



## **Global Development Network Program Document**

# **Doing Research Assessments: Understanding Research Systems in Developing Countries Executive Summary**

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## Executive Summary

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## Executive Summary

In a global knowledge economy and in the context of the Sustainable Development Goals (SDGs), there is a growing recognition among governments and international organizations of the importance of mobilizing local research for higher education and innovation, as part of wider strategies for socioeconomic development. In this sense, research for development is the process that enables the production of knowledge for critically analyzing evidence and policy challenges. Research systems must be developed to promote the use of locally-grounded social science research as a key input to democratic debate and sustainable development planning. Aligned with the implementation of Sustainable Development Goals (SDGs) both at country and global levels, doing policy-relevant social science research is fundamentally a local endeavor which requires contextualized knowledge of the local environment.

However, the current state of research systems in the South is a cause of concern, since it often does not enable local researchers to carry out useful quality research that can feed into public debate and policy discourse. This leads to a situation where most such research is carried out in well-established universities and research centers in Europe and North America, creating chronic under-investment in research in the South and a persistent gap that cannot be closed without the relevant information on research systems in the South and a deep understanding of the structural barriers to improving these conditions.

Within this larger context, GDN has launched a major research program titled **“Doing Research”** to contribute to a better objective assessment of research systems in developing countries and to expose weaknesses and shortcomings that can be addressed through research policy. The

research program covers a complex set of issues, ranging from the institutional contexts in which researchers, academic institutions and think-tanks operate, the political environment (e.g. recognition of the importance of research), to the socio-economic or cultural contexts that determine the demand for scientific research, and the international linkages of the academic community.

An in-depth analysis of research systems is key to understanding how to bridge the gap and lift up research that is generated in developing countries. Information on research systems would allow research and development actors to answer a number of questions, which are currently difficult to tackle in absence of the relevant performance metrics. *What can be done to further generate and mainstream local research as a key input to public debate and sustainable human development policies?*

To answer this question, GDN launched a pilot phase between April 2014 and 2016 for the program to assess different methodologies for studying the research environment and identify barriers and challenges to doing research in developing countries. Seven studies covering eleven very different countries across the world were produced employing distinct research methods. The pilot phase confirmed GDN's assumption that there is a need for more information on research systems. GDN synthesized the findings from the pilot and engaged in a large consultation to scale up the program and build an analytical framework for assessing and benchmarking the performance of social science research systems in developing countries. It is further detailed in the GDN document “Doing Research Pilot Phase Synthesis”.

# Doing Research Assessments: to Understand, Map and Assess Research Systems

The general objective behind Doing Research Assessments (DRA) is to support the global sustainable development agenda through the strengthening of social science research systems in the South. GDN's program aims to understand, map and assess social science research systems to analyze structural barriers to doing research and highlight pathways for action. Looking at the production, diffusion and uptake of social science research, it will support research capacity building and promote the role of research in shaping democratic debate and decision making – which, in turn, can be used to inform sustainable development policies.

Our approach is further developed into three distinct but interrelated program components, each leading to a specific set of outputs contributing to the program's expected results and its overall objective. The present paper describes the Doing Research Assessment method and, as such, focuses mainly on Component 1.

## Box 1: Three components of the Doing Research program

**Component 1:** To use a systematic methodology – the Doing Research Assessments – to analyze and assess the performance of national social science research systems.

**Component 2:** To curate a global dataset to benchmark and compare research systems across countries and over time, to document global and regional trends in research production, dissemination and uptake.

**Component 3:** To develop practical resources to create incentives and awareness, and support development actors in reforming research systems with improved policies and contextualized capacity building efforts.

The practical and objective analysis of social science research systems will be presented in detailed country reports, while the benchmarking results will feature in comparative global and regional reports. These will be compiled using publicly available data collected during the DRAs to help inform actors from research, development and policy communities of the characteristics of their local policy-oriented social science research environment and ways that it can be improved.

## The Doing Research Assessment Method

The Doing Research Assessment (DRA) is a method for analyzing in detail the key factors impacting the social science research system in developing countries. It reflects the fact that doing quality research requires a range of skills other than pure scientific expertise; and also depends on a factors such as the socioeconomic, political and

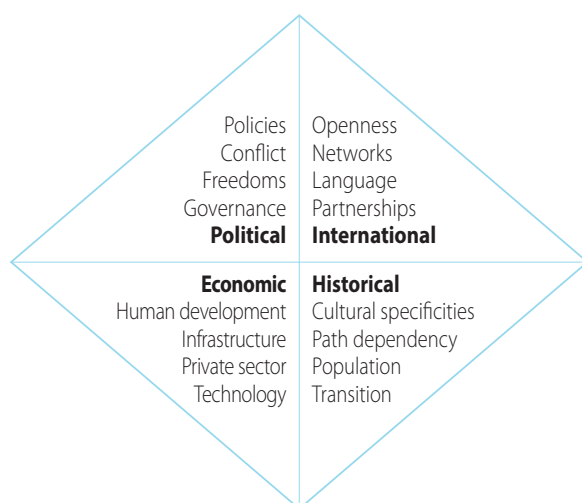
historical context; international dynamics; the characteristics of the research market; and supporting policies and services.

It includes three logical steps, beginning with an overall assessment of the context for doing research (Step 1), followed by a mapping of national research actors to identify research producers and users (Step 2), culminating in the Doing Research Framework and its indicators, using a combination of surveys, interviews and secondary data (Step 3).

## Step 1: Context Analysis

Our analysis of the general context in which research takes place and is used is made up of four elements: economic, historical, political and international dimensions. These are assessed from a qualitative perspective to determine the borders of our analysis, but most importantly they allow us to develop a contextualized reading of the subsequent steps of the Doing Research Assessment method.

Figure 1: Elements of the Context Analysis



Documenting the context develops an understanding of the exogenous factors that impact the research system – such as the cultural specificities, the nature of the political regime, the level of human development or the access to technology. Because the practice of research is highly dependent on these contextual characteristics, documenting the context is critical for analyzing the indicators measured in Step 3 of the assessment.

## Step 2: Stakeholder Mapping

The mapping is conducted to better identify the research actors – producers and users – that make up the research system. It is directed at a macro level analysis as the aim is not to assess each and every university or funding agency. Instead, we identify and characterize the importance of the different groups of actors and the nature of the relations between them, and identify the main players within each group, in order to provide another background element to understanding the main Doing Research Assessment Framework.

Research actors are divided into four categories: higher education institutions (HEIs), government and funding agencies, industry, and civil society. These categories have sub-groups: HEIs, for example, can be divided into public and private universities which can be for-profit or non-profit organizations; industry includes for-profit think tanks and consultancies; and civil society includes NGOs, opinion leaders, non-profit think tanks and the media. Government and funding agencies is the most hybrid category; it includes national ministries and research councils, as well as public and private foreign donors.

Table 1: The Doing Research Assessment Framework

	1. Production	2. Diffusion	3. Uptake
Inputs	1.1 Research Inputs	2.1 Actors & Networks	3.1 Policy-Friendly Research
Activities	1.2 Research Culture And Support Services	2.2 Research Communication Practices	3.2 Research- Based Policy Making
Outputs	1.3 Research Output & Training	2.3 Research Communication Products	3.3 Research-Based Policy Tools
Outcomes	1.4 Opportunities & Sustainability	2.4 Popularization Of Science	3.4 Research For Better Policies

### Step 3: Doing Research Assessment Framework

Populating the Doing Research Framework is the final step in the implementation. It describes the key determinants for each of the three main functions of the research system – namely the research production, diffusion and uptake.

Factors that enable the generation of quality academic knowledge are described under ‘production’, and are associated with the creation of research, its output, and the long-term objective of building a quality knowledge base and critical mass of people who value and understand research. In this sense, the ‘production’ column describes the factors that relate particularly to the academic community: from the necessary inputs (people and resources), to the publication of research articles and the role of research in education and training.

The second column, describes the function of ‘diffusion’ and the factors that enable the circulation of research and the discussion of research-based products within different audience groups in the wider society. The ‘diffusion’ column is therefore about sharing research products and understanding how research is mainstreamed, and the role it

plays in society and the media.

The third column is about using research to support better policies, and reflects a view shared by many researchers and practitioners that it is desirable to strengthen the link between research and policy communities. This link is important, not only to enhance the contribution of research to policy ideas, but also to ensure that policymakers are able to understand research and value its capacity to address societal problems. The ‘uptake’ column is about understanding how research supports policymaking, both directly (when researchers are consulted or research is commissioned by policymakers), or indirectly by looking at factors that strengthen the research-to-policy nexus.

### Data and Indicators

Data collection follows a mixed method approach, involving a combination of secondary data, surveys and interviews. It starts with a desk review for the contextual elements and the stakeholder mapping, followed by secondary data collection, key interviews and surveys of research actors. The results, along with additional qualitative observations, will be curated by GDN into an open access dataset on research systems. It will be published, critiqued and challenged,

allowing us to refine the indicators and improve the Doing Research Assessment method over time. It is important to note that data collection and data treatment should follow the same protocols in each of the different country studies, in order to ensure that the results of the assessments are comparable across countries.

## **Benchmarking, Variants and Flexibility of the Method**

The proposed Framework is highly flexible and context-sensitive, and can therefore be used for different purposes. The main purpose is to apply the three-step methodology to an in-depth analysis of a country's social science research system. However, GDN will also use the Framework to devise a benchmarking of social science research systems by drawing from it a comparable set of indicators, and measuring the performance of a country's research system against its neighbors and peers. In addition, the Framework can be tailored to a number of different applications. These 'variants' could be used by research actors who have a particular interest in studying a specific aspect of the research system, a particular category of actors, or a more limited geographic or administrative area.

For example, the method can be applied to a particular group of stakeholders in the research system, such as public universities, think tanks or NGOs – using information compiled during the stakeholder mapping. Its flexibility also allows it to assess research systems at different levels: country level, local or regional level. A research system can be defined as a country (e.g. the research system of Cambodia), a specific region within

a country (e.g. the research system of Uttar Pradesh, India), or a regional union of several countries (e.g. the research system of West Africa). The Framework allows us to define the contextual limitations of the research system and to map research actors in a second stage. Once these boundaries have been defined, the main Framework can be applied to any geographic or administrative scale using the same study protocol. A regional assessment can also be produced by aggregating several country assessments in the same region.

## **Relevant Academic Literature**

It is worth noting that relatively little has been written about how social science research is produced in developing countries, compared to developed countries. While authors such as Jamil Salmi (2009, 2011), Nico Cloete (2011, 2015), Manuel Castells (2009) and Johan Mouton (2009), as well as organizations such as IDRC, OECD and DFID, have published extensively on the development of universities, research excellence, higher education systems or research policies in Africa and other developing regions, there has been relatively little analysis of research systems, processes and outcomes in these regions, particularly for social sciences.

On the question of performance, a number of authors mention the decline of social science research in developing countries, especially in Africa (Idrissa, 2016; Urama, 2011). The small amount of research being produced, combined with low research capacities and the complex nature of the social sciences, make it difficult to provide an accurate assessment. The current measures of research performance are not sufficient for understanding the critical challenges,

constraints and barriers to social science research in these contexts (Sawyer, 2004). Documenting the factors which influence the performance of research systems becomes essential for understanding why developing countries perform poorly in research, and for looking at ways to improve their research systems – particularly in terms of producing quality, locally-produced research that can feed into important policy decisions.

The model of national innovation systems (NIS) developed by Lundvall (1992) defines a system of innovation as “constituted by elements and relationships which interact in the production, diffusion and use of new and economically useful knowledge”. We use similar functions and apply them to social science research systems – an approach that was also adopted by several research teams in the Doing Research pilot phase. Our Framework also relates to the literature on the ‘knowledge triangle’, which represents the relationship between higher education, research and innovation – three highly interrelated sectors and systems (European Commission, 2009).

The literature has made contributions to the conceptualization of knowledge production. Gibbons et al. (1994) oppose Mode 1 – a traditional form of scientific research based on disciplinary structures, hierarchical mechanisms and homogenous actors – and Mode 2 – a more organizationally diverse, transdisciplinary, socially accountable and application-oriented form of research. The Doing Research Framework attempts to integrate these two different modes by linking the production function with traditional Mode 1 research and the diffusion and uptake functions with more applied Mode 2 research.

Finally, the growing complexity of the topic has led to attempts at defining ‘research

ecosystems’ (Salmi, 2011) or, as was the case in the Doing Research pilot phase, ‘research systems’ (Idrissa, 2016). For Salmi, the research ecosystem provides opportunities for national universities and supports the development of higher education institutions. The potential for building world-class universities is therefore directly linked to the presence of a strong research ecosystem. For Idrissa, it is the demand side of research that directly benefits from a strong research system. They strengthen connections between research producers and users, helping to better target capacities, training and funding – and enabling the production and diffusion of useful research in the country.

## Conclusion

The Doing Research program aims to assess how the characteristics of a research system impact the capacity to produce, diffuse and use quality social science research as a key element of social and economic development. It will do so by implementing Doing Research Assessments to produce a number of outputs such as in-depth country assessments, an interactive publicly-available dataset, a benchmarking of social science research systems, and a periodic global report on doing research in social sciences in developing countries. The Doing Research Framework, introduced in this document, acts as the core instrument for implementing the assessments.

Framing research as a process allows researchers, policymakers, civil society actors and development practitioners to examine aspects of research that are not captured by traditional metrics. Research is often viewed as the activity of generating knowledge, but it also involves peer networking, policy relevance, communication or the presence of a popular culture of research.



The Doing Research program opens up new opportunities for understanding the role of research as a key component of locally-owned, social and economic development. This bold initiative has the potential to provide new incentives for social science researchers and transform the role of research: from generating pure academic knowledge to a social and political process of evidence-informed public debates and policymaking.

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\*A complete list of references is available in the Doing Research Assessments: Understanding Research Systems in Developing Countries document.

# Notes

# The Global Development Network

The Global Development Network (GDN) is a public international organization that supports high quality, policy-oriented, social science research in developing and transition countries to promote better lives. It supports researchers with financial resources, global networking, and access to information, training, peer review and mentoring. GDN acts on the premise that better research leads to more informed policies and better, more inclusive development.

Through its global platform, GDN connects social science researchers with policymakers and development stakeholders across the world. Founded in 1999, GDN is currently headquartered in New Delhi.

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