Knowledge into policy:
Going beyond 'Context matters'

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**Vanesa Weyrauch, in collaboration with
Leandro Echt and Shahenda Suliman**
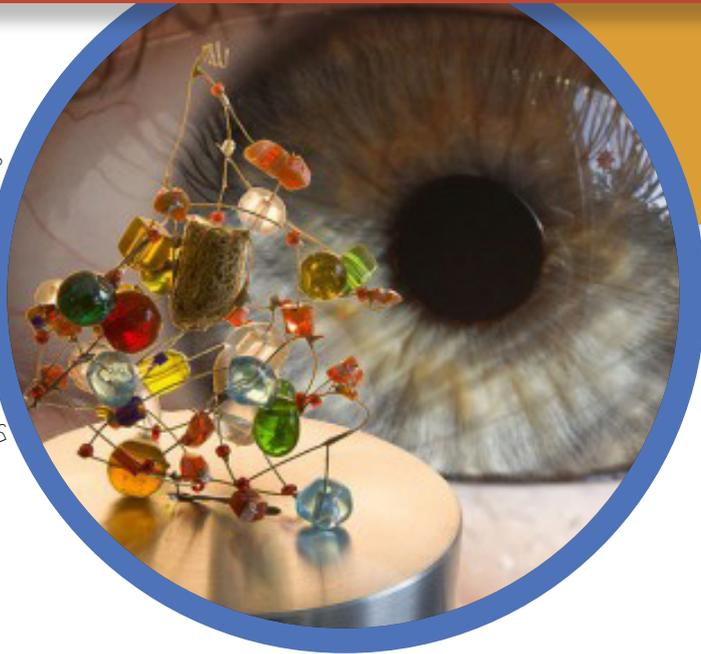
Executive summary

The role and importance of context in the interaction between research and policy is widely recognized. It features in general literature on the subject, in case studies of how research has successfully influenced policy, and in practitioner reflections on the results of their work. But despite this, there is significant room to improve our understanding of how context matters.

And so, in partnership with INASP, Politics&Ideas (P&I) embarked on the development of a knowledge systematization effort around context. Our aims were to:

- Detect and explore the main contextual factors that significantly affect the promotion and use of knowledge in policymaking
- Identify and systematize practices from different interventions that promote the use of knowledge in policy, both from the supply and the demand side that might be useful for other similar endeavours.
- Help those interested in promoting a more fruitful interaction between knowledge and policy to better understand context and thus more effectively and strategically identify the most promising potential areas of change for different types of interventions: research, design and implementation of projects, capacity building and monitoring and evaluation.

This effort has resulted in the development of two products, which together should enable us and others to better inform the design and delivery of capacity-building efforts with regard to the use of research evidence in policymaking in developing countries. The tools should also inspire other types of interventions and future research on how to deal with the most relevant contextual factors and/or focus efforts depending on where there is more fertile soil.

This paper presents the first of these – a conceptual framework to help policymakers, researchers, practitioners and donors better define windows of opportunity in different contexts to focus efforts on promoting better interaction between knowledge and policy. The second is an action paper, which proposes concrete ways in which the framework can be used.

The framework comprises six facets or 'dimensions' of context that any government institution aiming to improve the use of knowledge in public policy (as well as those working with these agencies) should consider carefully. These six dimensions fall into two categories: external and internal. The first two external dimensions are (1) macro-context; and (2) intra- and inter-relationships with

state and non-state agents. The four internal dimensions are: (3) culture; (4) organizational capacity; (5) management and processes; and (6) core resources. The full framework is presented on pp. X.

The links between these dimensions are various and changing. But there is also critical room to manoeuver within governmental institutions, as is explained in the section 'Our focus'. Leadership, for instance, emerges as one of the key 'sub-dimensions' that can catalyse effective improvements in culture, organizational capacity, processes and resources to strengthen that evidence use.

Organizational culture is also significant. It can erode well-designed and well-intentioned management processes. Staff incentives and motivations should be carefully considered – as too, should the factors that influence them, such as values, judgements, experience and expertise, pressure groups, etc.

Such complexity means that any formal decision to promote better use of research in policy needs to be highly strategic. Our proposed framework aims to help users better assess the contexts in which they operate and, based on careful assessment, detect where the potential for change may be greater (and barriers more significant). Our theory is that, by applying this lens to a particular government setting, users can identify what to do, with who and how more effectively.

This framework has diverse potential uses and users, and different practical applications for policymakers, researchers, capacity building experts, and others. Different uses by diverse users are explored in more detail in our action paper, which includes useful tools and examples of good practices that policymakers and others working with them have deployed to enhance the use of research in their agencies.

Contents

Acronyms and abbreviations

AFSSRN	Asian Fisheries Social Science Research Network
CONEVAL	Consejo Nacional de Evaluación de la Política de Desarrollo Social
DFID	Department for International Development
FOSIS	Fondo de Solidaridad e Inversión Social
GDP	gross domestic product
HDI	Human Development Index
ICT	information and communications technology
INASP	International Network for the Availability of Scientific Publications
IWMI	International Water Management Institute
KSI	Knowledge Sector Initiative
M&E	monitoring and evaluation
MP	Member of Parliament
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
P&I	Politics & Ideas
SEDESOL	Secretaría de Desarrollo Social
UN	United Nations

I. Introduction

Context matters. Those working in the interface between research and policy hear it – and say it – so often. When discussing context, policymakers and practitioners in developing countries nod their heads, all too familiar with the challenge of trying to inform policy with knowledge when their immediate and peripheral surroundings fail to recognize its need or its relevance, and are unwilling to take it into consideration when making policy decisions.

A significant body of literature on the links between evidence and policy also recognizes the role of context in explaining the successes and failures of those promoting their research to influence policy (Weiss, 1995; Sutton, 1999; Court and Cotterrell, 2006). Over the years, there have been attempts to systematically understand contextual factors influencing development intervention outcomes using various frameworks (O'Meally, 2013), including the 'drivers of change' approach or, more recently, political economy analysis (PEA).

To use these analytical frameworks, several organizations have developed practical toolkits (Fritz, Kaiser and Levy, 2009; DFID, 2009), which include guiding questions about contextual features in different aspects of analysis (e.g. the business-state relationship, state dependence on earned revenues, etc.).

Academics have also developed practical tools and approaches to help organizations better decipher the context in which they work, such as assessments of political contexts and political issues (Court and Cotterrell, 2006), and frameworks to help think tanks conceptualize context (Brown, Knox and Tolmie, 2014; see also the very interesting On Think Tanks series focused on context).

Today, it seems, no one would underestimate how fundamental context is when considering interventions, projects and activities to promote better interaction between research and policy. And, in practice, we are constantly aware of its weight and energy as we strive to identify ways in which we can bring about concrete and visible results.

We tend to regard context as an explanatory factor to account for what has worked or not worked that well in a specific project; or to tell a story of where evidence has successfully informed policy. We often refer to it in broad terms, alluding to "external events" for instance. We present it as something that is clearly beyond our control, too large, too complex, too "external".

Yet on a daily basis we are immersed in context and dance with it as the political animals we all are: we seek out opportunities, we stumble with at hurdles and evade threats, we adapt activities and refocus others as we interact with different stakeholders.

At P&I we believe that there is still ample scope to improve our understanding of context analysis and how we interact with it. We seek to build on the approaches and frameworks already developed and expand the discussion to understand in detail and with more precision how context can both open up and hinder opportunities for a fruitful dialogue between research and policy. Our assumption is that a more thorough understanding of context should lead to more effective interventions – both by those who design and manage policies and by those trying to influence them – and thus greater impact.

In partnership with INASP, we embarked on the development of a knowledge systematization effort around context, exploring the macro contextual factors and, more specifically meso or institutional-level factors. We aimed to:

- Detect and explore the main contextual factors that significantly affect the promotion and use of knowledge in policymaking
- Identify and systematize practices from different interventions that promote the use of knowledge in policy, both from the supply and the demand side that might be useful for other similar endeavours.
- Help those interested in promoting a more fruitful interaction between knowledge and policy to better understand context and thus more effectively and strategically identify the most promising potential areas of change for different types of interventions: research, design and implementation of projects, capacity building and monitoring and evaluation.

This effort has resulted in the development of two knowledge products. This paper presents the first of these – a conceptual framework to help policymakers, researchers, practitioners and donors better define windows of opportunity in different contexts to focus efforts on promoting better interaction between knowledge and policy. The second is an action paper, which proposes concrete ways in which the framework can be used.

Both products should enable us and others to better inform the design and delivery of capacity-building efforts with regard to the use of research evidence in policymaking in developing countries. It should also inspire other types of interventions and future research on how to deal with the most relevant contextual factors and/or focus efforts depending on where there is more fertile soil.

1.1 Knowledge in policy

1.1.1 Understanding "policy"

Public policies are what we look to strengthen in various aspects through the promotion of a wider, better use of knowledge in their creation and implementation. But what do we mean by "public policy"? While the term is widely used in public administration and by those who, one way or another, are connected to or involved in the public sector (academics, journalists, business people, civil society organizers, international organizations, etc.), not everyone understands the 'public policy' equally. (See, for example, a definition by a well-known policymaker in Brazil given in Box 1.)

Several authors state that public policies allow to regard "the state in action" (Oszlak and O'Donnell, 1976) with regards to issues that become problems as a result of the power struggle among different actors in society. Public policies are defined by the state's involvement in problems, issues or social matters such as demands or needs stemming from the dissatisfaction of a social group or sector.

However, as different sections of society will have different views of what is (or is not) a problem, they will seek to impose their view of the facts based on *their* needs, interests and resources. Not all situations, then, become problematic or are given the same level of attention by the state. Based on Oszlak and O'Donnell (1976), we conceive public policies as government actions resulting from the way it handles and settles disputes among different players within a framework of a certain distribution of power.

This paper also makes several assumptions related to the policymaking process:

- **Policymaking policies are product of complex, non-linear processes.** As such, there are many entry points, which may not always be identifiable, to incorporate evidence into the debate and decision-making process. These entry points, or 'doors' depend on the operating method of the governmental agency or the area in which you work, or even on certain political moments during which particular actors prevail.
- **Public policies emerge from multiplayer processes.** The interaction between available knowledge, its potential creators and users can therefore be varied. Various skills are required effectively match evidence with relevant policy decisions and management.
- **Actors intervening in the public policy process have interests and use resources to influence the decision-making process.** It is therefore necessary to take these

Box 1. Democracy's method for defining public policies

"Democracy has its own method for defining public policies. Decisions result from a negotiated adjustment of interests, according to transparent rules defined in the public space... The policies do not reflect the supposed omniscience of enlightened technocrats but represent the distillation of legitimate interests, a concurrence of wills, including the government's will."

Fernando Henrique Cardoso, former Brazilian President, speaking at the Economic Commission for Latin America and the Caribbean, August 2003

interests and resources into account (Box 1) and identify said resources to identify how they might affect receptivity to considering research in policy processes.

- ◆ **Policymaking is neither an instrumental nor a rational process.** Acknowledging the importance of research as a source to inform policymaking does not ignore the political nature of public policies. So it is not possible (nor desirable) that politicians avoid values or ideology when making decisions: there is no "single correct answer" to each policy issue, and the choice of alternatives is not part of a impartial, objective and rational assessment nor a clear response to the available "evidence" on their impact and results.

- ◆ **Public decision-making is influenced by several factors.** The knowledge stemming from research is one of the many elements that may contribute to identifying the best available solutions. Therefore, those looking to foster a wider use of research must acknowledge the relative importance each factor has on a particular public policy decision and how they interrelate.

1.1.2 Understanding "knowledge"

Often in public policy literature, "knowledge", "evidence", "information" and "research" are used interchangeably. But it is important to clarify their differences and explain how these terms will be used throughout this paper (see also 'Terminology').

Evidence is located in the world. It is the set of observable events or conditions that allow an argument to be built in support of certain statement.

Knowledge is located in the agents (both individuals and organizations). It is the set of information stored through experience or learning.

Information plays a mediating role between evidence and knowledge: the set of facts and observations associated with an object becomes information, and information associated with a context and experience becomes knowledge (Carrion Maroto, 2002).

Research, on the other hand, is a process. It is the search for and generation of knowledge through intellectual activity characterized by innovation of ideas, the use of rigorous methods and the validation and critical judgment of peers. Thus, research is a process that, using the available evidence and information, seeks to contribute to the production of knowledge.

Here we can see nuanced differences between these terms. But at some point in the discussion of the use of knowledge in public policy, these nuances become less relevant. So, while it is

necessary to recognize these nuances, in this study we decided to approach them under the broad "umbrella" of "knowledge", which encompasses evidence, information and research. Whenever we refer to these concepts, we will include these different types of knowledge circulating in public policy processes, which are generated and used by various actors –academia, civil servants, civil society, and others.

Knowledge is one of many factors influencing policy decisions. And so, rather than incorporating knowledge into policymaking in a linear way, we need to consider the wide range of possibilities in terms of uses. According to Nutley, Walter and Davies (2002) there are typically several ways in which decision-makers and other key players in the policymaking process use evidence:

- **Instrumental use.** Research findings directly contribute to public policy decision making. While direct application of knowledge to decision making is not common, there are certain areas of public policy – such as healthcare – where certain issues have a larger consensus mainly due to scientific research. In these areas, the instrumental use of information is more frequent.
- **Conceptual use.** Research findings may foster a change in the understanding of a situation and contribute to new ways of thinking about certain courses of action. The evidence resulting from research typically contributes to identifying public policy dilemmas, thus shedding light on the pros and cons of different courses of action: "If I do more X, how much Y do I need to compromise?" Or: "If I benefit group A, how would group B be affected?"
- **Support mobilization.** Research findings may also become an instrument of persuasion. Certain findings may be used as a political tool to legitimize certain courses of action or to push for these from non-state actors. Furthermore, as one mentor pointed out, there is a step between the point at which evidence is made available, presented, etc. and when the decision taken, where the judgment of the individual bears significant weight. This stage is influenced by a wide range of factors including values, beliefs, political calculation, etc.
- **Further influence.** Evidence may have influence beyond the problems or issues it makes reference to. Through professional and researcher networks, it may change public policy paradigms or beliefs. Research contributes to the accumulation of knowledge, which ultimately helps to bring about large-scale changes in ways of thinking and, sometimes, in actions.

The uses of research in public policies can also be organised according to the different critical stages of the policymaking process (Table 1).[1] In this way, the timing for each type of use of knowledge might vary (see also the exploration of timing as a relevant factor on page 58).

Table 1. Evidence contribution per policy cycle phase

Stage	How evidence contributes
Inclusion in the agenda	Evidence helps to identify new problems or, through the accumulation of evidence, we are able to capture the magnitude of a problem so that the relevant political players are aware that they are facing an important issue.
Formulation	Once an understanding of a situation and the different courses of action are as detailed and complete as possible, policymakers may rely on evidence to make informed decisions about how to design and implement a policy (including the different aspects that define it). This includes knowledge of the instrumental links between an activity and a result as well as an intervention's expected cost and impact.
Implementation	Here attention is focused on operational evidence to improve the efficiency of initiatives. This may include analytical work as well as systematic learning with regard to technical abilities, expert knowledge and practical experience.
Monitoring and assessment	A process of comprehensive monitoring and assessment is essential to determine the efficiency of the policy implemented and to provide the basis for future decision making.

Source: Pollard and Court (2005).

1.1.3 Summary

This overview of knowledge and policy leads us to some important conclusions. On the one hand, there is the need for public policy processes to give space to and a role for available knowledge in different policy areas, recognizing it is a factor which interacts with others that also have an influence on decision making. On the other hand, we should adopt a complexity lens when analysing the relationship between knowledge and policy, overcoming a purely normative view, and considering the multiplicity of actors, interests, situations and relations inherent to the public policy processes in our societies.

1.2 The concept of context

To contribute to the understanding of context, the first challenge is to define the concept itself. As McCormack, Kitson, Harvey, Rycroft-Malone, Titchen and Seers (2001, based on Morse, Hupcey,

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1 These stages are presented based on the policy sequential analysis model which is a tool that simplifies the understanding of public policies as complex processes involving phases with their own specific issues. For more on uses according to the policy stages, please see the Practical paper.

Mitcham and Lenz (1996:256)) point out, concepts in a discipline are "mature" only when they are relatively stable, clearly defined, with well-described characteristics, demarcated boundaries, specified preconditions and outcomes. If a concept is "immature" it will be poorly understood, poorly developed and poorly explained.

The concept of "context" does not meet the maturity criteria. It is used synonymously to refer to very different surrounding or influencing dimensions related to policy and politics: macro-political context, specific policy context, decisive moments in the policy process and even the way in which policymakers think.

We will therefore attempt to contribute towards its "maturity" by detecting and exploring those contextual factors that play a critical role in the promotion of the use of knowledge in policy.

Based on available literature, we initially decided to use "context" in this study to refer to the specific environment in which people try to get research evidence and knowledge into practice. In its most simplistic form, the term here refers to the physical environment in which practice takes place, but also encompasses the relationships and processes that go beyond this physical environment and enable change as a consequence. Such an environment has boundaries and structures that together shape the environment for practice (McCormack et al., 2001).

However, we did not want to dismiss the complexity of the term, nor reach a conclusive definition of it. As Harle and Ademokun (2014) explain in this post, any system is supposed to interact with other institutions and actors – funders, government policy, internal and external incentives. The authors propose that there are probably "rings" within a system, maybe inner and outer, maybe more levels than that. Indeed, any setting or environment where practice takes place will be influenced by, and at the same influence other similar and also different settings and environments (e.g. Congress will be affected by the Ministry of Finance and vice versa) so there are no linear ways to structure the system but rather circles overlapping and crossing each other .

It was therefore recognized that our framework needed to capture those inter-relationships and how they affect practice as effectively as possible, while at the same time drawing some working boundaries so as to make the exercise manageable.

II. Our focus

Context is a complex environment where different levels of policy decisions and implementation take place as the result of simultaneous interactions between various stakeholders. These stakeholders are not only policymakers but also those trying to influence them, or affected by them, such as citizens, media, private companies, unions, civil society organizations, research centres, etc.

After reviewing relevant literature on the topic and based on our own experience, we decided to focus the framework on the factors that affect the use of research *at the level of government institutions[2],* instead of concentrating on macro-level factors. It is important to note, however, that we do include the macro-level context as a relevant dimension that significantly affects each state agency.

There are several reasons for this focus. First, we believe that concrete governmental institutions constitute the most obvious and direct environment where practices to promote the use of knowledge in policy take place. They are the setting where most decisions about policies are discussed and, most importantly, in the case of executive branch institutions, where they are implemented. Thus, chances for research to inform different aspects of their working are present, more systematically and continuously.

Second, the macro-contextual approach, which has dominated the existing (though limited) literature on context, focuses largely on the level of particular socioeconomic and political realities at the national level (such as the extent of political freedom, media freedom, etc.). Macro context factors, as we will analyse in more detail in the first part of Section 5.1, are usually beyond the sphere of control or influence of those trying to promote the use of knowledge in policy, either from the inside or outside the State. In this sense, as this paper and wider study aim to promote more effective and strategic identification of potential areas of change for different types of interventions, looking primarily into macro level factors would not be useful.

At the micro level, local factors can clearly shape how specific interventions unfold and the extent to which they are successful,

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2   We include within government institutions the three different levels: executive, legislative and judiciary since they all use or could potentially inform policy with evidence. However, most of the literature related to the interaction between research and policy is focused in the executive power and there is increasing attention paid to the use of research in parliaments and among legislators. Naturally, the way knowledge is used in the different levels varies due to the nature of the policy design process and the type for decisions that need to be made and implemented. To add complexity, executive power agencies might behave very differently at the sub-national level, parliaments change their processes to incorporate evidence according to prevailing parties and their ideologies, etc. State agencies are therefore far from being a monolithic stakeholder.

even within otherwise broadly similar contexts (Joshi, 2013: 6). This means that under the same macro-contextual factors, different stakeholders could produce heterogeneous results.

For example, very similar interventions to build capacity of staff to define a need for evidence to inform a policy design might yield very different outcomes if deployed in the ministry of finance (where in many countries there is a large pool of highly regarded and experienced economists as well as economic researchers with experience in developing this type of evidence) compared with the ministry of social development. Despite sharing similar macro contexts, the same type of capacity-building activities will play very differently among diverse government institutions. Choosing the best entry points at the institutional level therefore seems an effective strategy to elevate potential for sustainable change.

Third, change at the institutional level bears more potential than just focusing on the individual. As Harle and Ademokun (2014) expressed, even though training people is important, this alone isn't sufficient to achieve lasting results; it is necessary to think about how individuals are enabled – or not – by the broader environment for research, and how they work together, within and across departments and institutions.

There are interventions, such as the Knowledge Sector Initiative (KSI) in Indonesia, that aim to work at several levels simultaneously. KSI is identifying solutions to address system-wide constraints of the knowledge sector, such as reforms in the regulation about procurement of research by government organizations, funding in the national budget for research and development, the incentives of researchers in university to conduct further research.

At the same time, KSI is also working in select policy areas to bring together knowledge producers, knowledge intermediaries and those who demand and use evidence. The purpose of this is to test ways to strengthen the interaction between these different stakeholders and to address their specific capabilities. There are, however, very few initiatives in this field that have sufficient resources and time to catalyse change at different levels. Therefore, changes within institutions rather than whole systems – either driven from within and/or supported from outside – appear to be more feasible for smaller projects working with shorter timeframes.

Last but not least, the role of institutions in enabling systemic change has also been widely credited in development-related projects. Focusing at the institutional level has promising potential to contribute to change because of the significant role borne by institutions within any system. For example, a strategy document produced by the World Bank – *Reforming Public Institutions and Strengthening Governance: A World Bank Strategy* – aimed to

help build efficient and accountable public sector institutions in addition to providing discrete policy advice. It noted that a key lesson from experiences in the 1990s was that "neither good policies nor good investments are likely to emerge and be sustainable in an environment with dysfunctional institutions and poor governance" (World Bank, 2000: vii).

This is also strongly related to the "good governance" agenda. This term emerged during 1990s amid growing concerns about governance. As a consequence, the United Nations, Commission for Africa, Department for International Development, the World Bank, Commonwealth Secretariat and others cited it as a factor essential to the promotion of development, capacity building, and to combating poverty.

The concept of good governance is relatively broad but there is general agreement on several key principles: participation and inclusiveness (involvement and ownership by a broad range of stakeholders); accountability (decision-makers responsible for their actions, checks and balances in place, etc.); and respect for institutions and laws (rules apply equally to everyone in society and corruption is controlled, etc.).

Despite there not yet being a body of evidence supporting the idea that positive change within governmental institutions leads to better outcomes for society, dysfunctional and ineffective public institutions and weak governance are increasingly regarded as being at the core of development challenges. Poor governance usually leads to misguided resource allocation, excessive government intervention, and arbitrariness and corruption, which, as we analyse below, have clear consequences on how evidence is or isn't used to inform policy decisions.

We acknowledge that, while focusing on institutions and thus narrowing the scope of our study, our endeavour is broad and complex. When aiming to improve the chances for interaction between research and policy, we are aware that policies do not emerge from a vacuum but are generally the result of bargaining between contending groups, and with this interplay shaped by the institutional and political "rules of the game" (World Bank, 2000: 7-8).

Therefore this paper stresses the need to avoid approaching proposed changes as simply technocratic or resource challenges. On the contrary, the politics implied in any institutional strengthening process must to be established as a matter of priority in any change agenda. This also necessitates factoring ourselves (that is, those desiring and pushing for change) into these processes and taking in account power dynamics (Box 2).

Similarly, and referring to specifically capacity building, Datta, Shaxson and Pellini note that:

> "Given the often intangible and invisible nature of capacity, the organization cannot be understood by looking only at official mandates and goals, formal procedures and structures and other functional aspects inside the organization. Any understanding needs to extend to the political dimension—the power, incentives, tensions and sometimes conflicts, which provide the energy and bring the motion, direction and change to an organization, good or bad. While part of this political dimension is codified in the form of formal hierarchies, official values and mission statements, how real power is distributed in an organization is rarely described formally." (2012:3)

Furthermore, government institutions are complex organizations whose members do not always agree on what changes should be made, or even on whether changes are needed at all. Therefore, power dynamics will directly affect any intention of change and need to be taken into account when promoting it (Box 2). Policymakers are very aware of the significance of politics. As participants from P&I's online course "Leaders of change" in Latin America frequently acknowledged, implementation of any technical advice, process or tool –as robust as it may seem from a logical and rational model– should build on a sound and realistic understanding of how things are usually done in the organization (culture being key) as well as a capacity to act upon this knowledge.

To sum up, efforts to promote the use of knowledge for policy could be more strategically geared to demonstrating how this can contribute to how institutions function and are governed, and in consequence pave the way to good policies and sound public investment. Knowledge is certainly not the only or the best answer to all policy questions and political challenges. It is not exempt from politics in the way it is generated – policy narratives influence, for example, what research is generated and for which purpose. Efforts should therefore include increasing awareness and discussion within the state and among other stakeholders about the role of research and its interaction with other relevant decision-making factors in public policy. This may include values, resources, ideology, etc. This is not a simple nor easy task (we will delve more deeply into the challenges of institutional change further on), but it provides a promising entry point to those who are interested in promoting sustainable and positive change.

III. Our principles

## 3.1 Regard knowledge as one of the valuable contributions to policy and politics

Far from assuming a convergent trajectory between research and decision making where a piece or body of research influences (or should influence) a certain policy, we consider the policy-making process under what Brunner (1993) defines, a self-regulation model. This model states that decision making and coordination processes emerge from interactive processes in which several agents with partial information and local knowledge intervene.

Under this model, the "solution" to a problem is the result of complex processes in which multiple players are involved, all of them with local knowledge, partial information and a body of practical experiences. This entails a series of processes that include a relatively messy series of interactions, of "comings and goings" of information and knowledge, which eventually may contribute or not to the decision making process.

In short, players -including decision makers- interactively produce certain arrangements that are more or less unstable, for which they use information and knowledge filtered through instrumental or strategic considerations (Brunner, 1993), which should not be disregarded. The self-regulation model suggests that knowledge derived from research is one of many factors and resources influencing the decision making process.

We consider that knowledge is neither the only nor the most valuable resource of the decision making process. Instead, we believe that public decision making is influenced by several factors, as presented in Figure 1. Some of these factors are inherent to the decision maker, such as his/her values, ideology and expertise. Others are inherent to the way of making policy of the country or government in question (which we will analyse further on), such as habits and traditions and resources available to solve policy problems. Other factors are related to the macro context in which those decisions are made: the presence of pressure groups, contingencies or specific circumstances.

Figure 1. Factors intervening in the decision making process

Resources

Judgement

Values

Evidence

Habits and
traditions

Experience and
expertise

Lobby and
pressure groups

Contingencies
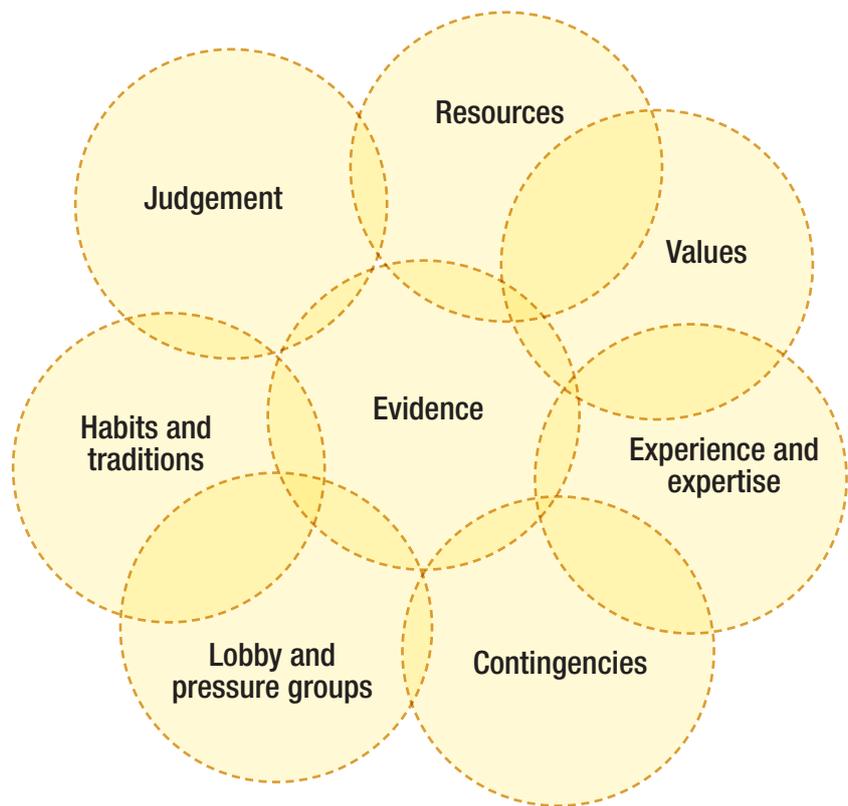
Source: Segone (ed), 2008

By understanding how these operate and interplay, one can detect more fruitful ways of linking knowledge with policy.

3.2 Partner with policymakers in this effort

We believe that to better understand the context of political institutions and its implications, it is crucial to engage policymakers by taking into account their views, their experience, and their own thinking about how to grapple with related challenges.

For that purpose, we have engaged three senior policymakers as mentors in this project who have assessed the preliminary framework and reviewed findings and conclusions[3]. We have also involved a senior expert in capacity building who helped us shed light into how our findings should inform this type of activities (see Annex 2 for full biographical details):

- **Mugabi John Bagonza,** Director, Research services at Parliament of the Republic of Uganda, Uganda
- **Ricardo Ramírez,** independent researcher and consultant in communication planning, participatory evaluation and capacity development, Guelph, Canada

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3   We are also thankful to Clara Richards and Jon Harle from INASP, and Arnaldo Pellini from KSI for their helpful feedback and comments as we developed this study.

- **Carolina Trivelli,** former Minister of Social Development and Inclusion in Peru and member of the Executive Committee of Institute for Peruvian Studies, Peru.
- **Mapula Tshangela,** Senior Policy Advisor for the National Department of Environmental Affairs in South Africa, South Africa.

3.3 Build on what others have learned

There is a significant body of relevant but untapped experience among those in developing countries on how to handle contextual factors in promoting knowledge in policymaking, particularly among policymakers or former policymakers. However, these experiences and lessons are rarely systematized, let alone recorded.

For some time, donors like the World Bank have supported large efforts to develop state capacity and promote institutional reform. Thus, among this group there is a body of lessons learned on the implications and challenges of different types of interventions within government institutions that should also be built upon. Following this thread, we were, and are, eager to continue working with others.

P&I was created to promote effective co-generation of relevant knowledge on the links between research and policy, with a special emphasis on Southern perspectives and experiences. We believe that we are a part of a larger community that is grappling with similar issues and challenges in our search to promote a more fruitful interaction between research and policy. At the same time, we notice a significant lack of interaction between individuals and organizations, especially in developing countries, that work in the same topic. This is made more difficult by a very low capacity to systematize lessons learned in order to build on what others have already tried out (both from successes and failures).[4] One of the reasons for this is that those in developing countries seldom have the knowledge about who is doing something similar, from whom they could learn. Nor do they have the time or resources to tap into this knowledge in a more professional and systematic way.

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4   In 2015, P&I delivered the online course "Leaders of change: developing Latin American policymakers' capacity to promote the use of knowledge in policy". Supported by INASP, the course sought to contribute to improving Latin American policymakers' capacity to use and promote the use of knowledge in policymaking and public management. The rich and heterogeneous group of 24 participants that was selected to take the course, and the demand to replicate it in Africa, reveal that there are many policymakers interested in becoming agents of change but with scarce access to knowledge and experience of others facing similar challenges.

IV. Our methodology
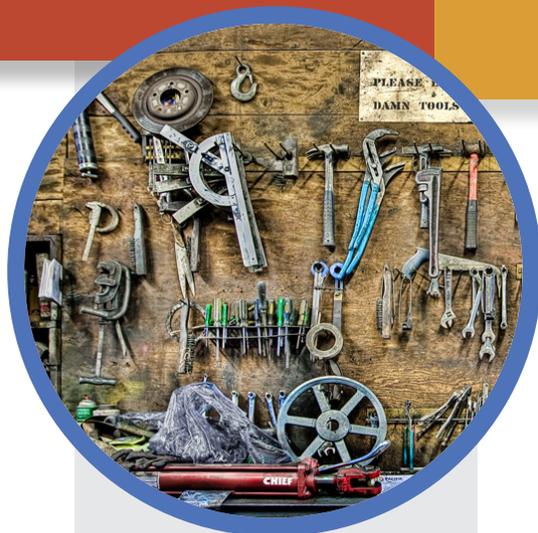
The framework presented in this paper was produced using a broad range of sources, both primary and secondary. This was combined with P&I's experience in working with policymakers, particularly in the area of developing their capacity to use evidence in policy.

First, we conducted an extensive literature review of more than 100 books, chapters, papers and articles. We focused primarily on literature related to evidence-informed policymaking in the following aspects:

1. The role of context in links between research, evidence, information, knowledge and policy
2. The use of research/evidence/information/knowledge in policy sectors
3. How certain institutions use research/evidence/information/knowledge
4. Context in capacity-building activities regarding the link between policy and research/evidence/information/knowledge
5. Public-sector reforms oriented to generate information systems and create departments to commission research or gather experts
6. Literature about leaders of public sector reforms aimed at generating information systems, conduct research, etc.

Regarding the two latter points, we were unable to detect a critical mass of literature focused specifically on how governments are implementing changes to incorporate the use of knowledge in policy. We therefore complemented this gap with some readings related to public-sector reform in general. Here we found a lot of potential for next steps: efforts to understand how governments are implementing changes to incorporate the use of knowledge in policy and efforts to develop appropriate capacity within the state to better use research in policy can learn significantly from overall lessons emerging from public sector reform and governance. We highlight this as a practical implication for researchers in the practical knowledge product.

Second, we also conducted an initial set of interviews with key stakeholders, including policymakers, practitioners working in this field, experts and donors (Annex 3). During the interviews we shared a preliminary version of the framework and asked interviewees how the factors included resonated with their experiences, as well as which other relevant factors were missing. Interviewees were also asked about their overall knowledge regime and about their own or others' experiences in mechanisms and

processes to embed the use of research in policy within government institutions.

The first draft of the framework was also discussed with the group of mentors of this initiative who provided feedback and suggested additional literature and interviewees to complement the study (Annex 2).

Third, a second and more advanced version of the framework was approved by and enhanced with a second round of in-depth interviews with 48 mid-level and senior policymakers and practitioners in Asia, Central and Eastern Europe, Africa and Latin America. These interviewees gave their impressions on factors affecting the use of evidence and shared information on their own efforts in the field. Special emphasis was given to the detection of good practices to promote the use of knowledge in policymaking as well as interviewees' perceptions of where they considered there is more potential to promote changes in this direction. Some of these practices are introduced in this paper; most are part of the practical paper.

Finally, the framework was enriched with examples emerging from both literature and interviews that demonstrated how sub-dimensions of contextual factors have played a significant role in certain situations. We placed particular emphasis on examples from developing countries but also included developed countries examples where relevant to thinking about possible ways to address concrete challenges, or due to the lack of knowledge systematization in the South (boxes throughout this paper highlight some of these examples).

V. The framework
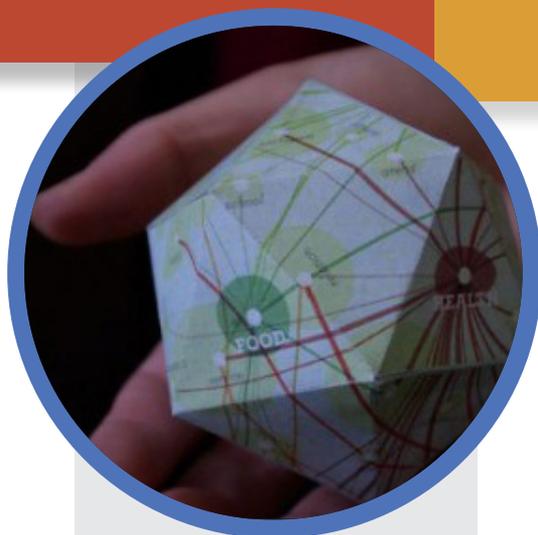
Our framework is built using a systemic approach. We believe that the component parts of any system (including policymaking system) can best be understood in the context of relationships with each other and with other systems, rather than in isolation. This is why –as depicted in Figure 2, which synthetizes the framework– we regard governmental institutions as part of the larger policymaking system.

Government institutions interact with each other and also affect, and are affected by, multiple institutions and individuals (as shown by arrows linking the different circles in the figure). Simultaneously, the policymaking system is affected by, and affects, the wider macro context (understood as the political, economic, social and cultural system). Boundaries between all these components are blurred and difficult to establish. It is therefore impossible to establish linear and simple relationships between institutions and stakeholders.

Under this principle, our proposed framework identifies six inter-related main dimensions[5] that are crucial to understand where the critical entry points to promote the use of knowledge in policy could be. It also presents a set of relevant sub-dimensions that most frequently affect any effort to foster the use of evidence and that should be carefully considered when thinking about potential paths of change.

There are two main dimensions that are linked with the external world of a governmental institution:

Macro context. This refers to over-arching forces at the national level that establish the "bigger picture" in which policy is made and, consequently, how research can or cannot inform it. It is the general external context for each policymaking institution, including political, economic, social and cultural systems. These forces shape opportunities and threats for state agencies in terms of using research to inform policy in two main ways: (1) *structural factors,* which very rarely change in a significant way and could be regarded as the more constant and regular outside setting of policy institutions; and (2) *circumstantial factors,* which emerge with particular weight every once in a while and open up very specific windows of opportunity for change.

....

5   To design the framework split into main domains and sub-domains we were inspired by a similar effort conducted by O'Meally, S. C. (2013) at *Mapping context for social accountability: A resource paper*.

Intra- and inter-institutional linkages. These belong to the macro-context but those stakeholders that interact with governmental institutions, including other state agencies, deserve separate attention. Due to the significant role that they play in the use of research, we consider these intra- and inter-relationships a separate dimension.

The four other dimensions are key aspects that account for how a governmental institution thinks and behaves (expanded in the second part of Figure 2) and are explored through the lens of how they enable or hinder the use of research in policy:

- **Culture** is the set of shared basic assumptions learned by a group. These assumptions have worked well enough to be considered valid and are therefore taught to new members as the correct way to perceive, think, and feel the organizational problems (Schein, 2004). In this case, this directly affects what research can mean and means for policy processes, and what incentives and motivations are linked to this.
- **Organizational capacity** is the ability of an organization to use its resources to perform (Lusthaus, 2002) – in this case, to design and implement public policies. It includes human resources and the legal framework that determines how resources can or cannot be used. It also establishes interactions between its members. Internal capacity plays a pivotal role in making the use of research possible (or not) as well as how it is taken up.
- **Organizational management and processes** refers to how each governmental institution organizes its work to achieve its mission and goals, from planning to evaluation. The way it is managed and the processes and mechanisms that are established to enable members to fulfil their roles and responsibilities can open up (or not) chances for evidence to interact with policy discussions and decision-making.
- **Other resources** that are critical to each organization's performance. These are the set of resources it counts to achieve its goals, including budget and technology. A state agency may present an organizational culture that appreciates the use of knowledge and that has staff with the right capacities to generate it and/or digest existing research. However, if they lack financial resources, time and infrastructure, the real opportunities for use will be significantly diminished.

Figure 2 below presents these dimensions and their relationships, including the set of sub-dimensions that will be explored separately and in detail in the following sections.

Figure 2. The six main dimensions of context defining the interaction between knowledge and policy in governmental institutions

01. MACRO CONTEXT

State agency

State agency

STATE

State agency

MEDIA

DONORS

PRIVATE COMPANIES

CITIZENS

RESEARCH ORGANIZA- TIONS

03. CULTURE

04. ORGANIZA- TIONAL CAPACITY

05. MANAGEMENT AND PROCESSES

06. OTHER RESOURCES

• Discretional decision making and corruption

• Strategic planning culture

• Consultation and participation in policy processes

• Knowledge regime

• Usual large factors acknowledged in literature (extent of political, academic and media freedom, etc.)

Circumstantial
• Popular pressure for change
• Crisis and transitions

• Degree of power distribution in the political system

• Prevailing policy narratives

02. INTRA AND INTER RELATION- SHIPS

Relationships with other State agencies for policy design and implementation

Relationships with non-State agencies for policy design and implementation

• Flow of information between jurisdictions and levels
• Capacity to use evidence among different sections and departments
• Support from governmental agencies that produce data & research
• Coordination among agencies
• Policy domains

• Relationships with other State agencies for policy design and implementation
• Existence and types of policy forums and epistemic communities
• Formal channels of interaction with researchers and research institutions
• Number and type of civil society actors involved in decision processes and degree of vested interests
• Status of consensus on the policy base

24

State agency

**04.
ORGANIZATIONAL
CAPACITY**
- Leadership
- Senior management
- Human resources
- Legal capacity

**03.
CULTURE**
- Values and beliefs
- Openness to change and innovation
- Incentives
- Motivations

**05.
MANAGEMENT
AND PROCESSES**
- Degree of systematic planning
- Existing formal processes to access and use evidence in policymaking
- Positions, including division of work and roles and responsibilities
  - Communications processes
  - Monitoring and evaluation

**06.
OTHER
RESOURCES**
- Budget committed to research
- Technology
- Existence of a knowledge infrastructure
- Time availability

Usual factors,
Power distribution,
Consultation, participation
and accountability,
Knowledge regime,
Planning culture,
Discretionality and
corruption,
Policy narratives

5.1.1 Structural factors

Usual factors

There is already significant literature on how the macro context affects efforts to promote a better use of knowledge in policy. Usually, this literature focuses on large contextual factors that are well beyond the sphere of influence of those who intend to strengthen how research is used in policy (see Box 3 for an example). For example, Court and Cotterrell (2006) clearly synthetizes these factors as follows:

- Extent of democracy/political freedom
- Extent of academic freedom
- Extent of media freedom
- Extent of development commitment of ruling elite (especially to the poorest)
- Extent of culture of evidence use
- Extent civil society groups have an input into the making of policy
- Extent of political volatility
- Extent of conflict or insecurity

Box 3. Large macro-contextual opportunities

The establishment of a democratic government in Uruguay after the end of the military dictatorship in 1983 contributed to the enhancement of research capacities for infectious disease control and a culture of evidence-based policy. For example, new funding was allocated to science and the reconstruction of research facilities, which had been reduced drastically during the totalitarian regime.

Source: Liverani, Hawkins and Parkhurst (2013)

Similarly, Results for Development Institute's paper, *Linking Think Tank Performance, Decisions, and Context* (Brown et al., 2015) has identified the following main exogenous factors:

- Political competition
- Government effectiveness
- Priorities and transparency
- Intellectual and civil society environment
- Media freedom

These are certainly forces that define the big picture for how governmental institutions behave and can or cannot enable change for better use of knowledge. However, based on interviewees' experiences, case studies and our own experience, there are, in addition to these general strands, other stable and concrete structural and circumstantial factors that more directly influence efforts at the institutional level.

Degree of power distribution in the political system

In theory, democracies imply greater accountability of governments, which works usually as a greater incentive to improve policy and performance. They also imply the existence of "more open" entry-points into the policymaking process for diverse stakeholders and fewer constraints on communication about these.

According to Court and Young (2003) in *Bridging Research and Policy: Insights from 50 Case Studies*, political culture and degree of openness were highlighted as significant in enabling the use of research in policymaking. Research was seen as most likely to be used in open, transparent, democratic contexts with strong academic and civil society institutions, free media, and good information systems. However, there is still no evidence in literature that tells exactly how a *closed* political system affects the impact of research on policymaking.

Moreover, the concrete political systems at different government levels (i.e. local and subnational) differ significantly within democratic contexts and thus present different windows of opportunity or obstacles for the use of research in policy. Factors such as the level of centralization versus decentralization of policy design and implementation, the checks and balances (or the lack thereof) between the executive, legislative and judicial branches, and the roles and responsibilities of some specific government agencies can all play a significant role.

According to Liverani et al. (2013), centralized political systems are likely to be less open to the uptake of research findings than decentralized systems, with the exception of some specific government units. The concentration of power prevents pluralistic debate and thus the need for evidence to support competing views. By contrast, in countries in which policy is made through ad hoc, issue-specific coalitions – such as the US – and in federal systems in which policy is made at the provincial level, "there is more need for research as legitimation or ammunition" to justify policy (Liverani et al. 2013:4).

Porter and Feinstein (2014) argue that central agencies (ministries of finance and planning commissions) can be powerful in the allocation of resources according to evidence aligned to strategic intent. These tend to be stronger in developmental patrimonial states due to centralized power structures, whereas in neo-patrimonial states resource allocation is the result of informal policy processes, meaning that central agencies are institutionally weaker.

Another important factor is the weight of congress/parliament in the decision making process. Newman, et al. (2013) found that, while parliamentary or elected representatives are often the target of efforts to increase research use, in many countries they actually have weak influence over policy, which is made by the executive.
A key determinant of the effectiveness of legislators, and thus their links with research, is the extent to which other important power holders –most importantly executives and parties– cede, lose, share, exchange or let slip the power they hold.

Power distribution among political parties and their degree of consolidation are also very important. According to Tanaka, Barrenechea and Morel, strong and consolidated parties are important in connecting the world of knowledge production with the world of public policies (2011:36). In this case the institutionalization of systems is associated with programmatic parties (Jones, 2005:2); and a programmatic policy is more easily linked with the use of research than a non-programmatic policy (Garcé, 2011:359-360). On the contrary, weak parties often follow personal and discretionary criteria, and increase the influence of de facto powers and informal networks in policy decisions.

The level of government institution also frequently creates differences in the use of evidence in decision making. For example, a study by Landry, Lamari and Amara (2003) of Canadian government agencies revealed that, generally, those working in federal government agencies were less likely to use university research than those working in provincial government agencies. The exception was in education and information technology; in these policy domains federal government agencies were more likely to use university research.

This will of course vary according to country (see Box 4 for some broad differences between political systems in developed and developing countries). It is important to identify whether centralized and decentralized decision-making agencies place the same importance on research and if they also have the needed capacity to produce it (Box 5). In the long run, there is an increasing awareness of the need to move to a system in which research findings influence all relevant sectoral and territorial institutions in a more integrated way so as to enable effective change. In this sense, information and knowledge should be shared equally among agencies at different government levels. This is, however, far from the current practices in many countries: Uma Mahadevan (2015) shared that in India:

"There are different agencies of the government independently collecting data on the same or similar subjects without coordination between them. This silo approach results in two sets of data that are not comparable and not even complementary. They may even produce two inconsistent sets of figures."

Consultation and participation in policy processes and accountability

A greater degree of democratic openness generally leads to the creation and institutionalization of norms on consultation and participation in policy processes, which directly influence how evidence impacts policy. Increased consultation with policymakers has been identified as helping to establish a "conducive

environment" for research use (Sumner, Crichton, Theobald, Zulu and Parkhurst, 2011:6). These norms are often present in political systems with greater levels of accountability: when policymakers are held accountable for the "quality" of their decisions and scrutinized by other state or civil society organizations – including the media – the need to inform decisions with available evidence from different sources is greater.

The existence or absence of a participatory policy process contrasts with situations in many developing countries (and, often, in developed countries too). In such situations, policies are decided by one minister after consultation with one or two advisors, restricting the extent to which other relevant stakeholders can participate in these processes.[6]

When policy processes are more open and transparent, there is a greater role for interested parties – including campaigning and lobbying groups, coalitions, and citizens – in adding to and contesting evidence, as well as their perceptions or interpretation of this evidence. This also includes the role of the media in overseeing policies, requesting evidence and framing the parameters of the debate (Box 6).

Another relevant aspect is state regulation with regard to lobbying and advocacy, and how this enables or not diverse stakeholders to legally and equally access important discussion and decision-making spaces.

Knowledge regime

Campbell and Pedersen (2013:3) define knowledge regimes as "the organizational and institutional machinery that generates data, research, policy recommendations and other ideas that influence public debate and policymaking". Within this, there are several key aspects to consider.

Availability of public data and information. Gutbrod (2013) points out that evidence-based policies require quality data:

> "Mostly taken for granted in developed countries [although there are numerous exceptions], data is less reliable where state institutions are weak. Quality data and data analysis thus fills a gap, and is a critical contribution to informing decision makers, improving public debate, and tracking the actual implementation of policy."

....

6   Of course a caveat for this is that sometimes advisors have wide experience in the related topic and belong to epistemic communities where issues are frequently discussed, new knowledge is shared, the voices and ideas from other experts are heard, etc.

Where there is shortage of basic statistical and other data, which are fundamental to drawing reliable conclusions (Box 7), policy arguments may be more likely to turn on issues of power and prejudice than on evidence. This is also linked to the existence of laws on public and private access to information. Related to this, is the degree to which existing research is available, accessible and relevant to policymakers (Box 8).

Funding of the knowledge sector. The average gross domestic product (GDP) countries spend on research and development is reported to be 2%, while Asia, Latin America and Caribbean, and Africa are each closer to 0.8% (World Bank, 2011).

Nielsen (2010) shows that in countries that have invested highly in research and development, the government is not the only source of demand nor is it the only source of supply. Demand stimulates domestic capacity, both government and private sector, to provide dynamic and expert research capability. On the contrary, a low level of expenditure can result in government dissatisfaction with the volume, quality or applicability of research, and lead to excessive reliance on foreign technical advice.

Labour market. The degree of development and involvement of those working at universities, private research organizations and think tanks should be taken into account when looking at the entire knowledge regime. For example, in Indonesia these research-related institutions appear to have played a more important role in policy research in the past than they do at present (Cislowski and Purwadi, 2011).The integrity of knowledge producers, particularly those that are independent, plays a crucial role. For knowledge producers to emerge and contribute clear rules are needed for financing their work and supporting their existence. As one of the mentors for this study highlighted, in Latin America, as international cooperation has decreased, many think tanks – mostly supported by international donors – have disappeared or become all but invisible because states do not think they are relevant.

Many developing countries face a significant lack of individuals with skills in analysis and interpretation. This could be related to the lack of quality teaching in policy analysis and research at university level; while university accreditation systems have been established in most of developing countries, there is little follow-up or support for remedial action. In addition, few universities have established public policy departments. Understandably, the output of well qualified researchers with grounding in public policy is extremely low.

Critical thinking. Regarding the country's educational system it is also important to assess whether it promotes critical thinking. In this sense, low levels of evidence literacy in policymaking institutions have been linked to low levels of evidence literacy in

society, and an education system that did not instil a culture of critical inquiry in students (Newman et al., 2013).

Lack of global South–South or South–North research exchange (research findings usually travel global North to South) and "brain drain" can also damage or limit the production and dissemination of research.

Capacity to conduct policy relevant research. Even though there might be a critical mass of research centres and universities in a particular context, if the knowledge they produce is distant and disengaged from policy problems, the chances of it being used are very scarce.

The social valuation of science. Moreover, and as Garcé (2013) suggests, the knowledge regime should include the social valuation of science, which profoundly affects the supply of and demand for research. He affirms that:

> "In countries where a more rationalist culture predominates, the demand for research tends to be more intense and recognises that science can be neutral. In countries characterized by political cultures that are sceptical of expert knowledge, there will be less demand for scientific knowledge and knowledge will not be used as a tool toward political ends" (2013:25)

Finally, if the level of confidence a country has in science is low, it is more probable that the level of aggregated ability of society's players (universities, civil society organizations, companies, the state itself) to produce quality, relevant information for the decision making process is lower. This makes it more difficult for information to become a deciding factor in the decision-making process.

Strategic planning culture

The existence of large strategic planning processes, generally at the national level, often represent an important framework for the generation and use of policy relevant research. For example, many African countries develop Long Term National Strategies, such as Uganda Vision 2040, Zim Asset in Zimbabwe, the National Development Plan 2030 in South Africa, and National Development Priorities in Ghana. These frameworks are spread from the very top down to all governmental institutions, to establish priorities for subsequent planning, reforms and capacity-building efforts. As a consequence, demand for related evidence is clearer and more concrete.

It should be noted, however, that sometimes planning can also act as a barrier to introducing new ideas emerging from research: they may be quickly disregarded if they do not fit under previously defined goals or if they could limit the implementation of existing officials' plans.

Discretionary decision making and corruption

According to the World Bank (2000) well-functioning governments are generally thought to have certain important characteristics in common. They are responsive to the citizenry and reasonably efficient in the delivery of public services. Their decision-making processes and resultant decisions are, in general, transparent and predictable. Oversight mechanisms (checks and balances) exist to guard against arbitrariness and to ensure accountability in the use of public resources, but these oversight mechanisms do not eliminate the flexibility and delegation needed to respond quickly to changing circumstances. In sum, they are accountable and results-oriented.

On the contrary, several governments are characterized by a lack of transparency and of accountability, excessive intervention, a lack of delegation, and poor results on the ground. This leads to arbitrariness, corruption, rent-seeking, cronyism and "influence-peddling", all of which significantly diminish the potential for research to be used in policy (see Box 9, for example). Moreover, laws and regulations alone do not seriously challenge entrenched behaviour nor do they overturn the power of vested interests by those who benefit from existing arrangements.

For example, in Indonesia, Sherlock and Djani found that:

> "Regulations were allowed to obstruct rather than facilitate government procurement because of a bureaucratic culture of compliance with the letter of the law, poor staff training, pressure on civil servants to conform to existing practice within their particular ministry, and to obey their superiors. Fears about accusations of corruption slowed decision making even further. The obstructive 'gatekeeping' role was also a means by which corrupt officials could abuse their office for private gain. The regulations did not by themselves cause corrupt behaviour, but their arcane complexity allowed those with inside knowledge to manipulate the system, particularly with weak service-wide systems for transparency and enforcement of accountability" (2015:5)

Forging strong and sustainable links between research and policy (especially on the fiscal front) may only be possible if policymakers are willing and capable of setting up good governance and resisting rent-seeking groups. The practical implications of this should not be underestimated. Interventions that approach governmental institutions without a thorough assessment of the political economy of how decisions are made and behaviours incentivized –including the degree of arbitrariness and corruption– are doomed to experience serious difficulties in creating genuine and sustainable change.

Along with the complex power relationships analyzed in page 26, governance arrangements will play a key role in how a certain technical process/mechanism is taken in and implemented. Thus, leadership from within –as this paper will explore in more detail– is one of the most crucial factors to address when promoting change.

Prevailing policy narratives and ideas

The way in which findings and proposals emerging from research and knowledge systematization efforts are taken in and interpreted are heavily influenced by dominant policy discourses.

Several authors (Roe, 2002; Fischer, 2003) have highlighted how policy problems and potential solutions are socially constructed; the way that policymakers and others frame them is usually linked to how public issues are understood, prioritized and discussed.

In this sense, Haas (1992) adds that how decision-makers define state interests and formulate policies to deal with complex and technical issues can be a function of the manner in which the issues are represented by the specialists to whom they turn for advice in the face of uncertainty.

Moreover, ideas conveyed under these narratives are key in linking research and policy, theory and practice. Little research, however, is available on these ideas and how they evolve. As Ordoñez (2013) explored in P&I's paper *Defining problems or providing solutions? The role of ideas in policy debates* there is a need to understand how the policy problem is defined, and what public sentiment about it is. Indeed, public sentiment (or "philosophy") and the problem definition will limit the extent to which a solution is considered appropriate and feasible.

5.1.2 Circumstantial factors

In addition to these aforementioned factors, there are some macro-contextual factors that emerge every once in a while that disrupt the regular decision-making landscape and open up opportunities to include research and evidence in policy debate and decisions.

Popular pressure

Popular pressure and the desire for faster economic growth and improved public services frequently motivate reform. For example, in South Africa there was considerable pressure to improve performance of the public sector, with monitoring and evaluation (M&E) seen as a key tool for doing this (Phillips, Goldman, Gasa, Akhalwaya and Leon, 2013). This resulted in high-level political commitment for a strong M&E system from the president, cabinet and responsible minister. This commitment facilitated the rapid

Popular pressure, Crises and transitions

establishment of the Department of Planning, Monitoring and Evaluation (DPME) and the increase of its capacity to around 200 staff.

However, as Thomson, Wilson and Howden-Chapman (2007) note in the example of the use and misuse of health research by parliamentary politicians during the development of a national smoke-free law in New Zealand, public opinion may not necessarily have an impact on the uptake of research. In the case of second-hand smoke, politicians who doubted the evidence were willing to go against the views of 90% of the population. This was linked partly to the strength of the tobacco industry and its allies, and in particular their ability to persuade politicians that there was significant doubt about the health risks of second-hand smoke.

Crises and transitions

Crises and transitions also open up unique windows of opportunity for incorporating research into policy. Many lead to short-lived "policy windows" during which an institution is temporarily more receptive to research uptake. For example, during regime change in Singapore, ideas associated with the old regime were discredited and disorganized. This opened up space for new attitudes towards knowledge and creating a more conducive environment for research use (Jones, 2009). The occurrence of natural disaster, for instance, can also give rise to demand for evidence. However, the urgency to reach a consensus for decision-making in such a setting often hinders the possibility of resorting to new sources of information.

Electoral processes and transitions in the government administration are also key milestones when it comes to the use of evidence. Regarding the former, it is important to look at the tone of the electoral campaign, and whether electoral candidates and their teams are open or averse to incorporating evidence into their discourses. For instance, do candidates explain what they will do, how, when and with whom? Does the policy debate revolve around vague references to universally desirable aims without specifying how these initiatives will be financed? What is the concrete action plan that will be employed to reach the proposed objectives? And what are the different alternatives to consider? (Echt and Eskenazi, 2013). Macro factors such as polarization might also affect references to evidence in candidates' proposals and direct the discussion towards personal statements, slights on the competitors and/or their political spaces, etc.

Finally, societies and political systems undergoing transition have generated new opportunities for evidence use in policy (e.g. South Africa and Vietnam). Indeed, transitions at the government administration are also moments in which some policymakers are

Box 10. Promoting the use of evidence in electoral processes

Considering that, with some exceptions, electoral campaigns in Latin America do not generally involve serious debates over strategic policy issues, different think tanks in the region saw this is a time when they can really show their worth and change. For that purpose, they have set up different initiatives to enhance the level of the policy debate by preparing policy briefs with proposals and bring them to the discussion among candidates and their technical teams. In some cases, these initiatives intended to organize electoral debates. Echt and Eskenazi (2013) and Echt (2015b) have systematised some of these experiences and their lessons.

interested to show 'how well' their programs or agencies have been working, looking to survive in the next period. Lots of evaluations are conducted at the end of one government administration or at the beginning of a new one, and different diagnoses or policies and also organizational designs are requested.

5.2 Intra- and inter-relationships

02

Jurisdiction and levels, Institutional capacity, Agencies that produce research and data, Coordination, Policy domains

There are two particular types of relationship that exert significant influence over how knowledge interacts (or not) with policy. One is related to internal relationships between the government institution and other related government agencies. The second one relates to interaction with relevant users and producers of knowledge who can affect or be affected by policy design and implementation.

5.2.1 Relationships with other state agencies

Flow of information between jurisdictions and levels

Regarding *internal relationships* one important sub-dimension is the *flow of information between jurisdictions and levels*. This is usually more complex in those countries with federal government structures. In the latter, national agencies' access to information generated by local agencies and vice versa is often limited by the degree of political affinity or distance between parties. There are also horizontal challenges: different national government agencies tend to share more or less information depending on their political affinity.

Degree of capacity for use evidence in different sections and departments

Some sections and departments may count among them high-level researchers and significant budgets while others may seriously lack expertise. Policymakers may also be less willing to use research that they were not involved with from the start, or that comes from other agencies; engaging with policymakers at all stages of research production could, then, help overcome limited capacity or willingness to use research.

Another challenge is that sometimes research design and/or outputs are not directly linked to the policy agenda; some research works are commissioned for a different purpose and may not necessarily have been translated into a possible solution for a particular policy problem. This sometimes makes it more difficult for policymakers in other institutions to access, understand and use it.

Support from governmental agencies that produce data and research

Concrete support from other governmental agencies is also vital (which also applies to how they demand specific evidence, i.e. see the example in Box 11). This does not only mean whether there is an internal knowledge infrastructure –such as that outlined in Section "Core Resources"– but also the level and depth of interaction and trust between the government institution and other governmental bodies such as national research and science councils, institutes of statistics and policy analysis, and strategy and planning units, departments and directorates, etc.

Whether these relationships are hierarchical or horizontal, rigid or flexible, etc. will influence how relevant knowledge is shared and produced. In fact, institutional silos can limit access to research and evidence use; government departments do not always have automatically free access to evidence generated by such agencies. A case study from Mexico found that the hierarchical management of information within centralised government organizations prevented research from arriving at relevant organizational levels, meaning that policymakers found it difficult to access evidence (Trostle, Bronfman and Langer, 1999).

Coordination among agencies

In some situations, a lack of coordination between agencies can significantly deter sharing of research. For example, in Indonesia a study in 2010 detected a vacuum of planning and coordination of government research and a lack of coordination between agencies. Regulations for managing and evaluating civil servants meant that specialist staff who should be at the centre of policy formulation were divorced from decision making, and had few incentives to produce work that was useful for government purposes (Sherlock and Djani, 2015).

Simultaneously, as coordination is demanded in policymaking where integral approaches (for example, social protection) are fostered, "co-production" of knowledge with different government departments and also with other research institutions, and trans-disciplinary research will have increasing windows of opportunity. Swilling (2014) details an urban regeneration initiative in Cape Town wherein there was a significant degree of knowledge co-production involving public, private, and university-based stakeholders. In this case, knowledge co-production was actively solicited and led by a government department, with researchers playing less of an "advocacy" role as a result. So, in terms of research uptake, what mattered was not only the content of the final product but also the process of interactive discovery and debate between

the different stakeholders. This made the co-generation of the framework possible, and has retained political support and inspired subsequent work.

Some interviewees also highlighted the potential "spread effect": if other public agencies note that similar institutions are successful or have good reputation in the media due to how they publish their data, they are encouraged to imitate them.

Policy domains

Policy domains also account for differences in how government institutions interact and do or do not share knowledge. For example, a study of 883 policymakers in Canada found that those working in municipal and regional affairs, public works and public infrastructure had the lowest level of knowledge utilization while those working in the policy domains of social services, health and social security had the highest levels of knowledge utilization (Landry et al, 2003).

5.2.2 Relationships with non-state stakeholders

Existence and types of policy forums and epistemic communities

In terms of external relationships, the existence of policy forums or networks for sharing knowledge and expertise is frequently highlighted as a very important contributing factor to the tendency of using evidence in policy processes (see Box 12). Ongoing and institutionalized or formal interactions between policymakers and researchers enable the development of trust and can positively influence policymakers' views of evidence (Moat, Lavis and Abelson 2013). This is particularly relevant in developing countries where policymakers are unfamiliar with current scientific approaches or view universities and researchers as sites of opposition to government.

Within these interactions, some authors and practitioners point to the existence of "epistemic communities" – that is, colleagues who share a similar approach on an issue and maintain contact with each other across their various locations and fields then create new channels for information and discussing new perspectives. These are believed to be particularly effective if they include prominent and respected individuals (Court and Young, 2003)

Formal channels of interaction with researchers and research institutions

When there are limited systemic or institutional channels for policymakers and researchers to interact via, there is a "gulf" between them (Orton, Lloyd-Williams, Taylor-Robinson, O'Flaherty and Capewell, 2011). This is to say, there are problems with

Policy forums and epistemic communities, Formal channels, Civil society actors, Consensus, Donors

Box 12. The contribution of networks

The existence of networks for research and policy such as the Latin American Trade Network and the Asian Fisheries Social Science Research Network (AFSSRN) were highlighted as influencing cooperation between researchers and policymakers. Moreover, successful networks were noted for having fluid mobility of personnel between research and policy communities.

Source: Carden (2011)

engagement, collaboration or communication between stakeholders or there is inadequate dissemination (Clar, Campbell, Davidson and Graham, 2011). Even when a channel is created, both sides face significant challenges in investing time to participate in these due to tight agendas and researchers having to commit time to paid projects. Management of such spaces is still challenging: who sets the agenda? Who makes recommendations and how these are implemented, etc.? These are all issues under discussion as pilots evolve.

Links with *other training or educational institutions* should also be considered among factors that can enable more interaction between research and policy, as too should the existence of intermediaries who facilitate interactions between policymakers and researchers. Finally, *the role of international experts* as well as regional and global programmes linked with policy-relevant research should also be considered, as they often influence both policymakers, and influence (and finance) local researchers. In this sense, there is an increasing trend to emphasize how this external help should be guided by local agents, as owners of the change process. As Andrews, Pritchett and Woolcock argue:

> "In past work we argued that development interventions—projects, policies, programs—create incentives for developing country organizations to adopt 'best practices' in laws, policies and organizational practices which look impressive (because they appear to comply with professional standards or have been endorsed by international experts) but are unlikely to fit into particular developing country contexts" (2012)

Number and type of civil society actors involved in decision processes and degree of vested interests

Pressure groups or individuals with vested interests and general citizens also exert significant influence over the extent to which evidence is used in certain policy discussions and design. Research is unlikely to be used if the required reforms go against the interests of important political players (Court and Young, 2003) (see Box 13, for example).

The interests of various stakeholders –including religious groups, pharmaceutical companies and health professionals– may often run counter to research findings and hinder the use of evidence in policymaking. Strong vested interests have a significant impact on health and other policies (including how much budget is allocated) and tend to disincentive evidence use and limit the scope of possible policy reform for policymakers (Sumner et al., 2011).

Box 13. The logics behind deciding upon research sources: an example from Indonesia

Outside sources of knowledge can be regarded by officials with suspicion and rejected in favour of in-house sources. Although the advice coming from internal sources such as departmental research units (Balitbang) may be weak in analytical terms because of the personnel management issues outlined above, it tends to be favoured because it is more politically "reliable". Budgets for outside inputs are frequently seen as "project" money to be dispensed for strengthening the patronage network of influential officials. The personalization of the market for knowledge has partly been the result of the institutional incapacity of government agencies to organize a systematic effort, but it has also suited the interests of powerful officials and ministers to hold unfettered discretion over state resources and to use them for personal and political objectives.

Source: Sherlock (2010)

On the other hand, the existence of an educated and aware public with the capacity to understand evidence may enable a broader and more frequent use of knowledge to make decisions. Links have been found between higher literacy rates and greater use of evidence (Broadbent, 2012). Indeed, incentives to support decisions with information lessen if citizens do not demand their political leaders to justify the decisions they make. In this direction, the push for Open Development (see here for example) to foster a greater and better use of data by government will probably play an increasing role in the near future.

The type of relationships with non-state actors and their participation in policy-making processes are very diverse. For instance, the interaction with knowledge provided by business chambers will differ significantly from evidence emerging from marginalized groups due to the differences in available resources, roles and interests between these stakeholders. Some emerging practices to make these relationships more transparent, inclusive and equitable are provided in our practical paper.

Status of consensus on the policy base

Furthermore, interviewees consulted for this study pointed out on more than one occasion that, if research is complemented by the views of people, it is more likely to be used. For example in a case concerning the issue of child trafficking in Zimbabwe, Munhamo (2015) detailed how:

> "A parliamentary committee went out to six regions to seek the views of people on how this issue should be dealt with. So if there is research that has been done and the parliamentary committee finds the same evidence from people then the results are much more likely to be used, because it has been validated by the people, there is supporting evidence."

This also applies to target beneficiaries of certain policies are constructed (see Box 14).

Relationships with donors

In many developing countries *relationships with donors* play a pivotal role in the use of research in policy. Often, they have taken on a long-term functional role in the provision of knowledge to the policy process, thus eliminating a major incentive for internal reform (Sherlock and Djani, 2015). Policymakers frequently have to anticipate the responses of donors when developing policy, which may result in them failing to consider research even when it is available. Also, and as will be explored in this paper, when political leadership does not request any analytical input, technocrats find

Box 14. How are social groups constructed?

The social construction of the target group can affect the use of evidence in policy, as policymakers are seen to be less likely to act on research that shows the need for improved services for groups viewed in a negative or undeserving light by the general population. Framing the issue in a different way or showing how it relates to existing national public health policy priorities can help overcome political reluctance to target services for marginalized groups. Such a change occurred in Switzerland when the provision of needles to injecting drug users was reframed from a policy of drug maintenance to a policy of harm reduction for HIV.

Source: Sumner et al. (2011).

it very difficult to take advantage of knowledge produced with the support of external donors.

Moreover, as many donors need to take care of relationships with governments, showing negative results is avoided. Many donor agencies are often under great pressure to disburse allocated budgets before the end of the financial year, and the careers of many individuals depend on this (Datta and Jones, 2011).

03

Values and beliefs
Openness to change
and innovation
Incentives
Motivations

5.3 Culture

We adopt Schein's definition of culture as:

> "A pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (2004: 17)

This culture (at individual, team and organizational levels of any public institution) creates the daily context for practice.

Unlike management formal processes, culture expresses what people believe the organization wants to see happen. When individuals join an organization, besides learning about its formal aspects, they spend much of their time being socialized into the "informal organization," namely, the culture. It takes time to absorb this organizational culture, as it generally cannot be spelled out in a document or directive (Lusthaus, 2002). This makes designing and implementing efforts to embed the use of knowledge in decision-making and implementation much more complex.

In fact, several diverse (and sometimes conflicting) cultures can be in operation within an organization, implicitly reflecting different values or worldviews. These opposing cultures may lead to dysfunctional or suboptimal working relationships, which can clearly affect how and what research is used. Differences frequently emanate from contrasting views on how the state should function, as well as hugely diverse interests, goals and priorities that characterize policymakers. Indeed, the state is not a monolithic entity behaving in a unique way with state representatives thinking similarly; on the contrary, heterogeneity among public servants is the prevailing rule and this explains the difficulty of their interactions with third parties which are also consequently different and sometimes even opposed. As such, leadership, as we will examine, plays a crucial role in nurturing or changing organizational culture.

As Lusthaus, Anderson and Murphy explain:

> "Organizational culture is a powerful motivating force: by embodying the values sanctioned by the organization, the culture frames the boundaries of acceptable attitudes and behaviour and creates a shared ethos. For instance, the culture helps determine the extent to which members of the organization will – and are expected to – extend themselves to fulfil tasks. Indeed, the culture can cause individuals to use or to push the very limits of organizational capacity" (1995:24)

Culture, therefore, needs to be well understood to determine the potential for change based on how much members will be willing to think and feel about the role of knowledge in their policy work.

We will now consider the key sub-dimensions that make up organizational culture and how each affects behaviours and attitudes around how – and if – research is used to inform policy.

5.3.1 Beliefs and values

As stated by Weyrauch and Díaz Langou (2011), the way in which the policymakers update their beliefs influences the way in which they receive evidence. According to Gal and Rucker (2010, as quoted in Brooks, 2010), counter-intuitively, when subjects' belief systems are confronted with evidence contrary to their beliefs, become more prone to forcefully advocate in favour of their original beliefs.

In the case of impact evaluation, literature suggests that if the evidence available is contrary to the policymakers' belief system, its effect may be doubly negative: not only will the policymaker not incorporate its recommendations, but they may also argue more compellingly in favour of their previous beliefs. What the studies do not reveal, however, is whether, while arguing more forcefully for their original point, people still believe in it in the same way. Perhaps repeated exposure to the new "facts" from various sources, and/or longer-term studies would reveal that belief systems can be changed.

Beliefs and values play a crucial role at two levels: (1) how evidence/knowledge and its conveyor is listened to or not according to the policymakers' existing set of values related to the specific policy issue (e.g. the social construction of the target group when deciding how to help drug addicts will set the tone for the consideration of research on policies addressed to this group); and (2) the overall appreciation within the organization of the role of knowledge in informing decisions (which is also influenced by the social appreciation of science as noted among the macro-contextual factors).

In terms of this first level, we need to acknowledge the weight given to prevailing narratives and discourses on a specific policy issue. These, along with societal norms, can lead to policymakers' reluctance to acknowledge an issue because it is stigmatized by prevailing societal norms and values implied in these narratives (often due to cultural or religious beliefs, as shown in Box 14). Political party ideology plays an important role in which of these beliefs and values are defended. Consequently, its leadership can produce a significant cultural change within government institutions.

Similarly, history and tradition can bestow legitimacy on a situation whereby existence of current practice can be deemed evidence that it should continue to exist (Broadbent, 2012). Related to this, the extent to which it is socially acceptable to challenge power structures is also a strong driver for change or the lack thereof. For example, national actors can delegitimize sexual and reproductive health issues by framing them and the accompanying evidence as "foreign" or culturally inappropriate (Sumner et al., 2011).

Regarding the second level, it is important to also consider the extent to which an institution "values" evidence. There are agencies that, due to tradition, the will of politicians involved in their operation, or personnel characteristics, have developed a higher preference for processes that allow for a more efficient information management – from its creation to its use, and including processing and communication.

On the contrary, the collection and appraisal of research is in some settings regarded as "non-work" amongst those who have needed to appear to be taking action. Indeed, an organizational culture of *doing* can become a barrier; enabling staff to undertake and familiarize themselves with research would require more balance between thinking and doing. A shift to a "thinker–doer" culture would require ongoing encouragement and explicit permission from senior leaders (Peirson, Ciliska, Dobbins, and Mowat, 2012).

5.3.2 Openness to change

Related to the values above, but worth highlighting separately, is how an organizational culture may enable critical inquiry, curiosity, and support risk-taking and innovation.

Bureaucratic logic often prevails: bureaucrats reinforce the idea that everything is fine ("It has always been done this way"), and that there is no need for change or innovation (there is often significant interest in maintaining the status quo, which benefits a specific group of stakeholders (Leicester, 1999)). This gives preference to existing frameworks in understanding policy problems and, therefore, favours only evidence confirming the efficiency of current practices.

The political economy of change must not be underestimated. Does the organization have a sufficiently flexible structure to enable the development of new groups or units, which will be effective in seeing through a policy change? Does the institutional environment allow any restructuring? Do resources exist within an organization, or can they be gathered, to respond to a new way of working? (Court and Cotterrell, 2006:12)

Finally, openness to change is closely linked to a government's willingness to admit failure. This is particularly relevant for evidence arising from M&E efforts. It is also related to the overall culture of critical thinking. Naturally, this entails careful management of open instances for genuine reflection and self-criticism, so that they do not completely erode decision-making and implementation processes but facilitate clear areas for enhancement and/or reform.

5.3.3 Incentives

Values and beliefs bear weight on existing incentives within an organization. Incentives depend entirely on the promise of something external (while motivations, explored in the following section, are internal). This follows some traditional approaches put forward by psychologists, according to which an activity can have a motivation of its own, called "intrinsic motivation", which leads to the execution of the activity in the absence of external rewards or incentives. Furthermore, intrinsic motivation may be diminished by extrinsic incentives such as performance contingent monetary rewards (Irlenbusch and Sliwka, 2005).

In this way, mid-level policymakers will be more likely resort to evidence to the extent that it is considered important to their workspaces – that is, to the dynamics of decisions and to their leaders of their organization.

Promoting an institutional culture of learning from mistakes, rather than one where mistakes are punished, can help overcome a compliance-based system and encourage departments to make use of evidence to actively solve problems (rather than avoid them) (Phillips et al., 2014). If research is valued by leadership and senior management, they will establish processes that require, enable and/or reward civil servants that commission or use it, including through the creation of specific job positions or roles and responsibilities within job positions.

This is clearly linked with the existence of a champion (or champions) among leading policymakers willing to apply evidence. The role of leadership and senior management will be explored in detail in the next section. However, it is important to signal that they are crucial in the determination of the rest of the concrete incentives. They are also accountable for setting the overall

Box 15. Not all incentives work well

In a study on the capacity of health policymakers in Nigeria to use evidence, some organizational incentives available for research –e.g. availability of library, internet facilities, research grants, in-service training, sponsorship to attend conferences/workshops, institutional subscription of research materials were rated as inadequate/very low by the policymakers surveyed.

This might be due to individuals´ motivations which internalize differently the value of external rewards.

Source: Uneke, Ezeoha, Ndukwe, Oyibo, Onwe, Igbinedion, and Chukwu (2011b)

intangible framework as a general incentive to use (or not) evidence in policy. A study of UK civil servants and ministers found that civil servants are often reluctant to say what they think and use evidence to challenge ministers, being "conscious of the need to create and maintain a 'good relationship.'" Moreover, the study suggests that this reluctance is partly a result of limitations in support structures (explored further in the 'Management' dimension), without which the easiest way to keep everyone happy is to "give the minister what they want" (Hallsworth, Parker and Rutter, 2011: 12).

The lack of *performance management indicators,* which monitor service provision, and/or ongoing evaluation all make efforts to promote the use of research more challenging. These were found to be more prevalent in developing country institutions. Additionally, some organizations or officials often do not share information for fear of it being used to assess their performance. This is very common when talking about processes followed within the framework of monitoring and assessment systems.

The existence or absence of *electoral incentives* to use research evidence along with political costs also bear significant weight – for instance, if the political costs of adopting a certain change are considered high, then the change is less likely to be adopted. Within this are perceptions surrounding the economic benefits of using evidence: if evidence use is linked to economic growth then policymakers may be more likely to use it, due to the related political gain. This is related to the macro-context in terms of the overall appreciation and demand for the use of knowledge and its advantages.

There are interesting discussions about the implications of the *career structures of civil servants* for issues of bridging research and policy (Court and Cotterrell, 2006). Hanney, Gonzalez-Block, Buxton and Kogan (2003) note that (i) policymaker mobility may not be easily compatible with effective research utilization; and (ii) given the length of many research projects, the original sponsor of research is often not in place when the findings are reported.

Remuneration is another strong driver (see Box 16). Low remuneration and the dependence on allowances do not only affect individuals: they also have serious negative impacts on work practices and workplace relations, and tend to entrench the status quo. New ways of doing things are resisted in favour of what will maintain the expected levels of remuneration, even if inefficient.

As Datta (2013) states, this is exacerbated in institutions with an incentive structure that encourages researchers to scramble for short-term consultancy work from donors and government rather than focusing on longer term projects that may provide the opportunity to strengthen their research skills along the way. In

Box 16. The power of economic incentives

In Singapore civil service salaries are benchmarked against similar jobs in the private sector, this was highlighted as contributing to a positive attitude to their working environment including in policy research functions.

On another hand, in Indonesia, in a situation where researchers are often chasing donor contracts to top up very low funding levels, coupled with excessive bureaucracy, and the need for less senior researchers to secure various permissions to secure funding from donors, researchers often try to minimize formal links between an externally funded project and the research institution in order to maintain a greater degree of control over it.

Source: Neilsen (2010).

fact, the personal career success of the directors often depends on their ability to secure projects and money from donors, and not necessarily their ability to stimulate the production of new knowledge. Finally, opportunities to upgrade knowledge, skills and qualifications through *capacity building* have also been highlighted as concrete incentives to promote the use of research.

5.3.4 Motivations

Personal drivers are also relevant in terms of the organizational culture and how incentives are taken up or not. The Self Determination Theory (SDT) proposes that people are motivated from within, by interests, curiosity, care or abiding values along with external factors such as reward systems, grades, evaluations, or the opinions they fear others might have of them.

Conditions supporting the individual's experience of *autonomy, competence,* and *relatedness* arguably foster the most volitional and highest quality forms of motivation and engagement for activities, including enhanced performance, persistence and creativity. These intrinsic motivations are not necessarily externally rewarded or supported, but can nonetheless sustain passions, creativity and concerted efforts.

According to this theory, there is interplay between the extrinsic forces acting on persons and the intrinsic motives and needs inherent in human nature. Its assumptions are consistent with experiments showing that extrinsically motivated behaviour can be efficient as far as the more fully an external regulation has been internalized; the more autonomous will be the subsequent extrinsically motivated behaviour (Irlenbush and Sliwka, 2005). This is where organizational culture plays a significant role, by determining the degree of consistency and interaction between incentives and motivations. Among main motivations the following are worth highlighting.

Competence and relatedness. There are many concerns policymakers have as they develop, implement and evaluate policies besides having evidence on whether they will work or not. For instance, cost, acceptability, distributional effects, risk, and the need to maintain good relationships with civil society, the private sector and other government institutions. And within a government organization, managers will be both co-operating and competing with one another as they press for personal and professional advantage, while at the same time trying to advance the policy on which they are working.

Internal perceptions of colleagues and other government agencies also matter. Policymakers take into account how colleagues and superiors value the evidence they contribute (or not), and are also

concerned about the perceived quality, relevance and usefulness of this research. Cultural perceptions influence how those with research roles are regarded. For example, Kane-Potaka (2013) found that Thai culture had a high regard for professionals and academics, which helped scientists and others gain respect and credibility (and research by association). On the contrary, some government research centres in Indonesia are quickly bypassed because they are perceived to be slow to respond and to have low quality of research. This perception may not be warranted but reinforces the tendency to bypass, thereby generating a downward spiral in confidence.

Ownership. A sense of ownership of the evidence produced emerged as a very important driver for policymakers engaged in promoting its use within policy decision-making and design. When policymakers are involved in the design phase of research projects, this increases the likelihood of the research being used by securing early "buy-in". It can also help to tailor the findings to the policymakers' needs (Newman et al., 2013). When demand for evidence arises within a country's political economy as opposed to structures external to the system (such as from donors), there is increased ownership, a factor critical to ensuring its use (Porter and Feinstein, 2014).

On the other hand, attempts to build upon imported or "home-grown" evidence are likely to encounter resistance if a sense of ownership does not exist in those expected to adopt the change. In some African countries, there was resistance to what was perceived to be foreign influence and a defence of what was held to respond to national or African tradition and culture (Broadbent, 2012). On the contrary, design, implementation and performance evaluations conducted in Uruguay (see Box 17) proved to be an effective mechanism to tap into external expertise while ensuring a sense of internal ownership through encouraging participation throughout the whole process.

Similarly, new staff coming in to a government agency may disregard research commissioned by the previous administration, arguing that it responded to the interest of the previous minister or official. High turnover consequently affects the chances of evidence being used in a systematized and effective way.

04

Leadership, Senior management, Human resources, Legal capacity

5.4 Organizational capacity

We understand organizational capacity as the ability of an organization to use its resources to perform (Lusthaus et al., 1995). Within this, there are two core components: human resources (including leadership and management); and the legal framework or set of rules

that determine how resources can or cannot be used, and establish interactions between individuals that are part of the institution.

As noted, the state is not a monolithic stakeholder that acts with the same incentives, interests and goals (see Box 18). Instead, it comprises a myriad of stakeholders with often conflicting views of their mission and objectives. Specifically related to the use (or lack thereof) of knowledge in policy, one first clear distinction necessary for better the different types of interests and uses, is between elected officials and those who are part of the more stable bureaucracy. Their agendas and priorities frequently differ or even clash.

Most often, high-level elected policymakers are very difficult to engage in research analysis and discussions (though some are fit to participate due to their prior academic engagements or expertise). Simply put, they don't have time to sit and listen to technical discussions. On the contrary, career and appointed policymakers with more stable positions are frequently more available to engage in more profound processes to determine what type of evidence is needed, to commission research, to access to relevant knowledge, etc. There is often a tension between civil servants and appointed individuals; the latter tend to be more innovative and thus face conflicts with career human resources who are more prone to preserving existing policies.

Of course, the two levels of public servants can work together in aligned and continuous interactions. But the challenge of making the political agenda and *modus operandi* function effectively with the more technical of the two appeared frequently in the literature and in interviewees' reflections. Sometimes, the policymaker with power to make a decision opens the door to a body of evidence to inform it, but this knowledge does not reach those who then need to implement that decision. The need to bring on board a large and diverse set of public servants that will have to make innovations and changes to implement the use of research results and findings is increasingly recognized. To this end, it is important to forge stronger links and lines of communication and decision-making between these different governmental roles.

5.4.1 Leadership

The role of leadership is one of the main enabling factors for change in terms of enhancing the use of research in policy (see Box 19), highlighted even more frequently than the capacity of bureaucracy. Continuity and stability of high-level leadership who are clearly engaged with facilitating the use of knowledge in policy appears to be critical (Peirson et al., 2012). This is especially true of efforts that were not sufficiently embedded in the structure and culture of an organization. For example, how much those at the top appreciate research determines the investment in research units or human

Box 18. Taking into account the executive and legislative branches

If we focus on the key players within the state structure, it is worth mentioning that most public policies are designed by the Executive Branch (more than by the legislative power) and that those in charge are often technocrats working in public administration (more than "politicians"). Among them, principal/permanent secretaries, staff officials, special advisors, writers, political analysts, technical consultants, researchers hired by the government, etc. stand out.

But while the role played by the legislature is more related to "making" laws as well as passing or rejecting the Executive Branch's work, in those situations in which the Legislative Power is capable of examining policies or influencing the passing of a bill, technical staff plays an important advisory role, as key evidence drivers. In all Parliaments there are often many specialized advisors, who can answer legislators' questions using a variety of evidence sources; there are also specialists who work in commissions (mostly referred to as committees) and play a key role in the preparation of reports or explaining concepts to Members of Parliament (MPs); in some cases, there is a Science and Technology office or a research unit (this is the case of Uganda, for example), which provides information on issues related to research.

Besides the administrative tasks of coordinating meetings and hearings and taking care of all documents pertaining to legislative tasks, commission personnel influences research-related decisions that determine the agenda; negotiate on behalf of the commissions and their presidents and work to create coalitions within commissions, chambers and conferences.

resources; if they do not believe in the importance of research, they will invest in other issues.

The link between culture and leadership needs to be further analysed. According to Schein (2004:2), this requires an evolutionary perspective:

> "…cultures begin with leaders who impose their own values and assumptions on a group. If that group is successful and the assumptions come to be taken for granted, we then have a culture that will define for later generations of members what kinds of leadership are acceptable. The culture now defines leadership. But as the group runs into adaptive difficulties, as its environment changes to the point where some of its assumptions are no longer valid, leadership comes into play once more. Leadership is now the ability to step outside the culture that created the leader and to start evolutionary change processes that are more adaptive. This ability to perceive the limitations of one's own culture and to evolve the culture adaptively is the essence and ultimate challenge of leadership."

Therefore, culture and leadership are two sides of the same coin. Schein continues to explain that:

> "Culture is not easy to create or change, or that formal leaders are the only determiners of culture. On the contrary, as we will see, culture refers to those elements of a group or organization that are most stable and least malleable. Culture is the result of a complex group learning process that is only partially influenced by leader behaviour. But if the group's survival is threatened because elements of its culture have become maladapted, it is ultimately the function of leadership at all levels of the organization to recognize and do something about this situation. It is in this sense that leadership and culture are conceptually intertwined" (2004: 11)

Political leadership is crucial to promote changes in terms of the role of knowledge in policy. Without commitment and drive from them, changing the internal rules of government (formal and informal) is not possible. Leaders who have understood and addressed a wide range of incentives and pressures related to using evidence in a policy processed, have been key in terms of enabling this change.

Leadership also emerged as critical when building skills, fostering expectations for using knowledge to inform policy, providing "moral messaging" throughout change processes, reinforcing norms, and

conducting participatory decision-making. For example, in South Africa, the existence of clear political and technical champions (individuals and departments) – a minister and deputy minister for performance M&E in the presidency and DPME for government-wide M&E – played a crucial role in achieving change. Indeed, there have been effective leaders who have created systems from scratch, set them up quickly and established strong teams to run them (Phillips et al., 2014).

5.4.2 Senior management

Leadership should be distinguished from management or administration; one can argue that leadership creates and changes cultures, while management and administration act within a culture. There are clearly leaders emerging from senior management who influence how and if knowledge is used within policy, and thus contribute to generating a new culture. These are more likely to emerge when higher leadership in government or a political party are already pushing for a broader use of evidence in policy.

Senior managers often play an important role in terms of interpreting the evidence as well as deciding who advises them and how. For instance, some opt to form expert advisory committees while others rely more on informal relationships with experts they trust.

Senior management's relationship with middle managers is also key. Senior managers may not be the authors of a strategy, which may well be developed by middle managers: the latter need to be supported as they communicate the change vision within the organization (Kotter, 2006).

5.4.3 Human resources

It is important to note that, in certain situations, government agencies do not have adequate resources to hire and retain the best talent with the adequate skills and capacities to conduct or identify the type of knowledge needed at different stages of decision-making and policy implementation. It may also not be easy to attract and retain a critical mass of policymakers with the required *technical and research skills* and experience, both to commission and interpret the results of research, and to put the findings into practice. This includes the capacity of bureaucratic agencies to manage programmes successfully, including expertise, personnel, political (elite) support as described, and other resources.

Among human resources, a key role is played by advisors who bring practice-based knowledge. Compared to research-based knowledge, advisors usually bring knowledge related to the different operating contexts, and experiences of implementation at different

government levels. This type of knowledge becomes increasingly useful in the implementation of large policies, since there is usually a need to adapt them to local priorities and capacities. Advisors can also act as brokers by transmitting and interpreting the information from research-based sources and operational research to policy decision makers.

There is often a discrepancy between perceived ability to use evidence and actual ability (see Box 20). According to several self-assessments, policymakers tend to overestimate their knowledge and capacity and underestimate capacity gaps (Newman et al., 2013). However their low research skills are very frequently identified as important barriers to the use of evidence. Moreover, policymakers' past experience or training in research can ensure they are comfortable reading and digesting policy-relevant knowledge. The specific capacity to use information and communication technologies (ICT) also plays a role in how the information is generated, interpreted and applied.

This is usually related to the *educational background* of policymakers, which has also been positively correlated with their use of evidence. In fact, officials with a graduate diploma or postgraduate degree were more likely to use research in policy-related work (Cherney et al., 2015). Another study noted that participants with higher academic qualifications (masters or doctorate degrees) had a greater capacity for acquisition and assessment of research evidence for policymaking than those with lower academic qualifications (Uneke et al., 2011b). For example, propensity towards incorporating evaluation is also explained by educational and professional background. The profession of the policymakers influences their predisposition to accept and incorporate empirical evidence. Moreover, professional prestige of certain professions (such as that of lawyers) can make them less prone to accept advice from other, newer professions. Additionally, in some countries, where local research is still scarce, the ability to access research in other languages (mainly English) can also significantly affect policymakers' capacities to use it.

Political and communications skills have also been proven to contribute to the effective use of research. Policymakers who are politically savvy and find effective ways to convey evidence, by detecting the right messages, moments and entry points, are usually more successful in convincing others about the need to consider research for policy decisions.

Among political skills, cultural sensitivity should not be underestimated. When large quantities of available evidence is produced at international or national levels, the capacity to contextualize it to the region and balance scientific research with

Box 20. Take a look at current capacity, first

In Nigeria, it was noted that the arrival of computer systems and technology preceded the availability of ICT training in the educational system, which meant that most policymakers who graduated from tertiary institutions before the 1990s did not receive any ICT training. A training led by Ebonyi state university found that policymakers had low capacity to use ICT; less than half the policymakers trained had ever used internet to source information, and the lack of computer literacy was highlighted as a major impediment to evidence use. Opportunities to attend ICT trainings were also limited, although there was a demand amongst policymakers for ICT trainings. In-house ICT training workshops were recommended to improve the capacity of policymakers to access and use evidence in policy.

Source: Uneke, Ezeoha, Ndukwe, Oyibo, and Friday (2011a)

people's views plays a pivotal role. Uneke (2015) provided the following example in the case of Nigeria:

> "Northern Nigeria has a different system to southern Nigeria. So you cannot make a policy that will be implemented in the north and south without taking into account the peculiar setting in terms of religion, culture, way of life – these things differ from place to place. You cannot just apply research-based evidence without taking into consideration these factors. For example, in many places in northern Nigeria pregnant women will want a female gynaecologist, so when making a health policy you need to have an understanding of this and consider these cultural or religious factors before just applying scientific evidence."

Regarding all these skills, and as analysed within culture, *capacity building* can contribute to their enhancement. A commitment to continuous in-house training and development of new skills and capacities can help enhance opportunities to effectively generate and use policy-relevant research, including specific guidance on how to utilize research findings.

High staff turnover hampers efforts to institutionalize the use of knowledge. This is especially relevant for the use of existing data as well as information-generating processes. A lack of permanence may imply the loss of valuable information for the decision-making process due to the fact that it was not computerized or communicated in good time. Also, as already noted, incoming policymakers, whether at national, subnational or local level, may disregard existing evidence for the sole reason that it was generated or commissioned by another ruling party. At the same time, however, changes are and should be viewed as opportunities, as the new administration may take more interest in information generation and use.

5.4.4 Legal capacity

Finally, the existing legal capacity to effect changes and increase the use of knowledge should not be underestimated. In fact, policymakers are also constrained or enabled by regulations in the commissioning and conducting of research. Often regulations are so intricate and complex that researchers and smaller research institutions cannot fulfil all steps and requirements, and thus cannot become regular suppliers.

For example, studies in Indonesia (Cislowski and Purwadi, 2011) found that within government, there are some key issues in the regulatory environment that hinder the capacity of government to formulate its knowledge need and develop evidence-based

policy. These issues include: the vested interests of various agencies and individuals; divisions between the different categories of staff (researcher and social engineer), which create barriers between policy expertise and policy decision-making processes; and regulations that arbitrarily divide (specialist) and structural (administrative) staff.

Furthermore, Cislowski and Purwadi also found that the Civil Service Law in Indonesia has the potential to bring new leadership and new expertise to the civil service, and that the new civil service Policy Analyst position could strengthen the quality of policymaking. However, they warn about the significant risk of unclear implementing regulations, which might enable vested interests to give voice to reformist rhetoric while continuing with "business as usual".

05

Degree of systematic planning, Existence of formal processes to access and use evidence, Positions, including division of work and roles and responsibilities, Communication processes, Monitoring and evaluation

5.5 Organizational management and processes

Daily work in an organization is largely dependent on ongoing processes and policies, and how routine decisions are made. This dimension includes:

> "Internal management systems – the many mechanisms that guide interactions among people to ensure that ongoing work is accomplished rather than hindered or blocked. They include planning, communication, decision making, problem-solving, monitoring, and evaluation" (Lusthaus et al., 1995)

Policymakers interact to accomplish their work, and the way that organizational processes are set up dictates the tone of the interactions that take place, including how and if evidence is used in the course of problem-solving, decision-making and communication (see Box 21). Management and processes are more prone to promote the use of evidence if there are long-term and consistent policy, regulatory, budgetary frameworks that support domestic research and development institutions. For example Brazil, Malaysia, Mexico and Singapore have invested in educational institutions and research think tanks, and have been tailoring government capacity for 20-50 years (Nielsen, 2010). Therefore the macro-contextual factors are again crucial to explain attitudes and behaviours at the institutional level.

5.5.1 Degree of systematic planning

The existence of overall national strategies and plans encouraging the incorporation of evidence, or that have strong M&E components, will push institutions at different levels (subnational

Box 21. Job boundaries as clear obstacles

Three studies from the UK, Canada and New Zealand discussed in a systematic review found that divisions of responsibilities and 'institutional silos' can also limit consideration of evidence – job boundaries can make it very difficult to engage with ideas beyond a person's immediate area of responsibility, or consider multi-disciplinary evidence and engage in horizontal thinking across sectoral boundaries.

Source: Liverani et al. (2013)

and sometimes even local) to use evidence and perform some type of monitoring and/or evaluation. This is especially applicable to the *planning stage* as already mentioned.

However, as detected in Indonesia, the government's planning and resourcing model works against the ability of government research units to be responsive and flexible. In this country, aspects of annual budget procedures and procurement systems designed to minimize corruption have been only marginally effective but at the same time have stifled the capacity of research units to be sufficiently responsive to a minister's needs for quick advice (Cislowski and Purwadi, 2011).

Even when macro context may dictate a culture of strategic planning with room for manoeuver, the planning processes within a specific institution can also open up opportunities to incorporate research – for example, when requiring diagnostics or baselines to support a new programme or policy. A mid-term plan can also provide sense and clarity for potential research agendas, and the need to systematically gather information to monitor and evaluate it. It can also enable continuous feedback loops between research, policy, implementation and monitoring.

Links between planning and budgeting are also crucial in terms of opening up windows of opportunity to fund and commission new research. In terms of management, we have already explored the contribution of senior managers; if their subordinates perceive that they really value evidence as a factor to make decisions, evaluate their work, provide training, etc. they will be more prone to incorporate it as part of their daily processes and routines.

5.5.2 Existence of formal processes to access and use evidence in policymaking

Similarly, another key factor is the existence of concrete and external processes that promote the use of evidence, such as evidence-based peer-review processes for internal policy briefings, parliamentary committee inquiries that require parliamentarians to gather evidence to scrutinize government policy, and requirements for spending bids to be supported by an analysis of the existing base.

In terms of formal processes, it is more frequent to find existing systems that aim to continue generating and using data that already exists (for example, national household surveys) than formal processes to commission new and/or dedicated research. The use of information tends to be more institutionalized for existing and systematic data gathered by the state while, in contrast, research produced by external stakeholders is used to inform a specific policy discussion, design or an aspect of its implementation. There are also other processes that are less visible but can have a deep-rooted

effect on the demand for evidence, e.g. processes related to specific policy strategies, policy appraisals and budgeting (Newman, Fisher and Shaxson, 2012).

5.5.3 Positions, including division of work and roles and responsibilities

Another crucial aspect of process is linked to how roles and responsibilities are defined and distributed – for example, whether they contain references to an expected use of research. In this sense, when there is an established functional specialization of policymakers, those within those roles are expected to be specialized experts in the substance of the policy domain and are consequently more likely to generate or listen to research findings.

Certain divisions of responsibilities within government bureaucracies limit the use of evidence, arguing that "individual civil servants are compelled to focus on small, specific areas of policy activity, making it extremely difficult for them to engage with ideas beyond their immediate area of responsibility" (Liverani et al., 2013:4).

On another hand, the creation of positions such as Policy Analyst, can increase the demand from government for knowledge and promote the incorporation of a new cadre of well-trained policy staff. This in turn could improve uptake of evidence into policymaking. The effectiveness of this, however, could be undermined by problems with inappropriate incentives born out of the division between administrative and functional staff, which has been identified as a major constraint to the use of knowledge in policy (Sherlock and Djani, 2015).

5.5.4 Communication processes

Communication processes are also vital. As a critical aspect of how relationships with other stakeholders take place, they contribute significantly to one of the key dimensions of our proposed framework. Often due to the variable quality of research outputs, or the dispersed systems for research commissioning and production, communication and coordination of research within each institution is poor. In Indonesia, for example, studies found that there are few high quality publications and very few publications in international journals. Another crucial point about communication is the frequent lack of knowledge and coordination among different ministries and agencies to jointly establish common research topics. Doing so would mean that all could be engaged early on in the sharing of what will be produced or commissioned, as well as in making decisions about how and when to involve external stakeholders throughout the process.

On the positive side, some institutions are very effective in communicating their research activities to diverse stakeholders, including periodically producing formal research reports as well as attractive documents with evidence of analysis and interpretation. Others have developed concrete and sophisticated mechanisms to interact effectively with a diverse group of stakeholders who can support the use of knowledge in policy, actively listening to their demands, priorities, proposals, etc. (for more insights on these mechanisms please see the action paper).

In this sense, although some formal communication processes can help towards further use of available knowledge, the role of key people of influence should be carefully considered, including how to build multiple-level dialogues with them. For example, in Vietnam, when it comes to actually communicating research to policymakers, formal knowledge products have a limited role (see Box 22). Rather, the president, directors of the institutes and heads of departments are the ones who interact with policy processes through private meetings, commenting on draft legal documents, attending technical seminars and workshops, and/or appearing in the press and on television. As Martin Rama explains in his paper on transition in Vietnam, influence is a result of research leaders with strong personalities – often seen as "bullet proof" mediators – who convince the most senior officials in the communist party, with whom they had a strong relationship, of the merit of new ideas. For important reforms, the mere technical soundness or attractive packaging of technical inputs is never enough (Datta and Jones, 2011).

5.5.5 Monitoring and evaluation

Monitoring and evaluation (M&E) are two increasingly implemented processes or practices that help generating internal knowledge. Both are key aspects of public policy management, in the extent to which they make knowledge accumulation and organizational learning easier so as to improve the effect of said policies on the population, on the social and productive structure and on democratic institutions. The types and uses of evidence in M&E are more specific and more clearly delimited among government institutions compared with other potential uses of research, such as framing a policy problem, evaluating policy alternatives, etc.

However, the role of motivations and incentives in terms of how M&E takes place should not be underestimated: research results that inform policy design stages are seen as valuable inputs, while evaluation results – when negative – can create a great deal of conflict for public servants, implying that part they are not doing

their work properly or efficiently. Consequently, they tend to be reluctant to adopt or use those evaluations results. This is linked with the overall organizational culture and how it genuinely embraces learning or not: there are agencies that have worked around how to constructively build on findings, such as Sedesol in Mexico (see Box 24).

More recently, many governments in developing countries have achieved a better understanding of the value of M&E in helping to accurately determine which investments and public interventions work, which don't and why (Box 23). However, the remaining challenge is the institutionalization of these systems in the general dynamics of public sector information management. That is to say, there is still a significant way to go towards system creation, suitable operation and intensive use.

Further, evaluating policies does not ensure the results of the M&E will be used to change policies. It is a great step forward to have M&E units in the public sector –and to have special committees or commissions with private and public sector representatives choosing the type of evaluations that a country needs (a good case is the Quipu Comission from Perú in 2012 and 2013, a good practice included in the practical paper), or independent bodies conducting the evaluations to ensure its independency and assuring its quality. But when evaluation results emerge and are shared with policymakers and public officials, they are not obliged to use these results or to adopt the recommendations. Unless there are processes in place to ensure the use of M&E findings (see Box 24), policymakers have to be convinced about the power of such recommendations in order to use them (Goldman, 2016).

The recommendations also need to be feasible within the bureaucratic rules of the public sector (Bardach, 1996); most evaluations end with recommendations that then need to be translated into operational actions within the public sector, and in that process, sometimes they lose their goals. The adoption of a recommendation implies changing operational rules in the public sector and such processes imply time, coordination (within the sector, but also with other sectors or governmental levels), negotiation and validation of its legality and validity. Literature usually ends its analyses of using evidence in designs or at the point at which the public sector are informed of the results, but we need to go one step further, and learn how these evaluation results will or will not be processed within the public sector boundaries.

The potential for conducting M&E internally is clearly linked to existing information systems, part of the core resources that we will analyse in the following sections.

Budget committed to research, Technology, Existence of a knowledge infrastructure, Time availability

5.6 Core resources

5.6.1 Budget committed to research

One of the factors most cited as a restriction on the degree of knowledge generation and utilization is the limited funding available for research. This limitation leads to inadequate methodological capacities and weak analytical skills among public servants, combined with the inability to hire highly qualified researchers or research centres to conduct specific studies. This is worsened by a frequent divide between the research and the policy agenda within the same governmental agencies.

Even when funders recognize the importance of budget support – which often carries high hopes as a motivator – there are other issues that frequently limit the effectiveness of financial support as catalyst for reform. Often those countries where donors have the most financial leverage have the furthest to go to improve institutions, but the least capacity to implement change. An uncoordinated set of donors with diverse and less focused demands and priorities, each providing financial support to suit their own individual priorities, does not allow for concerted and integrated strategies to promote the use of knowledge in policy. Sometimes tight schedules for commitment and disbursement of lending hinder government institutions in developing a sound plan that aligns its need with the existing offer and opportunities.

Budget flexibility and availability is not only key to the generation of required evidence but also for applying findings and results, as lack of resources significantly affects how useful these can be. For example, even if evidence suggests a concrete programme is working and it should be scaled up, governmental agencies often do not have the resources to do so. On the other hand, they might have already committed funds to a programme that isn't working, and to reallocate these resources is very difficult.

5.6.2 Technology

Technology plays a pivotal role in enabling the flow and production of policy-relevant knowledge. For example, internet access is poor or unreliable in many low- and middle-income countries. Additionally, many states have not yet computerized all the information they have available and departments operate as silos of information. Having digital tools to manage information could allow for a more efficient and timely use of knowledge but the availability of this infrastructure does not necessarily mean it will be effectively accessed or used. There is therefore also the need for a comprehensive capacity-development effort to ensure the use of new technology is not be underestimated, as in the example of Nigeria (see Box 21).

5.6.3 Existence of a knowledge infrastructure

The existence of a good knowledge infrastructure in government departments is likely to affect the levels at which policymakers consult and use research. This may be in the form of research units within government, knowledge management strategies that provide some sense and order to the existing information, or the existence of an electronic knowledge base of past policy papers. Indeed, in public agencies' hallways there is a lot of circulating information, which is not systematic and thus hinders it being better leveraged. This is also frequently linked to obsolete processes or tools.

An endless amount of data circulates among different public sector agencies. However, for this data to be available useful to decision-making processes, it needs to be stored in some kind of system that orders and makes sense of it. These structures, often called information systems, are instruments for knowledge generation and transfer, which support programme and project planning, monitoring and evaluation.

Information systems are usually used as support for other areas, queries (administrative acts, controls, reviews) or, in the end, for filing. For these systems to be efficient, they must address users' needs. The usefulness of information systems lies in their: (1) reliability – that is, decisions are made based on the generated information; and (2) timeliness – that is, information must be available when decision-makers need it. Another significant value is the feasibility of compiling data, taking into account the reliability and timeliness criteria. Feasibility is not only related to an attribute of existing information systems but also to the technical and administrative ability of chief operating officers and institutions to use them.

5.6.4 Time availability

Last but not least, lack of time also inhibits policymakers' capacity to use evidence. Indeed, timescales for decision-making are frequently incompatible with those for research. This will of course vary according to policy-decision methodologies and cycles. There is often a lack of synchrony – for instance, when evidence comes after the decision has been made and has missed the window of opportunity. This can only be avoided when there is a constant churning of evidence, to ensure that information is available for when the opportunities for use arise.

It is also worth distinguishing between systematic and ad hoc opportunities for research use. An example of systematic use is during election cycles, as already explored, when many policy decisions are made and evidence has the chance to significantly influence the election manifesto. Ad hoc decision-making, on

the other hand, happens when a specific policy issue or problem scales up in the political agenda due to a crisis, a social movement, pressure by a special citizens' group or media campaign, etc. This leads to many decisions being made in haste. A typical example is when a president or governor visits the countryside to hear people's views and ideas directly, and consequently makes immediate media statements about policy commitments responding to this specific claim or request. This commitment may contradict what local government authorities had planned and prioritized based on the available evidence, to which the high-level policymaker had not been exposed.

Availability of time will therefore vary according to the type of decisions and how much agreement there is already in place in terms of what is the policy problem and which are its potential solutions.

VI. Final remarks and future plans

Context matters. It matters in very specific ways and across several different dimensions. It is these dimensions that form the basis of our proposed framework, and which any governmental institution aiming to improve the use of knowledge in public policy should consider carefully.

The links between these dimensions are various and changing. Clearly a macro-context that hinders the use of knowledge in public policy – such as, for example restrictions on freedom of expression, or a lack of quality and policy-relevant research – will significantly limit the potential of internal changes that a new leadership might promote (for instance, attempting to create a culture that values research). The same applies to the type, interests and objectives of external stakeholders: if most stakeholders value the role of knowledge, and produce and use it to inform their own decision-making processes, it is more likely a governmental agency will take this into account.

However, as explained in the section 'Our focus', we also believe that there is important room to manoeuver within each governmental institution to inform its decision and implementation processes with existing or new knowledge. In the course of the study for this paper, leadership emerged as one of the key "sub-dimensions" that can catalyse effective improvements in culture, organizational capacity, processes and resources to strengthen evidence use. Therefore, the role of the individual agent, particularly when leveraged by a political setting that favours change, should not be underestimated when considering institutional change. For instance, when supported by capable senior management, leadership can effectively create new working cultures and channel resources to establish new processes that incorporate and promote knowledge production.

Organizational culture is also significant. It can erode well-designed and well-intentioned management processes aimed at change. Staff incentives and motivations should be carefully considered – as too, should the factors that influence them, such as values, judgements, experience and expertise, pressure groups, etc. This complexity means that any formal decision to promote better use of research in policy needs to be highly strategic.

In this sense, our framework aims to help users better assess their contexts in which they operate and, based on careful assessment, detect where the potential for change may be greater and barriers more significant. Any player in this field, even those who can work

with a more comprehensive and long-term framework, will need to decide what to do at the operational level. Conceptual devices such as this framework, if really valuable, should help users make better choices. Our theory is that, by applying this lens to a particular government setting, users can identify what to do, with who and how more effectively.

Indeed, the framework has a promising set of practical applications for diverse audiences – from policymakers to researchers, donors to practitioners, among others. There are concrete uses that can emerge from conducting this type of analysis and for different types of actions: research, design of interventions, implementation of interventions, capacity building, and monitoring, evaluation and learning.

The intention is not for each user to go through the entire framework "lens" or pay attention to each and every dimension and factor; instead we believe there are diverse potential uses and users, and different practical implications for policymakers, researchers, capacity building experts, etc. In producing the framework we have been able to map a critical body of emergent practices that policymakers and others working with them have deployed to enhance the use of research in their agencies. There is a significant body of practical experiences dealing with the proposed dimensions that others could use to inspire their own processes of change. We explore some of these practical uses and example practices in more detail in the practical paper, available here.

If after reading this paper you feel compelled to convert the framework into an effective tool to inform strategic decisions on how to promote change – from wherever you are and what you are currently doing – we would encourage you to refer to the practical paper. This product is an evolving creature: we are certain that it will become more useful and more valuable as users collaborate by sharing new reflections and ideas and practices.

To achieve change, every individual and organizational agent must make small steps together; we cannot do it alone. This framework and the practical knowledge product are one of P&I and INASP's contributions to such collaborative change. We hope that others join us on this complex but promising path.

VII. Bibliography

Andrews, M., Pritchett, L., and Woolcock, M. *Escaping capability traps through problem driven iterative adaptation (PDIA).* Center for Global Development. Working paper 299, June 2012.

Bardach, E. (1996) *The Eight-Step Path for Policy Analysis: A Handbook for Practice.* Berkeley Academic Press, 126 p.

Broadbent, E. (2012) Politics of research-based evidence in African policy debates. London: Overseas Development Institute.

Brown, E., Knox, A. and Tolmie, C. (2014) *Linking Think Tank Performance, Decisions, and Context.* Washington DC: Results for Development Institute.

Brunner, J. J. (1993) '¿Contribuye la investigación social a la toma de decisiones?', *Revista Colombiana de Educación*, 27, 7-21.

Campbell, J. L. and Pedersen, O. K. (2014) *The National Origins of Policy Ideas: Knowledge Regimes in the United States, France, Germany, and Denmark.* Princeton University Press.

Carden, F. (2009) *Knowledge to policy: making the most of development research*. Ottawa: IDRC.

Cardoso, F. H. (2003) Speech at the Economic Commission for Latin America and the Caribbean.

Castro, M. F., Lopez-Acevedo, G., Beker Busjeet, G. and Fernandez Ordonez, X. (2009) Mexico's M&E System: Scaling Up from the Sectoral to the National Level. ECD Working papers Series No. 20. Washington D.C.: World Bank.

Cherney, A., Head, B., Povey, J., Ferguson, M. and Boreham, P. (2015) 'Use of academic social research by public officials: exploring preferences and constraints that impact on research use', *Evidence & Policy: A Journal of Research, Debate and Practice*, 11(2): 169-188.

Cislowski, H. and Purwadi, A. (2011) *Study of the Role of Indonesian Government Research Units ('Balitbang') in Bridging Research and Development Policy*. AusAID.

Clar, C., Campbell, S., Davidson, L. and Graham, W. (2011) *Systematic Review: What are the effects of interventions to improve the uptake of evidence from health research into policy and low-income countries?* Abderdeen: University of Abderdeen.

Court, J. and Cotterrell, L. (2006) *What Political and Institutional Context Issues Matter for Bridging Research and Policy? A Literature Review and Discussion of Data Collection Approaches*. London: Overseas Development Institute.

Court, J. and Young, J. (2003) *Bridging research and policy: Insights from 50 case studies*. London: Overseas Development Institute.

Datta, A. (2013) 'Developing capacities in complex environments: experiences from Vietnam'. Supporting Think Tanks Series. Retrieved from On Think Tanks.

Datta, A. and Jones, N. (2011) *Linkages between researchers and legislators in developing countries: A scoping study*. Working Paper 332. London: Overseas Development Institute.

Datta, A., Shaxson, L. and Pellini, A. (2012) *Capacity, complexity and consulting. Lessons from managing capacity development projects*. London: Overseas Development Institute.

Dener, C., Watkins, J. and Dorotinsky, W. L. (2011) *Financial Management Information Systems: 25 Years of World Bank Experience on What Works and What Doesn't*. Washington D.C.: The World Bank.

Department for International Development (2009) *Political Economy Analysis How To Note*.

Echt, L. (2015a) *The role of evidence in policy making: "We seek to send the message that data is relevant"*. Politics &Ideas.

Echt, L. (2015b) *Think tanks and elections: a series on experiences from around the world*. On Think Tanks.

Echt, L. and Agustina, E. (2013) *Promoting a national policy forum: CIPPEC's agenda for the President 2011-2015*. CIPPEC.

Echt, L. and Eskenazi, A. S. (2013) *Addressing political incentives for electoral debates: CIPPEC's Agenda for the President 2011-2015*. Politics & Ideas.

Echt, L. and Weyrauch, V. (2015) Online course "Leaders of change: developing Latin American policymakers´ capacity to promote the use of knowledge in policy". Politics & Ideas.

Eyben, R. (2013) *Uncovering the politics of 'evidence' and 'results': A framing paper for development practitioners*. Brighton: IDS.

Fischer, F. (2003) *Reframing public policy: discursive politics and deliberative practices*. Oxford: Oxford University Press.

Fritz, V., Kaiser, K. and Levy, B. (2009) *Problem-Driven Governance and Political Economy Analysis: Good Practice Framework*. Washington D.C.: World Bank.

Gal, D. and Rucker, D. D. (2010) 'When in doubt, shout! Paradoxical influences of doubt on proselytizing', *Psychological Science.*

Garcé, A. (2011) 'Estructuras política y usos de la investigación en las políticas públicas. Métodos e hipótesis para una agenda de investigación', in Mendizabal, E. and Correa Aste, N. *Vínculos*

entre conocimiento y política: el rol de la investigación en el debate público en América Latina. Lima: CIES & Universidad del Pacífico.

Garcé, A. (2013) *Political Knowledge Regimes: Developing a new concept from the study of three changes in public policy during the government of Tabaré Vazquez in Uruguay.* Politics & Ideas.

Goldman, I. (2016) *Walking the Tightrope: Promoting demand for evaluation evidence in South Africa. Evaluation for Africa.*

Government of Uganda (2013) *Uganda Vision 2040.*

Politics and policy implementation in the Third World (1980) ed. Grindle, M.S., 3-6. Princeton, NJ: Princeton University Press.

Grindle, M. and Thomas, J. (1991) *Public Choices and Policy Change: The Political Economy of Reform in Developing Countries.* Baltimore: John Hopkins University Press

Gutbrod, H. (2013) '"Fact before Think" – The Case for Data-Focused Think Tanks', On Think Tanks.

Haas, P. M. (1992) 'Epistemic communities and international policy coordination: Introduction', *International Organization*, 46(1): 1-35.

Hanney, S. R., Gonzalez-Block, M. A., Buxton, M. J. and Kogan, M. (2003) 'The utilisation of health research in policy-making: concepts, examples and methods of assessment', *Health research policy and systems*, 1(1): 2.

Hallsworth, M., Parker, S., Rutter., J. (2011) *Policy Making in the Real World: Evidence and Analysis.* Institute for Government.

Harle, J. and Ademokun, A. (2014) 'Tackling systems and complexity in a research capacity programme', 14 May 2014, Practising Development.

Hyden, G., Court, J. and Mease, K. (2004) *Making Sense of Governance: Empirical Evidence from Sixteen Developing Countries.* Boulder, CO: Lynne Rienner.

Irlenbusch, B. and Sliwka, D. (2005) *Incentives, decision frames, and motivation crowding out-an experimental investigation.* IZA Discussion Paper No. 1758.

Jones, H. (2009) *Policy-Making as Discourse: A Review of Recent Knowledge-to-Policy Literature.* A joint IKM-Emergent and ODI Working Paper, No. 5. Bonn: IKM.

Jones, M. P. (2005) *The role of parties and party systems in the policymaking process.* Washington, D.C.: Inter-American Development Bank Workshop on State Reform, Public Policies and Policymaking Processes.

Joshi, A. (2013) *Context matters: a causal chain to unpacking social accountability interventions.* Brighton: IDS.

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Kane-Potaka, J. (2013) *The story behind the success: ten case studies identifying what led to uptake of research for development.* IWMI and ICRISAT.

Kitson, A., Harvey, G. and McCormack, B. (1998) 'Enabling the implementation of evidence based practice: a conceptual framework', *Quality in Healthcare*, 7(3): 149-158.

Kotter, J.P. (2006) 'Leading change: why transformation efforts fail', *Harvard Business Review.* Boston, MA: Harvard University Press.

Landry, R., Lamari, M. and Amara, N. (2003) 'The Extent and Determinants of the Utilization of University Research in Government Agencies', *Public Administration Review* 63: 192-205.

Leicester, G. (1999) 'Viewpoint: The Seven Enemies of Evidence-Based Policy', *Public Money and Management* 19(1): 5-7.

Liverani, M., Hawkins, B. and Parkhurst, J.O. (2013) 'Political and Institutional Influences on the Use of Evidence in Public Health Policy: A Systematic Review', PLoS ONE 8(10)

Lusthaus, C. (2002) *Organizational assessment: A framework for improving performance.* IDRC.

Lusthaus, C., Anderson, G. and Murphy, E. (1995) *Institutional Assessment:* A Framework for Strengthening Organizational Capacity for IDRC's Research Partners. Ottawa: IDRC.

McCormack, B., Kitson, A., Harvey, G., Rycroft-Malone, J., Titchen, A. and Seers, T. (2001) 'Getting evidence into practice: the meaning of "context"', *Journal of Advanced Nursing,* 38(1): 94-104.

Mendizabal, E. (2015) 'Introduction to the series on think tanks and context', On Think Tanks.

Moat, K. A., Lavis, J. N. and Abelson, J. (2013) 'How Contexts and Issues Influence the Use of Policy Relevant Research Syntheses: A Critical Interpretive Synthesis', *Milbank Quarterly*, 91(3): 604-648.

Morse, J. M., Hupcey, J. E., Mitcham, C. and Lenz, E. R. (1996) 'Concept analysis in nursing research: a critical appraisal', *Research and Theory for Nursing Practice* 10(3): 253-277.

Nash, R., Hudson, A. and Luttrell, C. (2006) *Mapping Political Context A Toolkit for Civil Society Organisations*. London: Overseas Development Institute.

Neilsen, G. (2010) *Comparative Experiences of Middle Income Countries*. AusAID.

Newman, K. (2014) *What is the evidence on the impact of research on international development?* London: DFID.

Newman, K., Capillo, A., Famurewa, A., Nath, C. and Siyanbola, W. (2013) *What is the evidence on evidence-informed policy making? Lessons from the International Conference on Evidence-Informed Policy Making*. Oxford: INASP.

Newman, K., Fisher, C. and Shaxson, L. (2012) Stimulating Demand for Research Evidence: What Role for Capacity building?, *IDS Bulletin*, 43(5): 17-24.

Nielsen, G. (2010) *Comparative Experiences of Middle Income Countries. Revitalising Indonesia's Knowledge Sector for Development Policy*. ISSA/IET/Asia Division AusAID.

Nutley, S., Walter, I. and Davies, H. (2002a) From Knowing to Doing: a framework for understanding the evidence-into practice agenda. Discussion Paper 1. St Andrews, Fife: Research Unit for Research Utilisation, University of St Andrews.

Oliver, K., Innvar, S., Lorenc, T., Woodman, J. and and Thomas, J. (2014) 'A systematic review of barriers to and facilitators of the use of evidence by policymakers', *BMC Health Services Research*, 14: 2.

Oliver, K., Innvar, S. and Lorenc, T. (2014) *New directions in evidence-based policy research: a critical analysis of the literature*. BioMed Central.

O'Meally, S. C. (2013) Mapping context for social accountability. Resource paper. Washington D.C.: World Bank.

Ordóñez, A. (2013) *Defining problems or providing solutions? The role of ideas in policy debates*. Retrieved from Politics &Ideas.

Orton, L., Lloyd-Williams, F., Taylor-Robinson, D., O'Flaherty, M. and Capewell, S. (2011) 'The use of research evidence in public health decision making processes: systematic review', *PLoS One*, 6(7): e21704.

Oszlak, O. and O'Donnell, G. A. (1976) *Estado y políticas estatales en América Latina: hacia una estrategia de investigación*. Buenos Aires: Cedes.

Peirson, L., Ciliska, D., Dobbins, M. and Mowat, D. (2012) 'Building capacity for evidence informed decision making in public health: a case study of organizational change', *BMC Public Health*, 12(1): 137.

Pellini, A., Contreras, A., Jabar, M., de Guzman, M. T., Era, M., Erasga, D. and Javier Jr, R. (2013) *Towards policy-relevant science and scientifically informed policy*. London: Overseas Development Institute.

Phillips, S., Goldman, I., Gasa, N., Akhalwaya, I. and Leon, B. (2014) 'A focus on M&E of results: an example from the Presidency, South Africa', *Journal of Development Effectiveness*, 6(4): 392-406.

Pollard, A. and Court, J. (2005) *How Civil Society Organisations Use Evidence to Influence Policy Processes: A literature review*. London: Overseas Development Institute.

Porter, S. and Feinstein, O. (2014) *Demand for and supply of evaluations in selected sub-Saharan countries.* Johannesburg: University of Witwaterstand.

Republic of Ghana (2011) *National Development Priorities.* Available at www.ndpc.gov.gh.

Republic of Zimbabwe (2013) *Zimbabwe Agenda for Sustainable Socio-Economic Transformation*. Harare: Government of Zimbabwe. Available at www.herald.co.zw/wp-content/uploads/2014/01/Zim-Asset.pdf.

Roe, R. (1994) *Narrative policy analysis: Theory and practice.* London and Durham: Duke University Press.

Schein, E. H. (2004) *Organizational culture and leadership*. San Francisco: Jossey-Bass.

Segone, M. (2008) *Bridging the gap: The role of monitoring and evaluation in evidence-based policy making.* UNICEF.

Sherlock, S. (2010) *Knowledge for policy: Regulatory obstacles to the growth of a knowledge market in Indonesia*. AusAID.

Sherlock, S. and Djani, L. (2015) *Diagnostic Study: Update on Constraints in the Enabling Environment to the Provision of Knowledge in Executive and Legislative Government.* Jakarta: Knowledge Sector Initiative.

Sumner, A., Crichton, J., Theobald, S., Zulu, E. and Parkhurst, J. (2011) 'What shapes research impact on policy? Understanding research uptake in sexual and reproductive health policy processes in resource poor contexts', *Health Research Policy and Systems*, 9(Suppl 1), S3.

Sutmuller, P. M. and Setiono, I. (2011) Diagnostic on Evidence-based Public Policy Formulation under Decentralisation. *Report to AusAID.*

Sutton, R. (1999) *The Policy Process: An Overview*. London: Overseas Development Institute.

Swilling, M. (2014) 'Rethinking the science-policy interface in South Africa: experiments in knowledge co-production', *South African Journal of Science*, 110(5-6): 1-7.

Tanaka, M., Barrenechea, R. and Morel, J. (2011) 'La relación entre investigación y políticas públicas en América Latina: un análisis exploratorio', in Mendizabal, E. and Correa Aste, N. *Vínculos entre conocimiento y política: el rol de la investigación en el debate público en América Latina*. Lima: CIES & Universidad del Pacífico.

Thomson, G., Wilson, N. and Howden-Chapman, P. (2007) 'The use and misuse of health research by parliamentary politicians during the development of a national smokefree law', *Australia and New Zealand health policy*, 4(1): 24.

Trostle, J., Bronfman, M. and Langer, A. (1999) 'How do researchers influence decision-makers? Case studies of Mexican policies', *Health policy and planning*, 14(2): 103-114.

Uneke, C.J., Ezeoha, A.E., Ndukwe, C.D., Oyibo, P.G. and Friday, O. N. W. E. (2011a) 'Enhancing health policymakers' capacity to use information and communication technology in Nigeria', *Journal of Health Informatics in Developing Countries*, 5(2).

Uneke, C. J., Ezeoha, A. E., Ndukwe, C. D., Oyibo, P. G., Onwe, F., Igbinedion, E. B. and Chukwu, P. N. (2011b) 'Individual and organisational capacity for evidence use in policy making in Nigeria: an exploratory study of the perceptions of Nigeria health policy makers', *Evidence & Policy: A Journal of Research, Debate and Practice*, 7(3): 251-276.

Weiss, C.H. (1995) 'The Haphazard Connection: Social Science and Public Policy', *International Journal of Educational Research* 23(2): 137-150.

Wellcome Trust (2014) *Response to Beyond Aid: The Future UK Approach to Development*. London.

Weyrauch, V. and Díaz Langou, G. (2011) *Sound expectations: from impact evaluations to policy change*. CIPPEC.

The World Bank. (2000) *Reforming Public Institutions and Strengthening Governance: A World Bank Strategy.* Washington D.C.

The World Bank (2011) Data: Research and development expenditure (% of GDP). Washington D.C.

The World Bank Independent Evaluation Group (2008) *Public Sector Reform: What Works and Why? An IEG Evaluation of World Bank Support.* Washington D.C.: The World Bank.

Annex 1. Terminology

Culture. Culture is the set of shared basic assumptions learned by a group that has worked well enough to be considered valid and, therefore, is taught to new members as the correct way to perceive, think, and feel the organizational problems (Schein, 2004).

Evidence. Evidence is located in the world: it is the set of observable events or conditions that allow an argument to be built for supporting a certain statement or statements.

Information. Information plays a mediating role between the evidence and knowledge: the set of facts and observations associated with an object becomes information, and information associated with a context and experience becomes knowledge (Carrion Maroto, 2002).

Knowledge regime. Campbell and Pedersen (2013:3) define knowledge regimes as "the organizational and institutional machinery that generates data, research, policy recommendations and other ideas that influence public debate and policymaking".

Knowledge. Knowledge is located in the agents (both individuals and organizations): it is the set of information stored through experience or learning, that is, put in context.

Organizational capacity. This the ability of an organization to use its resources to perform (Lusthaus, 2002) – in our case: to design and implement public policies. It includes human resources and the legal framework that determines how resources can or cannot be used and establishes interactions between its members. Internal capacity plays a pivotal role in making the use of research possible (or not) as well as how it is seized.

Organizational management and processes. This refers to how each governmental institution organizes its work to achieve its mission and goals, from planning to evaluation. The way it is managed and the processes and mechanisms that are established to enable members to fulfil their roles and responsibilities can open up or not chances for evidence to interact with policy discussions and decisions making.

Public policies. Based on Oszlak and O'Donnell (1976), we conceive public policies as government actions resulting from the way it handles and settles disputes among different players within a framework of a certain distribution of power. (See also Chapter 5.)

Research. Research is a process. It can be defined as the search and generation of knowledge through an intellectual activity characterized by innovation of ideas, the use of rigorous methods and the validation and critical judgment of peers. Thus, research is a process that, using the available evidence and information, seeks to contribute to the generation of knowledge.

Annex 2. Mentors

Carolina Trivelli is currently the Chief Operating Officer of Pagos Digitales Peruanos, a company owned by more than 30 financial institutions that aims to develop a digital platform to use e-money to help financial inclusion. She has served as main researcher at the Peruvian Studies Institute and the Latin American Centre for Rural Development (RIMISP). A former minister of Development and Social Inclusion in Peru (2011-2013), she is a member of the Board of Directors of Colegios Peruanos–Innova Schools, the Consultative Group to Assist the Poor, Fundación Backus and the International Advisory Board of RIMISP. She was recently appointed as member of the board of the Global Innovation Fund. She serves on the technical advisory committee for poverty measurement at Instituto Nacional de Estadísticañ e Informática. She specializes in social politics, rural poverty, rural and agricultural finance, and rural development. She was formerly a professor at University Católica of Peru and University of the Pacific and is also a columnist for Perú 21. She holds a Masters in agricultural economics from Pennsylvania State University and a Bachelors in social sciences with a minor in economics from the Pontificia Universidad Católica del Peru.

Mapula Tshangela is the Senior Policy Advisor at the National Department of Environmental Affairs (DEA) in South Africa. Her current responsibilities include policy and research interface in sustainable development, green economy and sustainable consumption and production. Among others, she coordinated the conceptualisation of South Africa's national green fund. She managed the development and subsequent promotion of the national strategy for sustainable development, green economy modelling report and environment sector research, development and evidence framework. Her previous responsibilities at the DEA include facilitating the environment sector outcomes-based approach, Cabinet and Intergovernmental Clusters policy coordination and waste information management. Prior to joining the DEA in 2007, she worked for ten years at the electricity generation, distribution and head office of Eskom, holding positions in areas including waste, air quality, sustainability performance, impact assessment, environmental, quality and pollution management systems, water-cycle chemistry and laboratory chemical analysis. She participates in a number of national and international multi-stakeholder engagements. Her interests include sustainability transitions, green economy, technology and innovation, policy management and evidence-based policymaking.

Mugabi John Bagonza currently works as Director of Research Services in the Parliament of the Republic of Uganda, where began working work as a Research Officer/Economist in 1999. Previously, he worked at Masindi District Local Government as a Budget Officer/Financial Analyst, and in the private sector as a Sales Executive. He has specialized in Economic Policy, Planning and Public Sector Economics. During his nineteen year service with Government, he has practically carried out planning, analytical work such as fiscal policy analysis, budget analysis, monitoring and evaluation. He holds a Masters of Arts (Economic, Policy and Planning) and has embarked on research for a Ph.D Economics all from Makerere University, Uganda. He also has had short-term professional courses training with a number of institutions like Eastern Southern African Management Institute (ESAMI), World Bank Institute, University of Pretoria and Universite Laval, Quebec, Canada.

Ricardo Ramírez is an independent researcher and consultant based in Guelph, Ontario, Canada, and an associate of New Economy Development Group. His consulting and research work includes communication planning, participatory evaluation and capacity development, both domestically, with First Nations, and internationally. He began his career in agricultural sciences that he followed with demonstration farm projects in Latin America. He switched to the field of adult education and rural development. He has worked with the Communication for Development group at FAO, Rome, with non-governmental organizations, and with consulting firms. His doctoral work in Rural Studies focused on information and communication technology for rural and remote community development. For two years he was professor in the School of Environmental Design and Rural Development at the University of Guelph where remains as adjunct. Together with Dal Brodhead they just published the book Utilization focused evaluation: A Primer for evaluators (Southbound, Penang 2013) – based on five practical experiences.

Annex 3. Interviewees

First name	Organization	Country
Ajoy Datta	Research Fellow at Overseas Development Institute	UK
Ángel Flisfisch	Director of Facultad Latinoamericana de Ciencias Sociales	Chile
Anne Lan Candelaria	Director, Ateneo Center for Asian Studies, Manila University	Philippines
Arnaldo Pellini	Research Fellow at Overseas Development Institute	Indonesia
Courntey Tolmie	Senior Program Director Results for Development	USA
Dylan Ramshaw	Country Director and Deputy Country Director, Innovations for Poverty Action	Peru
Emma Broadbent	Independent consultant	UK
Eva Vozarova	IT projects manager, Fair Play Alliance	Slovakia
Fred Carden	Senior Research Governance Specialist at RTI International	Indonesia
Frempong Godfred	Research scientist, Council for Scientiic and Industrial Research	Ghana
George Amoah	Assistant Director, Ministry of Employment and Labour Relations	Ghana
Ghia Fajardo	Department of Studies, Evaluation and Knowledge Management of FOSIS	Chile
Gilchriste Ndongwe	Director and Programme Manager, Zimbabwe Evidence-Informed Policy Network	Zimbabwe
Héctor Díaz Romero	Former Director of Social Policy Analysis and Evaluation of the Secretariat of Social Development	Honduras
Ian Goldman	Head of Evaluation and Research, Department of Planning, Monitoring and Evaluation, Presidency of South Africa	South Africa
Ibrahim Inusah	Director, Ghana Information Network for Knowledge Sharing	Ghana
Jok Madut	Undersecretary, Ministry of Culture	South Sudan
Juan Manuel Arribas	Executive Director, Asociación Soluciones Empresariales contra la Pobreza	Peru
Juan Manuel Arribas Berendsohn	Executive Director, Soluciones Empresariales contra la Pobreza	Peru
Juan Manuel Hernández	Country Director and Deputy Country Director, Innovations for Poverty Action	Peru
Julie La France	Senior Program Specialist at International Development Research Centre	Canada
Kharimsa Nugroho	Knowledge Sector Initiative	Indonesia
Kiruben Naicker	Director Science Policy Interface, Department of Environmental Affairs	South Africa
Leon Malazogu	Executive Director at Democracy for Development	Kosovo

Louise Shaxson	Research Fellow at Overseas Development Institute	UK
Marcela Garzón	Department of Studies, Evaluation and Knowledge Management of FOSIS	Chile
Marcos Rueda	National Council of Science, Technology and and Technological Innovation	Peru
Maribel Almeida	Independent consultant	Ecuador
Martin Filko	Director of Institute for Financial Policy	Slovakia
Michael Falade	Coordinator, Centre for Public Policy Alternatives	Nigeria
Morankar Sudhakar	Jimma University	Ethiopia
Munhamo Chisvo	Managing Director, Jimat Consult Private Limited	Zimbabwe
Ochieng Cosmas	Director, African Centre for Technology Studies	Kenya
Octavio Sotomayor	Director General, Instituto de Desarrollo Agropecuario	Chile
Pablo Gonzalez	Departament of Industrial Engineering, Universidad de Chile	Chile
Peter Taylor	Senior Program Specialist at International Development Research Centre	Canada
Raymundo Pérez	Director of Impact of Social Programs, SEDESOL	Mexico
Ronald Munatsi	Director and Programme Manager, Zimbabwe Evidence-Informed Policy Network	Zimbabwe
Samu Nesbert	Parliamentary Programme Coordinator	Zimbabwe
Silvana Lauzán	Head of Research, Instituto Nacional de Derechos Humanos	Chile
Sofía Olaviaga	Program "Redes", Ministry of Health	Argentina
Uma Mahadevan	Secretary to Government of Karnataka, Planning, Programme Monitoring and Statistics Department	India
Uneke Chigozie Jesse	Department of Medical Microbiology/Parasitology, Faculty of Clinical Medicine, Ebonyi State University	Nigeria
Ximena Quezada Morales	Advisor	Chile