to do more with less. Although social spending has been increasing, the same has not been true for inequality reduction in recent years, as inequality has stagnated. The increased fiscal pressures faced by several countries, exacerbated by the COVID-19 crisis, will limit the scope for further expansion of social spending in the future. This study presents options for maximizing the impact of the resources invested, with an approach that highlights how social policy is managed. These options point to better coordination within the government and also to a change in the incentives of service providers, whether governmental or not. Better coordination helps to produce synergies (i.e., greater impacts without the need for more resources) and also to minimize the frequent overlapping and duplication of effort. In addition to integrated strategies with coordination from the CoG, already tested in some countries, the comprehensive review of social interventions with a systems perspective (and user perspective) may be an important innovation in LAC countries, at least for certain areas of social policy. In turn, in terms of incentives for providers, options include pay for performance mechanisms, measurement and publication of performance information, and greater freedom of choice for beneficiaries, which can be expanded to cover more services. Although this could involve controversy or meet resistance, it is worth considering the growing evidence on their potential positive impacts on the quality of services, especially when possible undesired effects are actively addressed.

One finding to keep in mind is that context matters, and this should enable innovation according to the needs and capacities of each case.

First, as described in Chapter 2, the concept of “social policy” encompasses a wide diversity of interventions and, therefore, highly variable implementation challenges. The most challenging interventions, on which this paper has focused, combine heterogeneous beneficiaries, activities that are not programmable in detail, intense interaction with users, and monitoring difficulties. But there is another set of interventions (like those that directly transfer resources) that minimize such complexities. Second, the capacities of public administrations are heterogeneous between

and often within countries. Thus, the types of interventions that each administration can successfully implement will also vary. Finally, the gaps identified here (coordination, quality of service, etc.) also occur differently in different areas of social policy. Therefore, each decision maker and public official should consider the specific characteristics of his or her situation to prioritize the best reform options available.

Knowledge of the link between public administration attributes and climate change policies is incipient, yet certain conclusions can be drawn to guide decision makers. Unlike other areas of public policy, where there is already a more robust body of evidence on how public management institutions affect the quality and effectiveness of interventions, in climate matters this knowledge is only just being built. But since decision makers' timescales are pressing, this report seeks to provide general ideas about the main challenges and options for addressing them. In particular, it focuses on two main challenges that arise from the characteristics of the climate problem and that the institutional framework should address: (1) how to align the incentives of multiple actors behind coherent and urgent efforts; and (2) how to expand the information available to decision makers on a complex issue with high levels of uncertainty. This study has detailed specific reform options to address both of these challenges, based on the still novel experiences in climate and on comparable knowledge from other public policy areas. In summary, these are the overall conclusions:

- Coordinating the required set of actors is difficult, due to the existence of competing priorities, but it is more feasible if the CoG (empowered by its proximity to the head of the executive branch, with a cross-cutting perspective, and without its own bureaucratic terrain to dispute), rather than a sectoral ministry of environment, leads the coordination. The CoG can transform sectoral incentives thanks to its control over resources (political, budgetary, bureaucratic, etc.) that are relevant to the ministries; moreover, its ability to cross-cut information allows the government to identify synergies and coherent interventions.
- Such coordination must be based on a shared vision and a systems approach that recognizes the contributions needed from each sector and the key interrelationships, sequences, and feedback. Obviously,

this change in approach brings its own challenges, including managing the comprehensiveness of such a multidimensional challenge. This perspective enables alignment of incentives and information to generate consistent policies.

- The shared vision also facilitates the establishment of long-term plans that align incentives on an intertemporal basis. Such plans should be formulated on the basis of broad multi-stakeholder support, to provide certainty about the sustainability of climate policy even given changes in government and to encourage the necessary investments from private actors.
- Likewise, long-term commitments are only binding if instruments are established to put them into practice in short-term plans, programs, and budgets. Several countries have been establishing norms in this area, although they are mostly recent experiences, so it is not possible to certify their effect. In the LAC region, Chile, Costa Rica, Guatemala, and Suriname have defined financing and investment plans as part of the implementation of long-term strategies.
- Moreover, such commitments are not credible if there is no internal monitoring of their goals or mechanisms for citizen accountability, informed by adequate information. In addition to translating plans into concrete short- and medium-term actions, credibility requires setting precise goals and the identification of those responsible, with political and reputational incentives, so that they prevail on the government agenda.
- Faced with a complex and uncertain challenge, the formalistic rigidity of the region's prevailing administrative tradition should be tempered to make way for innovation, experimentation and learning about what works (and what does not). In certain countries, subnational governments can act as a laboratory for piloting new solutions and even adaptive co-management with local actors, taking advantage of information that may not be available to the public sector.
- In turn, the informality of decision-making processes, which are



This chapter highlights the institutional and management attributes that are most important for designing and implementing climate policies.

characterized by scarce ex ante quality controls, calls for the establishment of more demanding standards of evidence for the approval of policies and regulations, with methodologies that contemplate different possible scenarios (due to prevailing uncertainties) and that prioritize the minimization of climate risks.

- The last two points are based on solid information, monitoring and evaluation systems, and on public officials with sufficient skills and knowledge in the area (or, at least, capable of managing the necessary alliances with external actors with specific expertise).

Although the menu of reform options considered is broad, within each strategy the alternatives complement each other. To effectively align stakeholder incentives, it makes sense to combine the following elements: (i) coordination from the GoC; (ii) the operationalization of climate goals in short and medium-term instruments; (iii) and public accountability to motivate monitoring and citizen pressure. Each of these options should enhance the others, as they all generate synergistic incentives for stakeholders to intervene coherently and urgently in the face of climate change. Similarly, the strengthening of information, monitoring and evaluation systems should feed both the formulation of evidence-based policies and regulations (key tools for mitigation) and the flexible learning required for adaptation policies. In turn, expanding the knowledge and skills available within the civil service and to external partners would also build greater capacity to process and analyze evidence, and better advise decision makers in contexts of uncertainty and when sectoral positions are conflicting. In short, these are not mutually exclusive but complementary reform options, which should preferably be pursued in an integrated manner.

Obviously, in contexts of scarce resources, the most useful options for each case should be prioritized, always based on a good diagnostic. Governments may not have sufficient resources (political, budgetary, managerial) to promote a wide range of reforms simultaneously. Therefore, the specific gaps in each case should be identified so that the most urgent reforms can be implemented and to spend better, in a coherent manner, in order to avoid using certain public resources to combat climate change

while, at the same time, other resources are used in a way that tends to aggravate the problem, a situation that is often common today (Ferro et al., 2020). This chapter highlights the institutional and management attributes that are most important for designing and implementing climate policies. Decision makers will need to analyze the extent to which their organizations are moving towards or away from these attributes, in dialogue with public and private actors who have information and can provide useful perspectives on the issue. This chapter can serve as a basis for developing an assessment or self-assessment tool to translate these attributes into measurable indicators, thus enabling a more rigorous analysis of the state of affairs in each case. In any case, these should be rapid diagnoses that do not delay the momentum for adopting the necessary reforms.

Finally, these reform options should be evaluated through an in-depth examination of specific cases. This paper has drawn on case studies from different countries (most of them from outside LAC), the analysis provided by the experts interviewed, and the broader knowledge of public management that is relevant to this policy area. However, several of these reforms are only embryonic in several countries of the region, and their effective implementation has not been comprehensively documented. Therefore, to determine their effectiveness and, especially, to know the contexts where they are most applicable, a deeper immersion in both their implementation processes and their eventual impacts is needed. This is the next step in an agenda to which this paper seeks to contribute.

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Annex

The Relationship Between the Quality of Public Management and Early Childhood Development Variables

This annex details the quantitative analysis carried out to estimate the relationship between changes in institutional capacity, as measured by the bureaucratic quality index, and progress in early childhood development (ECD) indicators, using as an example those indicators that calculate survival, namely: (i) the infant mortality rate and (ii) the mortality rate in children up to 5 years of age.

These ratios are measured with equations (1) and (2), respectively:

$$(1) \quad IM_{it} = \beta_0 + B_1 IQ_{it} + B_2 X_{it} + \alpha_i + u_{it}$$

$$(2) \quad MR(5)_{it} = \beta_0 + B_1 IQ_{it} + B_2 X_{it} + \alpha_i + u_{it}$$

Where, IM_{it} corresponds to the infant mortality rate in country i in year t ; $MR(5)_{it}$ is the mortality rate of children up to 5 years of age in country i in year t ; and, the bureaucratic quality indicator in country i in year t ; IQ_{it} , the indicator of bureaucratic quality in country i in year t ; X_{it} , to the set of control variables in country i in year t ; α_i , to the country fixed effects, and u_{it} is an error term.

The following variables were used for this analysis:

Infant mortality rate per 1,000 births. Represents the number of infants who die before reaching 1 year of age per 1,000 births in a given year. Source: World Bank World Development Indicators.

Mortality rate of children up to age 5 per 1,000 births. It is the probability per 1,000 of death of a newborn before reaching the age of 5, if subject to the specific mortality rate at a specific year. Source: World Bank World Development Indicators.

Bureaucratic Quality Index. This indicator measures the experts' perception of the level of strength, expertise and autonomy of the bureaucracy. As detailed in this analysis, an improvement in bureaucratic quality is expected to have an effect on reducing the infant mortality rate and under-five mortality in the study period. Source: International Country Risk Guide (ICRG).

The control variables for this analysis were determined from the Abbuy (2018) study and are as follows:

Female literacy rate as a percentage of all women aged 15 and over. It corresponds to the percentage of women over 15 years old who can read and write, with adequate comprehension, a short statement about their daily life. As discussed in Abbuy (2018), there are several channels from which this indicator affects child mortality (Currie and Moretti, 2003; Duflo and Breierova, 2004; Grossman, 1972; Schultz, 2013). Source: World Bank World Development Indicators.

Current expenditure on health as a percentage of GDP. The estimate of current health expenditure includes health goods and services consumed during each year. This indicator does not cover health investment expenditures such as buildings, machinery, information and communication technologies, or vaccine inventories for emergencies and outbreaks. The work of Barenberg et al. (2016) examines how health spending reduces the infant mortality rate in India after controlling for other relevant variables such as political affiliation, per capita income, and women's educational attainment. Source: World Bank World Development Indicators.

Logarithm of GDP per capita in 2011 international dollars adjusted for purchasing power parity. There are several studies that analyze the relationship of economic performance as one of the determinants of infant mortality, but such a relationship is complex (Hojman, 1996; Nishiyama, 2011; Pritchett and Summers, 1996; Smith and Haddad, 2002). Source: IMF World Economic Outlook (WEO) (October 2020).

Urban population as a percentage of total population. Corresponds to people living in urban areas as considered by national statistical offices. Abbuy (2018) defines this variable as a key determinant, as it allows

capturing the relative differences in the availability of health infrastructure between rural and urban areas. Source: World Bank World Development Indicators.

Table A1 summarizes the results of this analysis: it shows that, even after controlling for traditional determinants of the infant mortality rate, an improvement in the institutional quality variable is associated with a reduction in infant and under-five mortality rates (which are key survival indicators for assessing ECD). The empirical evidence from this study demonstrates that, at the aggregate level, improvements in institutional quality can have a positive impact on ECD indicators.

Table A1. Results

Variable	(1)	(2)
Bureaucratic quality (score)	-6,38*** (1,80)	-12,4*** (3,66)
Women literacy rate (% of women 15 years or older)	-0,229*** (0,0298)	-0,377*** (0,0604)
Health spending (as % of GDP)	-0,463*** (0,126)	-0,326 (0,257)
Log GDP per capita (PPA, international dollars 2011)	-14,3*** (0,812)	-20,9*** (1,65)
Urban population (% of total population)	-1,04*** (0,0564)	-1,97*** (0,114)
Constant	237*** (5,97)	371*** (12,1)
<i>N</i>	2051	2051
<i>T</i>	135	135

Source: Authors' elaboration.

Notes: The dependent variables are the infant mortality rate (1) and the under-five infant mortality rate (2) for 2000–2019, controlling for country fixed effects. Standard errors in parenthesis; * p < 0.10, ** p < 0.05, *** p < 0.01.

