

DATA AND INDICATORS ON SOCIAL SCIENCE RESEARCH

DOING RESEARCH IN EL SALVADOR

Country Report

Fundación Salvadoreña para el Desarrollo Económico y Social (FUSADES) & The Global Development Network **2022**



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EL SALVADOR

Country Report

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The Global Development Network is a public international organization that supports high-quality, policy-oriented social science research in developing and transition countries to promote better lives.

FUSADES (Fundación Salvadoreña para el Desarrollo Económico y Social - Salvadoran Foundation for Economic and Social Development) is a private, nonprofit policy research institution founded in 1983 by a group of independent entrepreneurs and professionals, with the objective of improving El Salvador's economic and social development.

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THE DOING RESEARCH PROGRAM

Bridging the research gap and improving development policies

Today, governments and donors alike have little systematic information about the state of social science research, except for in a few developed countries. Yet, the implementation of the global agenda for sustainable development requires local research capacities to ensure that the scientific community is equipped to critically analyze development and policy challenges, and to accompany actions and reforms with contextualized knowledge of the local environment.

An in-depth analysis of research systems is key to understanding how to bridge this gap and raise the profile of research generated in developing countries. Research systems analysis can help policy makers, donors, and academics answer the question: what can be done to further generate and mainstream local research as a key input to public debate and sustainable human development policies?

Assessing and benchmarking social science research systems

Doing Research (launched in 2014) is an initiative of the Global Development Network (GDN) that aims to systematically assess how the features of a national research system¹ impact the capacity to produce, diffuse, and use quality social science research to the benefit of social and economic development. A pilot phase (2014-2017) in 13 countries was supported by the Agence Française de

Développement, the Bill & Melinda Gates Foundation, the French Ministry of Foreign Affairs and International Development, and the Swiss Agency for Development and Cooperation. In 2017, GDN conducted a synthesis of the pilot studies² and developed a standard methodology for studying social science research systems in developing countries,3 the 'Doing Research Assessment'. Since 2018, GDN has been implementing Doing Research Assessments in partnership with competitively selected national research institutions, with the aim of generating evidence on research systems. The program also aims to support the emergence of a network of research institutions in the Global South dedicated to informing national research policies, using new research-based, comparative evidence.

Doing Research National Focal Points – A Southern network of local 'research on research' expertise

Through the collaboration between GDN and these local institutions, the program aims to inspire research policies, map research strengths, support research capacity-building efforts and enhance the quality of research that can be used for policy decisions and local democratic debate in developing countries. Social science research provides a critical analysis of societies and human behavior and contributes to a better understanding of development challenges, which is fundamental to realizing national and global development agendas. Country reports, comparative global reports and data will inform actors from research, development and policy communities

In this document, the terms 'research system' and 'social science research system' are used interchangeably.

² See www.gdn.int/sites/default/files/GDN-2017-DR-pilot-synthesis.pdf

³ See https://www.gdn.int/sites/default/files/u116/ DRAIndicators.pdf

about their policy-oriented research environment and how it can be improved.

Doing Research Assessment: understanding, mapping and assessing research systems⁴

A unique feature of the Doing Research Assessment4 is the equal importance the methodology gives to production, diffusion and uptake factors and actors in the analysis of systemic barriers and opportunities for social science development. It involves three steps for analyzing the factors that impact the social science research system in a given country or region, which will lead to several knowledge outputs and awareness-raising efforts.

Steps and activities for implementing a Doing Research Assessment

Context analysis

Mapping of research actors

Doing Research Framework

Collection of new data at country level
Publication of the Doing Research
Assessment
National seminar and dissemination

Doing Research Framework: the core of the assessment

The Doing Research Framework is a mixed method research module that allows a contextualized comparative enquiry into a national research system, looking at key factors that determine the production, diffusion and uptake of social science. It would typically serve as a magnifying glass to identify aspects that need the attention of the regulator, or to provide a baseline for strategizing investments in capacity-building for research production, its diffusion or its use.

The Framework acts as the basis for comparing and benchmarking research systems in different countries and includes 54 indicators. These indicators are populated according to the national context framed by the National Focal Points (NFP); these follow the project guidelines while adapting them to their national environment. Therefore, each country follows the same framework and general guidelines, allowing for comparisons between different reports of the indicators that define the Doing Research Assessments (DRA). The same is true for the Country Reports, which follow a similar structure.

	1. Production	2. Diffusion	3. Policy 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 policymaking	
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	

⁴ See www.gdn.int/doing-research-assessment.

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Executive Summary

Prior to the COVID-19 pandemic, El Salvador was still not meeting the demands of its population to the fullest extent. Though progress had been made in socioeconomic terms, there were still areas of apparent stagnation or challenges related to the quality of services and the Fourth Industrial Revolution. In addition, dissatisfaction with living conditions and limitations on individual development spurred people to leave their regions of origin for the country's metropolitan area or abroad. Consequently, progress toward achieving the Sustainable Development Goals has stalled. This was exacerbated by the negative effects of the pandemic, especially on the most vulnerable.

This situation creates an opportunity to evaluate the National Development Agenda, as well as the relevance of public policies, and to implement improvements to meet the permanent needs of the population and respond to future emergencies. Given its focus on the study of societies and human behaviors, a robust and competent social science research system can provide theoretical and practical support for such actions. This starts with critical analysis of the available evidence and specific research that sheds light on the challenges to be confronted. Understanding the characteristics of the system and identifying its strengths and areas for improvement is essential to strengthen its catalytic potential.

The project "Doing Research: Assessing Social Science Research Systems" is implemented in El Salvador by the Salvadoran Foundation for Economic and Social Development (FUSADES), with the support of the Global Development Network (GDN). The assessment of

social science in El Salvador has adapted the GDN's standard methodology for assessing the social science research environment in developing and transition countries, namely the Doing Research Assessment (DRA). This paper is a first experience in consolidating information and evaluating the available evidence regarding social research activities in El Salvador. The objective is to support the creation of a sustainable development agenda for El Salvador by strengthening the local social science research system. The research questions pursued in this study are as follows:

- How effectively has the country produced social science research and what are the main challenges and opportunities?
- To what extent is research being communicated effectively to generate public awareness, discourse, and civic activism?
- How well are research results incorporated into policy, what are the challenges facing the adoption of research in policy development, and how can they be overcome?

The initiative combines quantitative and qualitative research methods to study the workings of the social science research system in terms of the production, dissemination, and use of social research. The methodology was based on context analysis, which involves identifying the economic, political, historical, and international factors that have an impact on the Salvadoran research system. Stakeholders are identified and mapped, categorized, and characterized according to their role and influence in the system.

Finally, the roles and processes in the social science research system are assessed using the indicators as defined in the Research Assessment Framework methodology.

Main findings

In El Salvador, there is a relatively small social science research sector with a variety of actors. Since the end of the armed conflict in the 1990s, social research has evolved, with more actors involved and participating in this type of activity. As at 2014, the rate of social researchers was 0.28 per thousand workers in the country. In contrast, Bolivia, with its high Human Development Index and low- and middle-income country status, had a rate of 0.32, and Costa Rica, with its high Human Development Index and upper-middle income country status, had a rate of 1.79. This study estimated that there are 140 social researchers per million economically active persons, working in government, civil society, the private sector, higher education institutions (HEIs) and funding agencies.

The Salvadoran research ecosystem is concentrated, both geographically and institutionally; but it is not unified. Three out of four social academics work at a HEI, and two out of five work in civil society. In addition, over half of the sector is located in the Salvadoran capital city. Despite this concentration, collaboration between local institutions is described as sporadic or non-existent by 74 percent of researcher respondents and defined as circumstantial in the focus groups.

The country lacks a culture of undertaking social research or critically debating the results.
Although in the context of the Doing Research Assessment (DRA), studies

produced outputs that the public policy community seems to deem useful, there is no clear social research agenda, nor any acknowledgment of the importance of promoting evidence-based development. Research administrators say there is little openness to discussing research findings, while actors in the social science ecosystem say the attitude of actors in the system is to ignore or deny scientific results, as perceived by half of the respondents. Similarly, academia notes that decision-makers request few studies to inform public policies, with only one in three administrators stating they had worked at the direct request of a policy maker. In addition, sparse peer review of publications is compensated only by access to mentors when studies are being carried out.

Institutional capacities make research production possible, but limitations remain in funding and access to information. The country invests little in research and development compared to the rest of the region. In 2018, for instance, the country invested 0.1 percent of its gross domestic product (GDP) in this area, but a year later, Bolivia and Costa Rica invested 0.2 and 0.5 percent of their respective GDPs. This is exacerbated when considering that an even smaller fraction is assigned to social sciences. Nonetheless, academia finds just enough resources and institutional equipment to carry out its activities; the most pressing restrictions are funding for private studies and hindrances in accessing information due to legal constraints, delays in delivery, historical losses, and a lack of digitized information or statistical output.

Academia work in synergy with institutions abroad. The country has established linkages with the international community: There is financing available

for academia actors to carry out research: they are part of international research networks and they participate in scholarship and academic exchange programs. Nonetheless, the potential that this type of relationship has for strengthening Salvadoran social science research has yet to be fulfilled to its fullest extent. For instance, only 12 percent of academics interviewed for this study noted they had worked on an article published in English in the last three years.

Most academics who were interviewed had master's degrees, despite being in a sector where there are few incentives for development.

Most of these professionals held degrees at an undergraduate (29 percent) or master's (49 percent) level. Experts pointed out that, in this country, it is hard to come by the skills needed for research, that the number of postgraduates is small, and the quality is questionable. Doubts remain surrounding the ability of the national academic curriculum to develop the skills required for robust social research, as well as the capacity these disciplines have to attract and retain students. As regards pursuing academia as a profession, only one in four researchers found the opportunities to be attractive and expressed dissatisfaction with the social and economic benefits of engaging in this type of activity.

Workload prevents academics from dedicating enough time to research activities. They mainly do administrative work and teach in HEIs. Research needs to be done concurrently, limiting the number of studies they are able to work on, as well as the quality of the work. On average, 40 to 60 percent of their time is strictly allotted to research activities. This is apparently due to the lack of funds and the way they are allocated, as well

as the lack of available support staff at the institutions where they work.

The ability to communicate research findings is an area for improvement.

The language used to communicate the resulting information needs to be adapted to non-academic audiences, and the channels that these audiences use need to be leveraged in order to communicate the research and findings to them. A potential way to influence the process of public policy decision-making is for the institutions where academics work to expand their outreach activities and use materials that are more effective in disseminating the findings. For instance, only one in three researchers had prepared this sort of document in the last three years.

The interaction between academia and policy makers seems to be concentrated and scarce. Many researchers get few or no requests from

researchers get few or no requests from decision-makers or have never discussed research results with policy makers after papers are published, and only half state that they have ever interacted with them. Almost none of them are members of policy advisory bodies, and only half of academic institutions have interacted formally or informally with policy makers. Social researcher participation in formulating or implementing public policies remains low.

Levers of change

The weak culture of research dampens the motivation to pursue science and limits the potential impact of the findings. Academia needs to double down on its efforts to popularize science, and generate confidence in the research process, and in the fact that the results are independent. This involves using straightforward language to address

citizens, and conveying the implications of the study results, or the way they affect their quality of life. Issues that are relevant to the population should be prioritized, as should collaboration with other relevant stakeholders who, in addition to supporting the research process, can replicate the findings in their own spheres of action.

When data and information are hard to access, non-existent, outdated or otherwise unavailable, this has a direct effect on the generation of knowledge, debate, and the design of evidencebased public policies. In the short term, academia could generate information in collaboration with different stakeholders to ensure reliability and validity. At the national level, joint work has already been carried out, with different institutions providing data, investigations, knowledge and public advocacy solutions. Medium- and long-term strengthening of national information institutions is essential to promote the generation, dissemination, and use of information among different social actors.

Balancing the work activities of academics requires ensuring that funding is allocated specifically to research activities. Institutions need to make social research a priority. This calls for different stakeholders involved in social research to make internal adjustments that reflect the relevance of the area of research and development, including changes in the internal budget allocations and staff assignments, simplifying procedures, and reducing or removing barriers to the execution of funds.

Capacity-building should be carried out to produce good quality scientific research and disseminate findings to a variety of audiences. The process

of garnering these skills must comprise formal education at all levels, and professional improvement needs to continue through nonformal education. This calls for revising the curricula and academic offerings covering these skills. There also needs to be ongoing quality monitoring and assessment by regulatory bodies such as the Ministry of Education and the Salvadoran Institute for Vocational Training.

The economic context and prioritizing social science research are some of the institutional and country-level factors that affect the availability of funds to undertake research. Investments are essential, in order to increase production, enhance quality and disseminate the results more effectively. This calls for combined efforts by the public and private sectors, obtaining and allocating resources to acquire tools, build capacity, and undertake social science research.

There is a need to identify, leverage, and expand the scope of spaces that the Salvadoran scientific community has already established for sharing knowledge. Leveraging the existing links between actors and establishing synergies with new entities, could lead to the formal establishment of a national social science research system. Concurrently, initiatives originating in the institutions themselves can foster an identity among the members of the system.

Some social science research institutions in El Salvador have partnered with institutional peers abroad or have obtained funds from international aid agencies to generate new knowledge. Strengthening and increasing relationships with the international scientific community and development aid agencies has the potential for building local capacity

through access to resources, exchange of experiences, adapting best practices, acquiring new knowledge and tools, and so on. It can also contribute to a greater presence of Salvadoran social sciences beyond national borders.

The relationship between academia and policy makers should be strengthened, and incentives created to make their interaction functional, in order to influence public policies. Therefore, research should respond

to current social issues and the output should explicitly state its relevance to society. Parallel institutional and individual efforts need to be made to best convey the results of the research to decision-makers in order to inform effective public policy design and to reinforce the fact that this activity is relevant for improving the quality of life. Development aid agencies can also contribute by fostering effective dialogue between researchers and decision-makers about social issues of national interest.

1. Introduction

Highlights

- The project "Doing Research:
 Assessing Social Science Research
 Systems" is being implemented
 by the Salvadoran Foundation for
 Economic and Social Development
 (FUSADES) in El Salvador, combining
 quantitative and qualitative research
 methods to study the social science
 research system, namely in terms of
 i) production, ii) dissemination and iii)
 use of social research.
- The objective of this study is to support the creation of a sustainable development agenda for El Salvador by strengthening the local social science research system.
- This is the first study gathering information about and evaluating the processes of social research in El Salvador.

As at 2019, the available evidence pointed to the existence of gaps between social demands and public policy in El Salvador. Despite progress in socioeconomic matters, it was hindered by or ran into new challenges regarding the quality of services and the Fourth Industrial Revolution (FUSADES 2019a). Subsequently, COVID-19 negatively impacted the quality of life of the population, mainly in terms of poverty, access to education, food and health (Cuéllar-Marchelli and others 2020).

The dissatisfaction Salvadorans have with their quality of life, combined with limitations on building their capacities, drives them to seek out personal solutions to this situation. Consequently, human mobility toward the country's metropolitan area is common, as well as

abroad, particularly to the United States of America. This state of affairs makes it difficult to consolidate the social cohesion required to bring different actors together in pursuit of sustainable development in El Salvador. Likewise, prolonged deprivation of decent living conditions can lead to dissatisfaction with the political administration of the state (Cuéllar-Marchelli 2019).

This context is an opportunity for social science research. Social science⁵ studies human societies and behavior, helping us to improve our understanding of the barriers impeding development and to inform the planning of global and national development agendas. It therefore has the potential to be a catalyst for transformations and drive the implementation of people-centered policies (Camejo 2014). Research for development processes makes it possible to produce knowledge for use in critical analysis of the evidence and the challenges of public policies.

Accurate and ample information is required for planning appropriate responses to crisis situations, such as those caused by the COVID-19 pandemic. The country needs a robust social science research system to achieve this, building the skills required in this role to

⁵ This project includes the following areas of knowledge within the framework of the social sciences: economics, political science, anthropology, international affairs, ethnography, demography, development, geography, education, gender studies, history, law, linguistics, management, philosophy, psychology, social work, public administration, sustainable development, public health, and social medicine.

help to bridge the gap between social demands and public policies. This is why FUSADES, with the support of the Global Development Network (GDN), is implementing the project "Doing Research: Assessing Social Science Research Systems" in El Salvador.

This initiative combines both quantitative and qualitative research methods to study three functions of the social science research system, namely the production, dissemination, and use of social research. This paper comprises three sections that contain the information collected and the analysis performed. The first is context analysis, involving document and database reviews, identifying the economic, political, historical, and international factors that have an impact on the Salvadoran research system. The second presents stakeholder mapping, identifying, categorizing and characterizing the various relevant groups involved in social science research. It also establishes the types of relationship between the different stakeholders and the relative importance in terms of their role and influence on

the three functions of the system. Finally, the indicators defined in the Doing Research Assessment (DRA) Framework methodology that were created based on information from bibliographical data and the outputs of surveys and interviews, are then used to evaluate the roles and processes in the social science research system.

This is the first project that consolidates information about the processes of social research in El Salvador and applies a methodology to evaluate it. The objective is to support the creation of a sustainable development agenda for El Salvador. This can be achieved by strengthening the local social science research system, such that it can offer essential material to inform democratic dialogue and the process of planning for development. It is hoped that as an outcome of this effort, research policies will be created, strengths identified, institutional capacities strengthened, and the quality of research documents enhanced for use in the decision-making process, and that democratic debate will increase.

2. Context analysis

Highlights

- Analysis of the Salvadoran regulatory framework covering research reveals a lack of understanding of the importance of social science in the country, and the role it can have in development.
- Since the end of the armed conflict in the 1990s, civil society has had an important role in generating social science knowledge, but this might be affected by recent mounting hostility toward this sector.
- El Salvador meets the minimum conditions for a general research system to operate, but ensuring its sustainability requires the national and institutional commitment to allocating resources to knowledge production, building capacities, and undertaking research and development.
- There are institutions in the country that have successfully established international relations to carry out social science research; this has yet to become an instrument to consolidate local research capacities, though.

The context analysis sets the parameters and conditions for social science research to operate. It seeks to identify relevant factors affecting the extent to which it has evolved, and its performance in terms of knowledge production, dissemination, and adoption for use in public policy design, implementation, and assessment. This analysis also offers elements to understand how much social science research systems can contribute to

democratic debate, and discussions about different issues in development and how to address them.

The context analysis was prepared using the performance assessment method used for social science research evaluation (the "DRA toolkit") provided by GDN (2020). The method consists of answering a series of key questions about the issue, based on document review and gathering information through semi-structured interviews with key respondents.⁶ It also includes compiling and carrying out analyses of certain relevant indicators that help to better understand the context. The analysis begins with general information about the country's economic and social development and its system of government, followed by an overview of research system components. It then turns to sociopolitical, economic and international aspects that influence any research system, focusing on the specifics of the Salvadoran system. Finally, a summary of the conclusions of the analysis is presented and certain issues are pointed out for further consideration in order to better understand the determinants of the social science research system's performance in El Salvador.

⁶ Interview subjects in February 2021: Dr Knut Walter, historian and former president of the Commission for the Accreditation of the Quality of Higher Education under the auspices of the Ministry of Education, Science and Technology (MINEDUCYT); Dr Reina Duran de Alvarado, Knowledge Transfer Coordinator at the Institute of Science, Technology and Research of the Francisco Gavidia University and former Director of the USAID Project "Higher Education for Economic Growth"; and Carlos Ramos, sociologist, former Director of the Latin American Faculty of Social Sciences El Salvador and until February 2021, Head of the Commission for the Accreditation of the Quality of Higher Education (MINEDUCYT).

2.1. Development of El Salvador in context

El Salvador is the smallest country in Central America and also one of the most densely populated (World Bank 2022). It is bordered by Honduras to the north-east, Guatemala to the north-west, and the Pacific Ocean to the south. Its official language is Spanish (El Salvador, Legislative Assembly 1983) and the United States Dollar has been its currency since 2001 (El Salvador, Legislative Assembly 2000). Its total area is 21,040.79 km², divided into 14 departments and 262 municipalities (DIGESTYC 2009). The government is described as republican, democratic and representative and is comprises three branches: legislative, executive and judiciary (El Salvador, Legislative Assembly 1983). In the municipalities, Municipal Councils have devolved governance powers and are responsible for approving local development plans. The central government needs to collaborate with the municipalities to achieve the objectives stated in the plans, and local governments need to support the execution of national or regional development plans (El Salvador, Legislative Assembly 1983). Consequently, both levels need to coordinate to work toward the country's progress in their respective spheres (FUSADES 2019a).

Data from the 2020 Multipurpose Household Survey show that El Salvador's population that year was 6,321,042. The majority, 3,897,688, resided in urban areas. As regards sex, 53.25 percent were recorded as female, and the rest as male. Approximately 27 percent of Salvadorans are concentrated in the Metropolitan Area of San Salvador, the country's capital. In addition, nearly 50 percent of the population is under the age of 30, which

is favorable for potential production and development. The dependency ratio, meaning the population under 15 or over 65 who are dependent on those in the 15–64 age group, was 50.4 percent in 2020 (DIGESTYC 2021).

El Salvador continues to have a low level of economic growth, with a 2-percent annual average from 2000 to 2019—the lowest growth in Central America—and 2.3 percent for the period from 2014 to 2019, second only to Nicaragua (1.8 percent) in terms of low growth (World Bank 2020). According to the World Bank, growth in the last decade was as high as 3.8 percent in 2011, while in 2019, it grew 2.4 percent and closed the year with a nominal GDP of \$27 billion. GDP per capita was \$4,167.70 in 2019, and average annual growth was 2.3 percent between 2014 and 2019 (World Bank 2020).

Due to the impact of the COVID-19 pandemic, GDP is estimated to contract by 7.9 percent in 2020. The World Bank (2020) projects growth to be 4.1 percent in 2021, which is higher than the recent trajectory but not enough to return to pre-pandemic levels of production. Other World Bank data (2020) shows that El Salvador is the most egalitarian country in Latin America. As measured by the Gini coefficient, inequality in El Salvador has reduced from 0.42 in 2014 to 0.39 in 2019 (World Bank 2020).

However, despite positive advances in some indicators, El Salvador has made little progress in human development. Between 1990 and 2010, average annual growth in the United Nations Development Programme (UNDP)'s Human Development Index (HDI) was 1.1 percent (UNDP 2020a). In the last decade, the country stagnated. Between 2010 and 2019 the HDI rose from 0.668 to

0.673, with an average annual growth of 0.08 percent (UNDP 2020a).

As for poverty, although 26.8 percent of Salvadorans were poor in 2019, this indicator has consistently improved since 2015 (FUSADES 2020a). Nevertheless, it is expected that the impact of the COVID-19 pandemic will reverse this improvement, with estimates showing that 40.7 percent of people will fall into poverty (FUSADES 2020b). Despite measures introduced by the government and the rise in remittance inflows, the population living in poverty reached 28.7 percent (DIGESTYC 2021). At the same time, gaps need to be closed in terms of access to basic services such as electricity, which was available to 97.8 percent of households in 2020, but when considering only rural areas, this percentage dips to 95.3 (FUSADES 2021a). Furthermore, 50.49 percent of the population were internet users in 2019. This indicator has consistently trended upwards and has gained even greater momentum since 2016 (World Bank 2019a). According to the Gini coefficient, inequality in El Salvador decreased from 41.6 in 2014 to 38.8 in 2019 (World Bank 2020).

Given the impact of the COVID-19 pandemic, persistent inequalities in access to basic services and technology could raise the Gini coefficient. There are also persistent capacity-building limitations. For instance, illiteracy has yet to be completely irradicated, affecting 9.6 percent of the Salvadoran population aged 10 and over in 2020. This proportion rises in the case of women (11.1 percent) and is even higher in rural areas (15.1 percent) (FUSADES 2021a).

The current context of development in the country represents an opportunity for social science. It has the potential to be a catalyst for transformations and drive the implementation of people-centered policies (Camejo 2014). El Salvador needs a robust social science research system to achieve this, with the skills required in this field to help to bridge the gap between social demands and public policies.

2.2. General research system structure

Salvadoran law contemplates the creation of a National System for Science, Technology and Innovation, comprising all institutions involved in these activities (El Salvador, Legislative Assembly 2012). However, it fails to identify a formal structure for research focused specifically on the social sciences. Even so, there are several institutions that emulate this sort of system, generating knowledge that can inform decision-makers and public opinion.

Using the DRA categories for actors, several institutions have been identified as forming an informal social science research system. These include 13 government institutions, 21 funding agencies, 34 higher education institutions (HEIs), 11 civil society organizations and 6 private sector institutions all doing relevant work on social science research. In addition, there are civil society organizations and public policy institutions that use the knowledge produced by these research activities. Information about these actors is provided in more detail in the stakeholder mapping. Nevertheless, it is worth noting the role of the Vice Ministry of Science and Technology, which is responsible for creating incentives and coordinating efforts by public and private institutions involved in scientific research in general. Also noteworthy is the work done by HEIs, particularly the University of El Salvador (UES) and the José Simeón

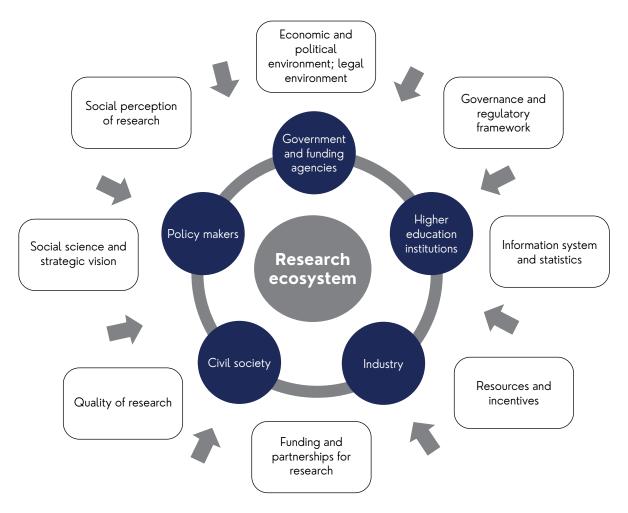
Cañas Central American University (UCA), producing three in four research articles generated in the branch of higher learning, as noted by the United States Agency for International Development (USAID) (Saunders and others 2012).

Figure 1 is a visual summary of the categories of actors identified in the Salvadoran research ecosystem and elements in the environment that influence it. These are described in greater detail in the context analysis.

2.3. Sociopolitical context

This section explains the influence of the Salvadoran sociopolitical context on the ability to conduct social science research in a way that is autonomous, free, and independent. This is done by reviewing the historical, cultural, social, political, and institutional factors that influence the way social science research is currently organized, the system that in which it

Figure 1. Salvadoran research ecosystem and key elements



Source: Prepared by the authors based on GDN (2017) and findings in the sections on context analysis and stakeholder mapping.

takes place, and its actors. Except for the "Historical perspective" section, which includes events from the last century, the analysis focuses on the elements and conditions in place at the time of writing. Additionally, this paper is based on information available in bibliographical sources and expert opinions sought from specialists in the area of Salvadoran research.

Historical perspective

During the first half of the twentieth century, inequality characterized Salvadoran society (UNDP 2013). Extensive income from coffee exports led the country's government and elites to develop a concept of progress inspired by European and North American experiences. This notwithstanding, sectors of the population did not benefit from these resources and were unable to afford the cost of enjoying the transformations to the quality of life at the same pace. As documented by the Ministry of Education (MINED 2009), the ideology of positivism also influenced this process, fundamentally prioritizing material gains over individual rights and freedoms. Positivists argued that change was inevitable and needed to be driven by any means necessary: they considered violating or altering the population's ancestral rights, setting up dictatorships and modifying the Constitution to be legitimate means of pursuing progress. Against this backdrop, the state lost sight of capacity building and expanding the population's freedoms (UNDP 2013).

In December 1931, a coup took place, marking the onset of militarism in El Salvador. As a result, General Maximiliano Hernández Martínez came to power, establishing a dictatorship that lasted nearly 13 years (MINED 2009). Against this backdrop, the ruling classes⁷ exerted control through coercion, without developing means for ideological-political debate. This is how the so-called political culture of silence was established, affecting democratic and revolutionary sectors, who failed to develop the capacity to analyze and critique the governing group's ideas. For this reason, there was limited production of social analysis from 1932 to the late 1960s. This period was characterized by a lack of any relevant development in social science at the University of El Salvador (UES)⁸, which, at that time, was the only HEI in the country (Lugo 1986).

Throughout the 1960s, the country was characterized by military dictatorships,9 electoral fraud, rural-urban migration, and the growth of exclusion and marginalization. The number of social demands that went unmet by the state rose, stoking social protests (Ramírez 2013). In the 1970s, the ascent of social science, liberation theology, and Marxism in Latin America would all contribute to the process of social radicalization and provided theoretical support for the emergence and development of political-revolutionary organizations in El Salvador (Lugo 1986; Ramírez 2013). This process resulted in an armed conflict late in the decade. Political needs at the time motivated the production of social analysis in the country along two lines: an academic

⁷ A partnership between oligarchs and the military (MINED 2009; UNDP 2013).

⁸ UES is the only public university in El Salvador. It was founded on 16 February 1841 (UES n.d).

⁹ Militarism came to an end following the coup on 15 October 1979 (MINED 2009).

line associated with the universities (Lugo 1986; Ramírez 2013), and a political-organizational line, motivated by the evolution of political-military revolutionary organizations (Lugo 1986).

As for disseminating research, in mid-1970, the country's first private university, UCA, 10 started systematically publishing articles in its journal, Central American Studies. These articles addressed social issues such as the state and political regimes, militarism, the role of the church, education, and political economy. Toward the end of the decade, UCA also started to publish analysis of current events in the *Proceso* bulletin. Furthermore, political-organizational analyses were used by revolutionary organizations as a foundation for strategic-tactical guidelines and program platforms. Consequently, only a few were made public, while many were kept private as internal documents (Lugo 1986).

In the 1980s, Lugo (1986) observed and identified the "crisis in social science" in Central America. He considered that the analysis of the academic research centers—particularly universities—in the region, was not consistent with the situation in the countries at the time. Lugo (1986) noted two reasons for this crisis: "Overall depletion of theoretical instruments of Latin American social analysis," leading to reliance on "increasingly ambiguous approaches, lacking theoretical development, where the latest fads in terminology were

predominant." He identified the second cause as a "divorce between research and political practice."

During this period, HEIs were dismantled in El Salvador (Ramírez 2013). The UES was shut down from 1980 to 1984 and its budget was cut. This was followed by the symbolical dismantling of the UCA in 1989, when its Jesuit founders were murdered. The Truth Commission Report (United Nations 1993) noted that certain members of the Armed Forces considered the UCA as a "haven for subversives." They also linked the guerrillas to the Jesuit priests because of their concern for the poorest sectors of the population who were most affected by the war (United Nations 1993). The murder of the priests is an extreme instance of the limitations to freedom of thought and expression at that time, when anyone or any organization advancing ideas that went against the official policies, ran the risk of being eliminated (United Nations 1993).

In 1992, at the end of the armed conflict, repressive conditions were lifted, creating a setting that was favorable for academic research (Lauria-Santiago 1995). More importance was given to social matters, with more investment and improved access to basic social services, and greater emphasis on fighting extreme poverty. In the institutional sphere, respect for individual freedoms grew, as did the exercise of fundamental rights, such as freedom of expression. The democratic process that started with the signing of the Peace Accords was also an

¹⁰ UCA was founded in September 1965 (UCA n.d.). According to MINED, as at 2021, there are 34 HEIs in El Salvador: 22 universities, 8 specialized institutions and 4 technological institutes.

¹¹ Some of the terms he mentions are "styles of development," "informal sectors," and "policy engineering" (Lugo 1986).

incentive for different social faculties to participate in politics (FUSADES 2018).

However, when the universities were dismantled in the 1980s, this gave rise to a proliferation of actors such as nongovernmental organizations (NGOs), research centers and private research foundations, which became the new generators of social knowledge. These were funded by international development aid agencies, which had greater influence on defining the research agenda and the type of interventions social scientists should undertake (Ramírez 2013). Lugo (1986) linked this to the importance placed on the sources of funds and their particular requirements, as well as the fact that social science had adopted the latest "fads" in approaches and terminology. Ramírez (2013) notes that from this point on, Salvadoran social science demonstrated its adaptability, "adapting itself to the new wave," reconciling its revolutionary past, in pursuit of accelerated progress, with the more leisurely pace that the modernizing "development" project proposed.

Following the armed conflict, the two political parties (the Nationalist Republican Alliance and the Farabundo Martí National Liberation Front) that had spearheaded the transition to democracy governed the country for practically three decades. However, from 2004 to 2018, the credibility of the political system experienced a steady decline (Inter American Press Association 2020). During this period, the Salvadoran population stated that the economic situation, crime, and insecurity had become the issues that most significantly affected their degree of satisfaction with their quality of life (InfoSegura n.d.).

In 2019, a new political cycle began

in El Salvador, when Nayib Bukele was elected president. A 2020 Inter American Press Association report states that the new administration exhibits authoritarian traits in its dealings with the media and with citizens in general, as well as in the way it interacts with other branches of government. This deterioration in the conditions of democratic governance deepened further in the context of the COVID-19 pandemic (FUSADES 2020c). Authoritarianism can pose a threat to free, autonomous, and independent social research, as noted by the United Nations Development Programme (UNDP 2013), when an authoritarian regime rejects dissent and different ways of thinking, and blocks dialogue in order to solve social issues. In the case of El Salvador, one respondent stated they believe that recently, a process of closing spaces for dialogue has been abruptly established, with some able to remain in place over time, but not necessarily those in decision-making circles.

Cultural aspects

The cultural identity of the Salvadoran population was built on beliefs and behaviors that highlight differences and inequality (UNDP 2013; Rivas 2015). Two of these elements remain very entrenched: racism and male chauvinism (UNDP 2013).

Racism assumes there are superior and inferior beings and endorses the establishment of relations of power and domination between ethnic groups (UNDP 2013). It also ranks social groups by assigning people certain attributes and roles according to their physical traits. The implications for public policy are that some demographic groups are favored, while others are adversely affected, or do not benefit to the same extent. Like other countries with a colonial history, in

El Salvador, indigenous populations are particularly affected by racism. Due to the common act of conflating rural and indigenous matters, the permanence and effects of racism are still evident in the persistent gap between rural and urban socioeconomic development indicators (UNDP 2013). Rivas's (2015) statement that the indigenous population has historically been rendered invisible and demeaned is supported by the fact that national statistics fail to record the status and specific needs of this group. This lack of information also constitutes a barrier to social science research focused on these peoples. This is evident in the results of the researcher survey conducted in the context of the "Doing Research Project: Assessing Social Science Research Systems in El Salvador,"12 in which 2 percent of the 194 respondents stated they had undertaken ethnographic work. This fact provides insight into the small proportion of knowledge production, research and even value assigned to social issues involving different ethnic groups in this country.

As regards male chauvinism, its persistence can be explained by the notion of power it instills, power that is exerted by men over women starting in the early stages of life and in a variety of social contexts (UNDP 2013). In El Salvador, for instance, this is evident in the unequal participation of women in political and economic spheres. One

of the ways male chauvinism penetrates knowledge production is that almost half of the Salvadoran population (46 percent) believes that scientific work carried out by males is more reliable than that done by females (CONACYT 2018). From the point of view of policy, inequality in male-female relations hinders dialogue and consensus for policymaking for the development society as a whole. This is particularly the case when women are not regarded as peers and kept from participating equally and actively in public policy decision-making processes that influence their own lives (UNDP 2013). At the same time, the researcher survey conducted as part of the DRA project showed that only 10.8 percent of women work on gender-related studies. Therefore, it might be interesting for future studies to look into the degree to which the male chauvinism culture in the country keeps this percentage from increasing.

UNDP (2013) notes that aspects like racism, male chauvinism and other expressions of discrimination create a social order that legitimizes control and domination by certain social groups over others. Moreover, these conditions lay the groundwork for the enforcement of authoritarian power in different types of relationships. In El Salvador, certain authoritarian ways of relating to each other are still accepted. UNDP (2013) points to the level of trust the population places in the Armed Forces, which is traditionally hierarchical and authoritarian. Latinobarómetro Corporation stated that in 2020, Salvadorans trusted the Armed Forces more than the judiciary, Congress and political parties. UNDP (2013) ties this cultural trait to memories of twentieth-century military governments, which "had a clearer course, and were able to maintain acceptable order, albeit at the cost of the freedoms of certain

¹² The 268 survey respondents for this project were three different types of actors: researchers (194), research coordinators (48), and those in the public policy community (26). The surveys provided information that made it possible to analyze strengths, weaknesses, challenges, and bottlenecks when undertaking quality research that is relevant to public policy in El Salvador.

demographic groups." Latinobarómetro Corporation even reveals that in 2020, 34 percent of Salvadorans stated that they "would support replacing a democratic government with a military government, if things get too difficult." In addition, 14 percent of the population stated that in certain circumstances an authoritarian government may be preferable (Latinobarómetro Corporation 2020).

UNDP (2013) states that authoritarianism combined with inequality opens the door to clientelism as an alternative way of accessing power, influencing public policy, and gaining access to economic resources. As previously stated, factors associated with authoritarianism jeopardize the freedoms that are necessary for social research to be autonomous and independent. Coincidentally, these factors can potentially close spaces, hindering the results of the research from being considered in public policy decision-making processes.

As for a culture of use of research, the results of the study on "The social perception of science and technology in El Salvador" are cited (CONACYT 2018). This study shows that, in general, only 6.8 percent of Salvadorans state they are not interested in matters of science and technology. In the social sphere, education, public security, and economic development are the topics that grab the population's attention. Television and internet emerged as the primary means people turn to for information about scientific developments, while a mere 1.4 percent do so by reading specialized journals, watching documentaries, attending lectures, or reading books. There is also a general opinion that researchers

make no effort to make the results of their work known. Consequently, only 10 percent of people stated that they know national institutions that are dedicated to undertaking scientific research, mentioning only universities and the Ministry of Education, Science and Technology (MINEDUCYT). Therefore, they key may be to leverage the channels most used by Salvadorans, like television and the internet, to counteract their unfamiliarity with scientific research.

The same source (CONACYT 2018) states that 86 percent of Salvadorans think that scientific and technical knowledge enhances the ability to make decisions. Therefore, 72 percent of the population believe politicians should base their decisions on the opinions of researchers and experts. However, only around 12 percent of people believe scientific activities can offer solutions to the country's social problems. This could be due to the fact that around 75 percent of people believe that research funders may encourage those carrying out the research to present results that are favorable to their causes. This shows that there are still doubts regarding the freedom, autonomy, and quality of scientific work in the country.

Democracy, rule of law and freedom

The Salvadoran Constitution (El Salvador, Legislative Assembly 1983) legally acknowledges the fundamental rights and freedoms of the Salvadoran population. One freedom upheld by the Constitution that is very relevant for social science research is freedom of expression. Nevertheless, Loya (2011), based on a 2009 human rights survey conducted in El Salvador, reveals that freedom of expression is considered the least protected of the rights.

More recently, the Inter American Press Association (2020) stated that the rapid decline of freedom of expression in El Salvador began when the Bukele administration came to power. The Inter American Press Association (2020) argues that, at this time, the executive branch increased hostilities against civil society organizations and mass media that reported abuses of power and cases of corruption. Concrete instances of this type of behavior against journalists include physical or online intimidation, as well as denying access or the opportunity to ask questions at press briefings during official events (Inter American Press Association 2020). Civil society has reported that state institutions and agencies have used social media to delegitimize and persecute those who criticize the government (Acción Ciudadana and others 2021).

In addition, the Latinobarómetro Corporation (2020) found that in 2020, 47 percent of Salvadorans believed that there was very little or no protection of freedom of expression in the country. However, at the same time, other findings showed that two out of three people agreed and strongly agreed with the following statement: "In difficult circumstances, the president should be allowed to control the media."

Given the context, during the period from May 2019 to April 2020, the first edition of the Chapultepec Index of Freedom of Expression and the Press ranked El Salvador sixteenth out of the 22 countries in the Americas, scoring 42.6 out of 100 possible points (Inter American Press Association 2020). Concern regarding the limitations on freedom of expression in the country have been voiced by US members of congress, the head of Reporters without Borders'

Latin America bureau, and the president of the Association of Journalists of El Salvador (APES). APES even forewarned that the situation would worsen in 2021 (FUSADES 2021b), the year the country dropped two levels down the Chapultepec Index to eighteenth out of 22 countries in America, with a score of 41.7 points, and was categorized as a nation where freedom of expression is "highly restricted" (Inter American Press Association 2021; Mejía 2021).

Another condition that is fundamental to undertaking research-related activities is academic freedom. Article 24 of the law on higher education acknowledges academic freedom (El Salvador, Legislative Assembly 2004). As for its enforcement, Freedom House (2021) states that academic freedom is respected in El Salvador, assigning it three out of a total of four possible points. In a report by the Global Public Policy Institute and Scholars at Risk (Kinzelbach and others 2021), El Salvador scores 0.747 on the Academic Freedom Index, a sliding scale from zero to one where one indicates that the country is performing excellently in this matter. These scores are similar to those of neighboring Guatemala, where Freedom House (2021) assigned three out of four points to the enforcement of this right, while its Academic Freedom Index was 0.788 (Kinzelbach and others 2021). Honduras, the third country in the Northern Triangle of Central America, scored two out of a total of four possible points under the Freedom House (2021) criteria and its Academic Freedom Index was 0.927 (Kinzelbach and others 2021).

As for the rule of law, the World Bank Worldwide Governance Indicators (World Bank 2019b) ranked the country in the 23.6 percentile in 2019. This suggests that El Salvador is in better shape than 23.6 percent of the 214 countries assessed by the World Bank regarding society's confidence in laws and their enforcement. This shows that there is still an ample margin for improvement. Concerning the state of democracy, despite starting the transition toward it in 1992, 20 years later, UNDP (2013, p. 61) argued that the conditions required for dialogue and consensus on public policy had yet to be established. The Latinobarómetro Corporation (2020) also found that approximately 48 percent of Salvadorans were "not very satisfied" or "not at all satisfied" with democracy in the country. The confrontations between the executive and legislative branches during the Bukele administration have diminished democratic governance in the country, a situation that was exacerbated by the pandemic (FUSADES 2020c).

In February 2021, the mayoral and Legislative Assembly deputy elections took place, with President Bukele's party, Nuevas Ideas, winning the majority of congressional seats (Alas 2021). This practically handed the president control of all branches of government, because the Assembly elects second-tier officials (Lima 2021). Given that situation, and keeping in mind the previously noted authoritarian traits, an expert at Florida International University (Lima 2021) said that "many sectors fear that this excessive amassment of power may mean the definitive destruction of democratic institutions in the country."

On 1 May 2021, the date of the Legislative Assembly's first session, the deputies resolved to remove the Attorney General and all five magistrates of the Constitutional Chamber of the Supreme Court of Justice. Although the official position is that these officials impeded

the president's ability to address the pandemic, national and international actors have described this as a blow to Salvadoran democracy (Pozzebon 2021). On that same date, the legislators proceeded to appoint the replacement magistrates and Attorney General. They dispensed with due process, abandoned discussion and flouted procedures established in both the Constitution and the law for appointing these public officials. This act also disregarded the fact that some of those sworn in as replacements have close ties to the executive. Civil society organizations and international agencies interpreted these actions as an "evident transgression of the principle of separation of powers, and the start of a clearly authoritarian stage in which President Bukele will concentrate more political power in himself" (FUSADES 2021c, p.170). The current state of affairs, where freedom of expression has deteriorated, democracy is weakened and signs of authoritarianism are emerging puts free, autonomous and independent social science research at risk in El Salvador.

Governance and regulatory framework for social science research

The law on scientific and technological development was enacted in 2012. The law defines the mechanisms and instruments for implementing the National Science, Technology and Innovation Policy by executing the National Science and Technology Plan. The Plan is the frame of reference for the National Research Agenda (El Salvador, Legislative Assembly 2012). The law (El Salvador, Legislative Assembly 2012) also creates the National Science, Technology and Innovation System. The system is coordinated by the Vice

Ministry of Science and Technology¹³ and comprises public and private institutions that dedicate most of their efforts and resources to scientific, technological activities and innovation.¹⁴ This law (El Salvador, Legislative Assembly 2012) also delegates the responsibility for creating incentives and stimulus for science, technology and innovation to the Vice Ministry of Science and Technology.

The most recent National Science, Technology and Innovation Policy entered into effect in May 2018. The policy focuses on linking scientific work to productive innovation to enhance competitiveness and promote economic growth in the country. The general objective is development and social wellbeing derived from economic growth achieved by generating and disseminating knowledge. The public sector is responsible for executing the policy and the president takes on the role of coordinator. The executive branch is also in charge of channeling the funds required to support strategic activities in science, technology and innovation (El Salvador, Legislative Assembly 2018). Nevertheless, Salvadorans have the perception that most investment in science in this country comes from international agencies, and although they acknowledge that the state does make some contributions, 67 percent of respondents think that it does not contribute enough (CONACYT 2018).

As regards the National Science and Technology Plan, the most recent version found is dated August 2010. This included

a National Research Agenda to define priorities to serve as the basis for joint work, coordinated between researchers and research centers. Soon after, health, energy, food security and the environment were established as research priorities for the 2010-2014 period (MINED 2010). Areas in the social sciences are notably absent, according to the definition established for social sciences in the DRA project. Note that this is the first time a mapping of social science research has been carried out in El Salvador following a rigorous methodology, with the aim of including this branch of science in the debate about national research capabilities. Analysis shows that, when the contents of the previously mentioned National Research Agenda are contrasted with the way other legal instruments approach scientific activity, it is only associated with production and promoting economic growth. Therefore, the question is what relevance is assigned to social science in the country's strategic vision?

On the other hand, 76 percent of the Salvadoran population believes that national research priorities reflect the researchers' own personal preferences, instead of what society actually needs (CONACYT 2018). Likewise, some respondents stated that the research agenda in some institutions, particularly those tied to external funding, do not always respond to national interests.

In August 2017, the National Policy for the Popularization of Science and Technology entered into effect. Its aim was to establish strategies to achieve scientific literacy in society, and to disseminate and popularize scientific knowledge. This involves the way research is used, and the way scientific knowledge is transferred to wider society so it can be assimilated and used to improve the quality of life. The

¹³ Under the auspices of MINEDUCYT.

¹⁴ Upon reviewing the Salvadoran legal framework for scientific research, there appeared to be no instruments to specifically regulate private-sector or NGO efforts in these types of activities.

Vice Ministry of Science and Technology is the institution in charge of this policy. The policy also establishes studies to be undertaken and a semiannual survey on societal perception of science and technology to measure its effectiveness (CONACYT 2017).

A review of previous laws and policies reveals the relevant role that the Vice Ministry of Science and Technology has in scientific activities in the country. Some key responsibilities, like creating incentives for science (El Salvador, Legislative Assembly 2012) and leading the popularization policy, are delegated to the National Council for Science and Technology (CONACYT 2017). CONACYT is a decentralized unit of the MINEDUCYT and reports directly to the Vice Ministry of Science and Technology. It is the body responsible for implementing science and technology policies in El Salvador and also supports innovation (MINED 2013).

Another MINEDUCYT institution that is particularly relevant for social science is the National Center for Research in Social Sciences and Humanities (CENICSH). Created in 2010 as part of the "Let's Go to School 2009–2014" Social Education Plan, it undertakes research on the state of the country that explains social transformations to reduce inequalities among the population (CENICSH 2011). It also aims to contribute to the development of social science and humanities in the country and foster relations between researchers and public policy designers and implementers (CENICSH 2011; El Salvador, Legislative Assembly 2018). CENICSH began publishing its own indexed journal (El Salvador, Legislative Assembly 2018) called Revista de Humanidades y Ciencias Sociales (Journal of Social Sciences and Humanities) in 2011 (CENICSH 2011).

According to respondents from the MINEDUCYT, CENICSH is currently merging with the National Institute for Teacher Training (INFOD). This section of the ministry focuses on ensuring the quality of the human resources in the education system (INFOD n.d.). In line with this process, a restructuring of the Journal of Social Sciences and Humanities has been proposed, in order to focus on publishing papers about the area of education that can be of use to Salvadoran teachers (Rodríguez 2019).

Finally, the role of the universities in Salvadoran research is worth noting. The law on higher education (El Salvador, Legislative Assembly 2004) states that one of the objectives at this level of education is to promote all forms of research (El Salvador, Legislative Assembly 2004). Article 48 of this law refers to state subsidies and support programs directed toward scientific research. Consequently, the MINEDUCYT has made the Higher Education Research Fund (FIES) available to accredited state HEIs (El Salvador, Legislative Assembly 2009). However, the National Science, Technology and Innovation Policy sets health, energy, food security and the environment as primary issues for the FIES, because they are "priorities in the National Research Agenda" (El Salvador, Legislative Assembly 2018, p. 21). Consequently, taking into account the definition of social sciences established in the DRA project, these are excluded from benefiting from these funds. Additionally, it again identifies the approach the country takes for research as an instrument for economic growth. This is because the FIES only finances technological projects geared toward production, the market and industry (MINED 2011).

In addition to the economic aspect, social elements also have a great influence on the quality of life of Salvadoran people. Therefore, it is important for more relevant Salvadoran institutions involved in scientific research to become involved in social science. This also involves a serious discussion about including social sciences in the areas of research defined in the National Research Agenda, and about the incentives that are available for its implementation. This will enable the dynamics of Salvadoran society to be better understood, which would in turn provide valuable information for public policy design to overcome social obstacles to the development of the country.

Summing up, the sociopolitical context of El Salvador provides evidence of the way social science research has been evolving in the country and how it has been adapting to current historical scenarios. It should be noted that the conditions, resources and actors involved in these activities have made progress since the end of the armed conflict. However, a new political cycle with authoritarian characteristics recently began in the country, which threatens to reverse the progress already made on the road toward establishing an environment favorable to undertaking autonomous and independent social research. This issue becomes even more concerning when taking into account that freedom of expression is already under attack and spaces for dialogue are being closed. Historical events and cultural aspects can be identified to understand, to some degree, the current state of decline of democracy in El Salvador. Moreover, analysis of the Salvadoran regulatory framework covering research reveals a lack of understanding of the importance

of social science research and the role it can have in the development of the country. This notwithstanding, civil society organizations have taken on an important role as producers of social science knowledge, particularly in the postarmed conflict period, but the recent rise in hostilities toward this sector could impair this work.

2.4. Economic context

Just as the sociopolitical, cultural, and historical contexts of the country affect the way the research system functions, so does its economic condition. Human capital, available funding, and the job market all determine, to some extent, the capabilities and opportunities for social science research. Since not all the available information is disaggregated by scientific area, this section characterizes the general individual and institutional capacities and resources for undertaking research, as well as the factors that influence the way it is produced, disseminated, and used in public policy making. Where evidence is available, specifics about social science research are included.

Individual and institutional capacities

El Salvador is characterized by slow growth and a lack of human capital resulting from low academic achievement and quality of education, as well as precarious employment, and other social conditions (FUSADES 2019b; Ruiz-Arranz and others 2019; World Economic Forum 2017). Real GDP growth was 2.4 percent in 2019, an average maintained in recent years (FUSADES 2020b). Moreover, the school system faces multiple challenges, one being student retention: Salvadorans tend to leave school after they have completed their elementary education,

with seven years of schooling being the average in 2018 (FUSADES 2019a). In 2018, higher education reached 11.9 percent net coverage, meaning four in five persons aged 18 to 24 did not undertake university studies (National Directorate of Higher Education 2019). Out of 190,519 enrolled students, 25.1 percent chose to study economics, administration and business, 19.2 percent technology, 18.9 percent health, 8.3 percent law, 7.3 percent social sciences, 15 6.5 percent education, 6.1 percent humanities, 4.4 percent art and architecture, 2.4 percent agriculture and the environment, and 1.8 percent science (National Directorate of Higher Education 2019). Although, according to the DRA definition, almost half of these students are majoring in science, this does not mean that they are developing quality research skills. The job market also poses a series of challenges, like informal employment, unemployment, and underemployment. The economy is neither able to accommodate the entire labor force nor to provide better working conditions, with seven in ten economically active individuals unable to find formal employment in 2018 (FUSADES 2019a).

These aspects, and others, are characteristic of a country with low production and insufficient employment, giving rise to a variety of challenges in the country's productivity and social progress. The World Economic Forum's Global Competitiveness Index awards El Salvador an index of 52.6

in 2019, ranking it 103rd, five places below its 2018 ranking (Schwab 2018; 2019). The UNDP Human Development Report awards the country 0.673 points in 2019, ranking it 124 and categorizing it as medium in the HDI, as it had the previous year (UNDP 2019; 2020b). This economic context certainly translates to barriers to capacity-building and socioeconomic opportunities. The research and development (R&D) sector is no exception. Low education levels, limited quality employment opportunities, low growth and scarce resources limit the population's ability to gain research skills in the education system and job market and to create opportunities for research. These elements affect individual and institutional capacities.

Although it is impossible to measure researcher participation in the job market, ¹⁶ available information is indicative of a very small sector, compared to the number of people involved in other economic activities. In 2018, the CONACYT Science and Technology Observatory registered 72 research institutions; 306 researchers, 82 of whom work in the social sciences; 628 teacher-researchers, 253 of whom work in the social sciences, and 727 research projects, 100 of them in areas of social science. Therefore, there were 335 professionals carrying

¹⁵ As classified by MINED, social sciences include political science, communications science, social communications, social research methods and techniques, advertising, public relations, and sociology.

¹⁶ The area of economic R&D does not appear in Salvadoran Social Security Institute records, making it difficult to calculate the number of researchers working in the formal labor market. As at August 2018, 18.1 percent of the private sector employees paying for social security worked in "professional, scientific, technical and administrative service activities," which could include research (FUSADES, 2019b).

out social science research¹⁷ in a market of 2.8 million workers, according to the 2018 Multipurpose Household Survey (DIGESTYC 2019).

As previously stated, economic conditions influence the size of the sector and its capacities. Data compiled by the Ibero-American and Inter-American Network for Science and Technology Indicators (RICYT) show there are few social science researchers in Guatemala and Honduras, which are countries with medium human development and lower-middle income, like El Salvador. Although Bolivia has high human development and lower-middle income, it is home to 1,619 researchers, 22.25 percent of whom work in the social sciences. This is slightly larger than the Salvadoran sector, with some 350 social science researchers. In 2014, the overall rate of researchers per thousand workers was 0.32 and 0.28, respectively. Costa Rica, which has very high human development and upper-middle income, stands out, with 3,781 researchers in the sector. A total of 31.7 percent of these researchers (approximately 1,200 professionals) work in the social sciences: four times the size of the Salvadoran sector. In general terms, the number of researchers per thousand workers in Costa Rica in 2014 was 1.79: six times that of El Salvador. However, the proportion of researchers with PhDs and master's degrees is relatively similar to that of Bolivia and El Salvador.

One of the main limitations in the national records is that CONACYT only includes 39 HEIs and 13 government agencies in its measurement of HEIs and government agencies. This means that collected data underestimate the sector's actual size, leaving out certain government agencies, civil society organizations and industry actors involved in research. Since the most recent survey was conducted in 2018, the researcher register could be out of date. However, the information can be used to characterize the market. The 2018 survey data are used to examine research opportunities and capacity, revealing some of the factors that influence them.

Research opportunities

The analysis framework for this study primarily considers research carried out in four sectors: HEIs, government and funding agencies, industry (consulting firms and for-profit think tanks) and civil society (NGOs, think tanks, mass media, leaders). Official figures show and experts confirm in interviews that the institutional capacity for research has strengthened but is remains limited. The conditions for producing, disseminating, and using research in public policy still needs improvement.

Research institutions are well defined, and each year more social science projects—and consequently more scientific outputs¹⁸—are undertaken (CONACYT 2016; 2019a). In 2018, HEIs had 39 centers, and the government

¹⁷ CONACYT includes different branches of research as part of social sciences: psychology, economy and business, education science, sociology, law, political science, social and economic geography, and media and communications, among others (CONACYT 2019a).

¹⁸ Scientific products notably include articles published in journals and bulletins—with or without an ISSN—books with or without an ISBN, International Scientific Indexing articles and other indexes, patents applied for and granted, lectures delivered at national and international scientific events, chapters in books, and technical reports published.

33, but CONACYT surveyed only 13 of them. Education-sector output was 624 social science products, constituting 45 percent of the total scientific output. The remaining 55 percent focused on exact sciences, natural science, humanities, medicine, and other areas. The government's output was 44 social science products: 20 percent of its overall production. More specifically, most of its production involves technical reports and articles published in journals or bulletins with an ISSN. Data and historical records show that social science research in El Salvador is mainly carried out in the education sector. As for other sectors like industry and civil society, it is difficult to map the installed capacity and estimate its scope, since there is no system to monitor that part of the R&D market. However, experts interviewed for this study believe that industry and civil society are sources of employment for researchers. They even mention the business sector as a source of opportunities, particularly companies interested in market research.

There has been an overall increase in scientific production, but it remains low. Although there was no information available to compare the number of national products with other countries, it was possible to compare the number

of publications in international document databases. According to RICYT, in 2018, El Salvador produced 1.58 publications per 100,000 population in Science Citation Index and 2.18 in SCOPUS. Bolivia recorded 3.20 and 3.54, and Costa Rica, 18.36 and 24.80, respectively. The amount of Salvadoran scientific output is mainly due to the lack of human resources and limited R&D investment in the country, as will be described further in the next section (CONACYT 2016). Although the number of studies undertaken is increasing, the results are not sufficiently publicized (CONACYT 2016).

Human resource capacities

There has been an increase in human resources involved in research in all scientific areas in the last 10 years, but as previously stated, the overall sector remains small. Several factors restrict the R&D sphere of action. In 2018, CONACYT recorded 140 researchers and 628 teacher-researchers at universities and institutes, as well as 166 researchers in government agencies. The percentage of social-science focused researchers in the HEIs was 47.9 and 40.3 of teacher-researchers. In the government, only 9 percent of the researchers worked in

Table 1. R&D personnel in the education and government sectors by occupation and sex, 2018

	Higher education institutions			Government			
	Males	Males Females Total			Females	Total	
Researchers	95	45	140	105	61	166	
Teacher-researchers	362	266	628	n/a	n/a	n/a	
Technicians	56	32	88	21	33	54	
Assistants	8	2	10	64	24	88	
TOTAL	521	345	345	190	118	308	

Source: Prepared by the authors with data provided by CONACYT.

Note: There are 67 researchers and 253 teacher-researchers in HEIs and 15 researchers in government that focus on social sciences.

the social sciences. Agricultural science accounted for most of these areas of social science, followed by exact sciences and natural science and medical science. However, R&D personnel tend to mainly comprise researchers and teacher-researchers at HEIs (Table 1). In this sector, only 11.3 percent were technical staff or assistants in 2018, whereas this percentage jumps to 46.1 percent in government agencies. Additionally, CONACYT data show that there are both HEIs and government are dominated by men: 95 compared with 45 and 105 compared with 61, respectively.

Notable factors restricting human capacities and R&D actions, include limited training (Table 2). Most men and women researchers have postgraduate degrees. A total of 34.3 percent of researchers working at HEIs had a master's degree, as did 42.7 percent of the teacher-researchers, and 26.5 percent of researchers working for the government. There were fewer with PhDs: 17.9 percent, 10.2 percent and 4.2 percent, respectively. Training seems to be even more limited among women. There are more men who have undertaken postgraduate studies and obtained

PhDs or master's degrees than there are women. For example, there were 20 men researchers with PhDs compared with five females in HEls; among researchers working for the government, this was four men compared with three women. As regards researchers with master's degrees, in HEls, there were 31 men compared with 17 women in HEls and 25 men and 19 women working for the government.

Despite a lack of national data regarding social science researcher degrees, they appear to follow the same pattern. A survey of 194 social science researchers carried out by this project found that 29.4 percent of them have undertaken postgraduate studies, 48.5 percent of them have master's degrees, and only 10.8 percent have PhDs. There are gender disparities in degrees obtained in the country, with more men having obtained PhDs. Some experts noted that there is little development of research skills in undergraduate studies and that there are gaps in the number and quality of undergraduate study programs (Avelar and others 2019). This was also mentioned repeatedly during interviews. The lack of academic options in research and social science prevents R&D personnel from

Table 2. Researchers in the education and government sectors by gender and academic degree, 2018

		Higher educat	Government			
	Teacher-researchers Researchers		researchers			
	Males	Females	Females Males Females			Females
PhD	13.8%	5.3%	21.1%	11.1%	3.8%	4.9%
Master	41.7%	44.0%	32.6%	37.8%	23.8%	31.1%
Bachelor	37.6%	47.0%	44.2%	51.1%	69.5%	63.9%
Technical degree	2.5%	1.5%	0.0%	0.0%	2.9%	0.0%
Other	4.4%	2.3%	2.1%	0.0%	0.0%	0.0%
TOTAL	362	266	95	45	105	61

Source: Prepared by the authors with data provided by CONACYT.

gaining skills. In 2015, only 81 out of the 210 degrees available in the country were in the social sciences (Salinas, Quintanilla, and Montoya 2017). In 2018, there were only 1,363 graduates in the social sciences, 2,724 in education, 1,681 in law, 852 in humanities, and 6,211 in economics, administration and commerce (National Directorate of Higher Education 2019). Even if this is half of the graduates that year, there ought to be close scrutiny of study programs to determine whether they provide the skills necessary for research.

Furthermore, work overload affects the capacity for research. Time spent on administrative tasks and teaching in HEIs limits time available for research (Avelar and others 2019; Rivera de Parada 2020). For instance, CONACYT reports an average of 11.7 hours per week dedicated to research at universities, and 7.9 at institutes. One in four researchers interviewed in the context of this project stated that between 40 and 60 percent of their time was dedicated to research, the equivalent of three days a week. The majority thought this was an insufficient amount of time to conduct thorough research activities. According to USAID, work overload and the lack of training are indicators for the low quantity and deficient quality of research in El Salvador (Saunders and others 2012). There are cases where trained researchers are working as full-time teachers (Saunders and others 2012).

Failure to acknowledge the importance of research for social development is another factor that influences human and institutional capacities. Experts who were interviewed believe that recognizing the value of scientific production would help shed light on the need for training in social sciences, to encourage greater

appreciation of research as a profession, and increase the investment different sectors make in R&D. This is evidenced by the fact that 68.6 percent of the 197 researchers interviewed in this project believed that attractive work opportunities are non-existent for researchers in El Salvador. A key aspect is the influence of the education sector. It is able to raise awareness of the need for quality research but neither innate curiosity nor the interest in the pursuit of knowledge and discovery have been stimulated enough and research has failed to be promoted as one of the best methods of learning (Rivera de Parada 2020; Calles 2013). Although there are teachers who make efforts to promote research, understanding information and critical thinking and creativity, this is not a systematic response in Salvadoran education (Rivera de Parada 2020). On the other hand, the education system is also able to promote academic research to improve education, and, consequently, human resource and research capacities.

Finally, the lack of a research agenda also influences capacity. In 2012, USAID acknowledged the lack of any kind of system to promote the serious adoption of R&D actions (Saunders and others 2012). In this regard, experts that were interviewed noted the importance of having an institution to systematically promote social science research, setting an agenda for investments in R&D, developing programs that provide information on an ongoing basis, promoting greater coordination in research and the exchange of knowledge, and informing decisionmaking processes. This would lead to more opportunities and greater accumulation of capacities.

Research resources

Financial, physical, and technical resources also influence the creation of opportunities and building of skills. This goes hand in hand with an institutional and National Research Agenda, and the acknowledgment that scientific production is key for social development. According to experts interviewed and data provided by CONACYT, these resources do exist, but they are limited. Given that it seems that R&D has yet to become a priority, the following section explores whether the institutions have the necessary investment and instruments.

El Salvador invests very little in R&D, which is why it is behind at the regional level (Saunders and others 2012). In 2018, 0.1 percent of its GDP was invested in R&D, ranking 131 out of the 140 economies on the Global Competitiveness Index for this indicator (World Economic Forum 2019). Developing countries, much like the Latin American region, have not seen significant investment in R&D (GDN 2020, and therefore, economic conditions have no doubt had an influence on the research system. Bolivia has high human development and is a lower-middle income country and invested 0.2 percent of its GDP in R&D in 2019, and Costa Rica, which has high human development and is an upper-middle income country, invested 0.5 percent. This has certainly influenced the size and capacity of the sector, with a greater number of researchers, a higher proportion of professionals with PhDs and master's degrees, and greater output in both countries, as compared to El Salvador.

One of the barriers El Salvador faces are the lack of trained human resources and institutions (Ruiz-Arranz and others 2019). The average R&D investment in sectors

like education and the government is US\$12,470,000 per year; with the average investment in the social sciences being much lower¹⁹ (CONACYT 2016). In 2018, HEIs allocated US\$15,486.50 to R&D, 44.2 percent of which was for social sciences, followed by engineering and technology (26.3 percent) and medical science (11.7 percent). The government was allocated US\$13,529.50, 38.0 percent of which was for social sciences, with the greatest investment in agricultural science (43.9 percent). Considering the amount and the number of social science projects, the government invests US\$467.7 million in each of its 11 projects, which is more per project than HEIs, which receives US\$26.7 million for each of its 256 projects. From this arises the question of whether it is better to have a greater number of R&D projects with a smaller budget, or to have fewer projects and greater funds allocated to each of them. There are also questions surrounding what kind of research can be financed with limited resources, as well as its scope and quality, and the reason why education institutions are not known to undertake research projects that have a lot of financing.

On the other hand, Table 3 shows that HEI allocations for R&D are 56.9 percent of current expenditure, and 43.1 percent is capital expenditure, while for the government, only 9.1 percent is capital expenditure. This affects the physical and technical resources available for research activities in any area of science. For instance, HEIs invest US\$43 out of every US\$100 in equipment,

¹⁹ In 2018, universities and institutes invested US\$6,837.45 in R&D that focused on social science, and the government invested US\$5,145.07.

Table 3. R&D internal expenditure in the education and government sectors, 2018

	Higher education institutions	Government	
Current expenditure	\$ 8,814.93	\$ 12,294.73	
Research personnel salaries	\$ 4,814.78	\$ 5,873.77	
Salaries of technicians and assistants	\$ 232.90		
Other current expenditure	\$ 3,767.25	\$ 6,420.96	
Capital expenditure	\$ 6,671.56	\$ 1,234.81	
Equipment and instruments	\$ 1,701.96	\$ 267.00	
Land and building	\$ 4,626.55	\$ 927.30	
Software	\$ 343.06	\$ 40.51	
Total R&D expenditure	\$ 15,486.49	\$ 13,529.54	

Source: Prepared by the authors with data provided by CONACYT.

instruments, infrastructure and software, and the government invests only US\$9. In addition, CONACYT data show that each sector is the primary provider of resources for R&D. In 2018, 74.5 percent of the HEI budget for R&D was financed by the institution itself, followed by international development aid agencies (14.9 percent), followed by private business (7.4 percent). The government practically self-funds its R&D activities (99.2 percent), with international development aid agencies funding the remainder.

In terms of infrastructure and technological resources, education and government sector research centers have multiple spaces and resources to carry out research activities (CONACYT 2019b). HEIs have office space (82.3 percent), laboratories (61.5 percent), experimental facilities (28.2 percent) and workshops (25.2 percent). The government has office space (60 percent), laboratories (53.9 percent), and experimental facilities (15.4 percent). As for technological resources, despite the national deficit in digital infrastructure and connectivity problems, most research institutions have internet access and tools to produce

and disseminate research. According to data from CONACYT, most HEIs and government agencies have computers, servers, local area networks, internet connections, access to online libraries, and databases, among other resources.

Overall, the R&D sector is generally small in El Salvador, and R&D in the social sciences is even smaller. The total number of institutions and human resources it comprises is still unknown, as is the real investment in R&D actions. but information available in the education sector and the government points to a certain level of human and institutional capacity. The economic context, limited academic options, work overload, little importance given to research, and the fact that there is no research agenda, among other factors, make it hard to accumulate skills. These aspects undoubtedly have an impact on the amount of resources available for R&D.

The country has the minimum conditions for a general research system to operate effectively. At the national and institutional level, there still needs to be a commitment to generating R&D

knowledge, capacities and actions, and to assign resources for this, in order to ensure sustainability for the research projects. It is also important to acknowledge that social science research could have a particular impact on the country's development, and increasing the value placed on the profession, as well as bringing the ad hoc effect of increasing the academic options, opportunities, and capacities. This would strengthen production and dissemination capacities and encourage the use of research results to inform public policy. For example, one of the limitations in state strategic planning for managing the COVID-19 crisis was difficulty accessing information to target measures to offset the impact of the pandemic and to identify vulnerable members of the population to provide them with benefits (Cuéllar-Marchelli and others 2020). In this sense, the recommendation these authors made was to generate knowledge for use in identifying the vulnerable population in this context and other necessary information, such as technical and financial pre-feasibility assessments, so as to better target social benefits. This is a clear example of the way social science research can be an effective and efficient influence for the country's development. Strengthened organizations and trained personnel would no doubt go a long way toward enhancing the quality of scientific production.

2.5. International context

Participation in international research organizations and networks

The international context has a direct impact on the social science research system in every country, both positive and negative. Integrating research systems into international networks stimulates

knowledge production, increases access to external production and promotes academic exchange, making it possible to import capacity from abroad (GDN 2019). However, a study on the social science research system in Myanmar by the Centre for Economic and Social Development (CESD) and GDN (Glutting et al. 2020) found that international influence could also keep it from becoming stronger. In fact, it showed that studies requested by donors could have a disproportionate effect on the design of the national social science research agenda, unless a portion of that funding is assigned to developing local research capabilities. This section explores the influence the international context has on the Salvadoran social science research system, based on previously published reports, informed by the most up-to-date data available from surveys conducted as part of the present project.

Partnering with the international community can improve the quality of education, promote innovation and make new employment opportunities available for researchers (Sloan and Arrison 2011). International assistance for social science research gives national research systems access to capacities that increase the competitiveness of the results of their research on a world level, on the one hand, and new sources of funding to undertake research projects on the other. A country's openness to the international community increases its capacity to produce and disseminate the results of research, and the involvement of international organizations in the process attracts government and private sector participation (Sloan and Arrison 2011).

The international context creates different opportunities for El Salvador to develop a knowledge-based economy. Different

international organizations currently have offices in El Salvador, including 14 United Nations agencies (United Nations 2020), the Central American Bank for Economic Integration (CABEI), and the Inter-American Development Bank (IDB) (Embassy of France 2009), as well as six international development aid agencies (Ministry of Foreign Affairs 2018). The funds these institutions provide are channeled through government development institutions and research projects with the participation of think tanks and HEIs, which is how coordination takes place among different national public and private actors. This also facilitates institutions that are members of worldwide research organizations and networks with greater access to publications and lectures from abroad (Sloan and Arrison 2011).

Think tanks make research-based public policy proposals and study national and international issues (McGann 2021). El Salvador has 14 think tanks, each a member of international research networks (McGann 2021). Three think tanks belong to the IDB's Latin American and Caribbean Research Network: FUSADES, the Dr. Guillermo Manuel Ungo Foundation (FUNDAUNGO) and the Salvadoran Business Foundation for Educational Development (FEPADE), as are four Salvadoran universities (IDB 2019). FUNDAUNGO and FUSADES also are members of the Latin American Initiative for Public Policy Research. International research networks have a direct influence on institutions' capacities to access information, affecting the quality of their results (Sloan and Arrison 2011).

The quality of research generated by Salvadoran think tanks has been acknowledged at the international level. In 2020, for instance, the University of Pennsylvania's Think Tanks and Civil Societies Program Global Go To Think Tank Index ranked FUSADES the best think tank in El Salvador, and number 12 in Central and South America (McGann 2021). FUSADES currently has ties to 29 public, private and international sector institutions. The international sector institutions include Southern Voice, Gender Action Project, Latin American Coalition for Excellence in Teaching, and in the context of the COVID-19 pandemic, the Gender Equality and Social Inclusion (GESI) Working Group, among others.

El Salvador is well integrated into the international community, but its ability to leverage resources for research depends on the quality of higher education in the country. In addition, HEIs play two roles in the research system: producing research and training human resources in social science research. Both objectives are interlinked with human resources and available operational capacity, which one of the respondents perceived as insufficient.

There are currently 39 HEIs in El Salvador, but they are behind in social science research. Only seven Salvadoran institutions published at least one article between 2009 and 2012, and only one in five produced one or more studies that made any impact internationally (Saunders and others 2012). The SCImago Journal and Country Rank indicator (2021) measures the number of documents a country has published by areas of research, among other indicators (the number of citations received by a journal and the citations per document, among others). El Salvador dropped 31 places in publishing social science research papers between 2015 and 2020; in 2020, 12 fewer social science research papers were published than in 2015 (36 and 24,

respectively). During this period, there was a steady downward trend, with the only reversal in these trends in 2019, when the country climbed 14 places compared to 2018, and published 13 more papers (SCImago 2021).

El Salvador was in fourth place in Central America in 2020, with practically the least aggregated production in social science research, only above Nicaragua (SCImago 2020). According to the SCImago (2021) ranking of published social science research papers, in 2020, El Salvador produced 88.9 percent fewer papers than Costa Rica, the Central American country with the highest ranking; 59.3 percent fewer than Guatemala, and 41.5 percent fewer than Honduras (SCImago 2021).

El Salvador is also behind in social science research production compared to similar countries outside the Latin American region. While El Salvador, Myanmar and Nigeria are in different geographic regions and contexts, their HDI is similar (UNDP 2020a), and all three are classified as lower-middle income countries by the World Bank. Myanmar, a country with lower-middle income and low growth (World Bank 2020) is ranked 114 by SCImago (2021). In 2020, El Salvador produced 72 percent fewer social science research papers than Myanmar (SCImago 2021), despite the fact that El Salvador has 4.8 times the number of researchers per million population estimated for Myanmar (Glutting et al. 2020). Nigeria, on the other hand, is ranked 41, 106 places higher than El Salvador. In 2020, Nigeria produced over 2,100 social science research papers compared to 24 produced in El Salvador (SCImago 2021), despite having a slightly lower estimated number of researchers per million population than El Salvador (Egbetokun et al. 2020).

There are two factors that could be linked to low social science research production, namely the way decision-makers receive the results of these studies, and the lack of trained human resources among faculties. Some of the results have had support from decision-makers, while others have not; institutions in the latter category have often been excluded from the process of preparing public policies, and their work runs into additional obstacles (Cooper and Packard 1997). In addition, the unavailability of human resources with postgraduate education determines the amount and quality of the resulting research. Only one-third of university faculty members hold master's degrees, and 2.3 percent PhDs (National Directorate of Higher Education 2019). Half of the social science researchers interviewed as part of this study have a master's degree and 11 percent a PhD. These results point to the fact that academics lack training compared, for instance, to Nigeria, where 36 percent of researchers have master's degrees and over half a PhD (Egbetokun et al. 2020).

The quality of HEI research is low at the international level. Literature notes that most research products in developed countries are produced in collaboration with universities that are at the center of the system (Godin and Gingras 2000). UES is the country's only public HEI and most professionals graduate from there. However, Saunders and others (2012) note that UES research papers are cited 40 percent less than those from the National Autonomous University of Honduras.

In the higher education sector, the relationship between integration with the international community and research production is more evident. Two universities produce 75 percent of HEI studies in El Salvador, namely UES

and UCA (Saunders and others 2012). Both have ties to transnational research networks. UES is part of the Network of Public Macro-Universities of Latin America and the Caribbean, created to promote research among public universities in Latin America. UCA is part of the Association of Jesuit Colleges and Universities, whose two-pronged purpose is to bring human resources with international experience in research into the country and to promote researchers from the institution going to work abroad. Private universities are part of the Salvadorian Association of Private Universities (AUPRIDES), member and founder of the Latin American Cooperation of Advanced Networks (CLARA), which works to connect researchers and facilitate information sharing (AUPRIDES n.d.).

Professional networks, scholarships, and academic exchange programs

The international community also offers the opportunity to import the capacities necessary to drive the social science research system and stimulate economic development. Trained human resources from abroad can act as a link to coordinate foreign investment in El Salvador, with a direct impact on economic growth (Li and Liu 2005). These scholarships, as well as the academic and professional exchange programs, act as a bridge to acquire skills that are scarce in the country.

Openness toward and cooperation with other countries opens up opportunities for Salvadoran students to get scholarships to specialize in the social sciences. CONACYT data from 2006 to 2016 show that 2,985 Salvadoran students received scholarships to do their graduate and postgraduate studies abroad, provided by international agencies and foreign

governments in allied countries (Salinas, Quintanilla, and Montoya 2017). A total of 21.6 percent of the scholarships that were available in 2016 were provided by the Organization of American States (OAS). In addition, during that period, the Special Fund of Resources from the Proceeds of the Privatization of ANTEL (FANTEL) scholarship program of the government of El Salvador provided opportunities for 113 Salvadorans to obtain a graduate or postgraduate degree abroad.

Foreign scholarships and exchange programs enable Salvadorans to specialize in different areas of the social sciences while the offering at home is limited. However, only 34.5 percent of foreign scholarships were provided for master's studies and 0.9 percent for PhD (Salinas, Quintanilla, and Montoya 2017), which are the academic levels that build capacity to make the national social science research system sustainable, according to one of the interview respondents. Furthermore, since 2013, the number of scholarship recipients has exhibited a downward trend (Salinas, Quintanilla, and Montoya 2017). Likewise, the national basic education system has not generated the skills required to leverage external mobility opportunities, particularly due to deficient English language skills.

Over the last five years, the number of Salvadorans who received scholarships to study abroad has been on a steady downward trend. According to data provided by the Ministry of Foreign Affairs (2021), in 2016, 214 scholarships were granted, 8 percent were for master's studies, and 0.5 percent for PhD studies. In 2019, the number of scholarship recipients dropped to 145, 18 percent of which would study a master's degree. There were no PhD

scholarships that year. In 2020, only 38 scholarships were awarded, three for master's degree studies (Ministry of Foreign Affairs 2021), possibly due to the restrictions and uncertainty around the COVID-19 pandemic. The only data on this registry was provided by international development aid agencies and partner governments. Private scholarships are excluded from this data set, and therefore, these data may be inaccurate.

Low English proficiency is a barrier to research production for Spanish-speaking professionals (Moreno and others 2012). It is perceived that writing research articles in English is 24 percent more difficult than writing them in Spanish (Moreno and others 2012). This is especially relevant for conducting social science research because the 10 most important social science journals are published in English (SCImago 2021).

El Salvador is ranked as a low English proficiency country on the Education First English Proficiency Index (EPI). The country ranks 56 out of 100, but between 2019 and 2020 it moved up four positions, from 60 to 56, and has steadily improved since 2017 (Education First 2020). No official data were found regarding the percentage of the population that speaks and writes in English, nor are there any data available on the proportion of researchers with English language skills. However, 12 percent of the academics interviewed for this study stated they had worked on an article that was published in English during the last three years. In this regard, the government has a responsibility to build the skills to be able to take advantage of the benefits of having international actors participating nationally, and to create incentives to leverage these benefits.

Obstacles in the international context also affect the development of the social science research system in El Salvador. The literature suggests that when researchers compete for external funding, they are forced to set aside issues that may be considered controversial (Laudel 2006). In El Salvador, where national investment in social sciences is meager, social science institutions and researchers' dependence on international funding would lead to the displacement of national issues in favor of international priorities. Along with international funds, the availability of public funds is essential to ensure that social science research responds to national needs as well as contributing to the international stock of knowledge.

In conclusion, the international context provides the social science research system with strength and sustainability, but only if the country is able to access it. There are institutions in El Salvador that have successfully established international partnerships, contributing to the creation and development of social science research. However, conditions are not yet ready for these partnerships to serve as a tool to consolidate national research capabilities. In particular, English language learning needs to be strengthened in the educational system, as this would increase the number of individuals who can apply for scholarships in social science training, encouraging the production of world-class knowledge at HEIs.

2.6. Limitations

Several limitations have hindered the process of identifying different sociopolitical, economic, and international factors that could enhance the performance of the social science research system. Firstly, it was impossible to identify even one previous study that specifically analyzed the evolution and performance of the social science research system in its functions of research production, dissemination, and its use to inform public policy. However, a recent assessment of the state of higher education in the country by Saunders and others (2012) offer some insight on the research capacities of this sector that have been taken into account. This analysis does not include information about research carried out by think tanks or research organizations other than universities and formal technology education institutes. The analysis is based on information available from various sources that generally address some aspect of social science research. There is a lack of research into the characteristics, capabilities, and influence of the four actors (HEIs, government, industry, and civil society) in the research system. However, the information available has enabled this first effort to evaluate the social science research system to characterize the R&D capabilities of HEIs and government better than those of industry and civil society.

Secondly, there is no public institution in the country that is specifically responsible for or leading the area of social science research. Nor has an entity been identified that permanently monitors the R&D sector and systematizes the information related to it, particularly with respect to the development of the social sciences. While it is true that CONACYT has made efforts to generate some information on scientific and technological activities, the available statistics are outdated and are not always disaggregated, making it difficult to learn about the specific details of R&D-related social science work.

Thirdly, other information is simply nonexistent, outdated, or inconsistent. No indicator was found on the percentage of the Salvadoran population that is fluent in English, nor is there literature about ethics and quality of research in El Salvador, the use of research in public policy processes, or the use of research to favor political clientelism. Also, where information about some aspects of interest for this analysis is present on the web pages of various institutions, it is limited or inconsistent. In addition, inconsistencies emerge when comparing CONACYT records, information on the Network of Salvadorian Researchers (REDISAL) database, and the web pages of academic and government institutions.

Considering the limitations listed here, the present analysis should be considered an exploratory effort. It offers a general context of the social science research system, defining some trends related to the factors that influence it, and identifying topics of interest that can be looked into in due course. This analysis aims to fill the gaps in knowledge about the social science research system in El Salvador, to contribute to the debate about how to strengthen the system, and to better inform the formulation of public policies about development.

2.7. Conclusions and reflections

In El Salvador, the current challenges to social development present the social sciences with an opportunity. Strengthening the social science research system and linking it to solutions for strategic social issues would not only lead to the design and implementation of better development policies but would also enhance public debate. However, in practice, this system is not yet formally

recognized as such, and it could be considered to be at a relatively incipient level of development. Although social issues have been gaining importance in public policies, there is currently no clear institutional framework to support social science research that is linked to a National Development Agenda. Changing this situation requires making the social science research system visible, with its own institutional framework, clear objectives, and being identified as such by the actors that comprise it. In other words, the system will be able to consolidate and gain recognition to the extent that it has the resources to carry out its work, and as the formal and informal regulations that govern it are consciously embraced by the actors that comprise it. The system needs to have a stronger institution. This can also determine its functioning and the relationships between actors in a specific context.

Different factors affect research system performance and its effect on development through informing evidence-based public policies. These factors may be sociopolitical, economic, or derived from the international context. It is important to remember that research is not a shortcut to finding solutions to improve the quality of life and well-being in society. Rather, it is the basis for promoting an informed debate between different viable options in a particular context.

Analysis of the sociopolitical context shows that research systems in different historical scenarios have evolved according to the importance placed on the social sciences and the way they are understood by the political environment. It has also been influenced by different actors' perceptions of their role in defining policies and programs

to improve the level of well-being. In general, the institutional framework for conducting research is rudimentary, and, to date, does not, as such, recognize an ecosystem for social research. The degree to which social science research has influenced decision-makers and public opinion has varied in each political cycle, and to the extent to which there has been respect for the rule of law and individual freedoms, primarily freedom of expression. The resurgence of authoritarian traits in the present administration could translate into a setback for the autonomy and intellectual independence of social research. There was progress on these two attributes as democratic institutions were strengthened after the end of the armed conflict in the early 1990s.

The economic context provides the social science research system with the minimum conditions necessary for it to function. The R&D sector in the country is relatively small, and even more so in the social sciences. Its performance has depended on several factors that contribute to capacity building, such as investment in R&D, academic options, incentives, and job opportunities to strengthen research skills. As regards the acquisition of research skills, no clear standard of quality has been achieved, nor have these skills been strengthened throughout the educational system. Should this be achieved, it could contribute to people developing a greater appreciation for independent thinking, and the attribution of importance to research in order to solve problems that affect everyone's lives. Other factors hindering the performance of the research system include the failure to acknowledge the importance of social science research, and the lack of a national agenda for producing knowledge in this field. In addition, institutional plans and resources to develop the capacities for the production, dissemination and use of research are scarce, and the labor market is relatively restricted (limited supply and demand) for those who would dedicate themselves to research. All the above could explain why the scientific production of most research institutions may be far from reaching minimum quality standards, as well as from taking advantage of the opportunities available in the international environment to advance the social sciences.

The international environment can be a source of opportunities to nurture the national research system, as long as it has the minimum capacity to take advantage of them. In the case of El Salvador, evidence suggests that not all research institutions are able to successfully enter into international collaborative networks, exchange knowledge and manage resources to develop social science research products. Given that El Salvador's social science research system is at the initial stages of its development, it may be that connections with the international environment may not always help consolidate national capacities. Seen from another angle, such connections could work against them when unacknowledged talent is tapped, encouraging brain drain. To prevent this, the education system must strengthen English language proficiency, increase the availability of scholarships for training in the social sciences linked to attractive job opportunities, and encourage HEIs to create high-quality knowledge products.

Finally, it is important to point out that this context analysis provides glimpses into issues that, if explored further, could help to understand the determinants of the performance of the social science research system in El Salvador. For instance, there is very little information about the dissemination of research findings. It would be interesting to know the extent to which researchers develop the skills needed to communicate the results of their work to different audiences, and the use of various platforms (different types of printed or digital publications, like social media, podcasts, radio, etc.). It would also be appropriate to look into the amount of resources institutions allocate to developing and implementing communication strategies to improve the dissemination of research and its impact on public policies. In addition, it would be interesting to find out whether there are incentives and resources available to develop and update initial or continuous training programs for social scientists. At the same time, it would be valuable to examine the opportunities the labor market offers to attract and retain social science professionals who want to engage in research in the country. This would increase knowledge about the context of social science research, the factors that influence the performance of social science research systems and their contribution to democratic debate, deliberation and sustainable development, as well as the strengths and challenges of this system in El Salvador and identify possible areas for improvement.

3. Stakeholder mapping (and sample)

Highlights

- A total of 212 institutions were identified in the Salvadoran social research ecosystem, including 79 government institutions and research funders, 34 HEIs, 86 civil society actors and 13 private sector actors. Of these, 79 are considered knowledge producers, while 133 are potential users.
- In El Salvador, the actors state that they are fragmented, and that relationships are neither coordinated nor permanent. This is the explanation they provide for the lack of recognition of being part of a functional system.
- Researchers report being overloaded with work due to administrative activities that run parallel to research activities, as well as a lack of incentives to dedicate time to research.
- Researchers think that not little importance is given to social sciences in the country, and that there is no culture of social research. Similarly, they also think that there is no scientific culture or evidence-based decision-making.

In El Salvador, there is a broad group of actors who share an interest in the use of social science research findings, whether or not they are also involved in research production or funding. The objective of this report is to provide a description of this set of actors, including an overview of the macro categories of institutions that influence, are interested in, or are capable of, carrying out social science research, as well as providing an assessment of their relative importance, their limitations, and the interactions that exist among them.

This project includes several areas of knowledge within the framework of the social sciences: economics, political science, anthropology, international affairs, ethnography, demography, development, geography, education, gender studies, history, law, linguistics, management, philosophy, psychology, social work, public administration, sustainable development, public health and social medicine.

Actors were identified by reviewing the web pages and reports of different institutions. Information was requested from public institutions and other institutions by emailing their Information and Response Offices (OIR) or emailing them directly. The characterization of the actors, the relationships between them and their relative importance in terms of interest and power of influence was based on information from focus groups that included researchers from different disciplines and areas of work.

3.1. Stakeholder identification

The first step to achieve the objectives was to identify this set of actors, focusing on the institutions that were classified into one of four main categories, and these in turn were divided into subcategories. Initially, the subcategories were based on those included in the Implementation Manual (GDN 2020), 20 but some new ones were added that better reflect the real situation in the country. For instance,

²⁰ The classification follows the recommendations in the manual on the Doing Research Assessment: Extended Toolkit (December 2020).

there are business organizations that produce research and associations that use research, so these are included in the mapping. The classification categories and subcategories are

Government (public policy makers) and research funding institutions;

HEIs: public and private;

Civil society: with a distinction between producers and users:

- producers: includes the subcategories NGOs and nonprofit think tanks;
- users: includes the subcategories opinion leaders, media, nongovernmental NGOs (national and international) and associations;

Private sector (industry): private for-profit think tanks, trade unions and business sector organizations and consulting firms.

Eight HEIs that do not offer degrees in the area of social sciences were excluded. In the case of HEIs that have more than one research unit, or have public opinion polling centers, they are counted as one institution.

The process of mapping stakeholders and researchers in the social sciences benefited from the following aspects:

- CONACYT, the governmental institution that oversees research in general, including the social sciences, publishes the REDISAL register of Salvadoran researchers annually, which records the number of researchers in HEIs and some government institutions; this provided an important starting point.
- The law on access to public information guarantees the right to request and receive public information through

- the OIRs. In addition, it establishes that certain information needs to be available to the public without the need for a request. This was useful in collecting information from the public institutions included in the study.
- Prior knowledge of FUSADES and its experience in the field of research facilitated the process of identifying other institutions that also do research, or that use it to formulate public policies or design programs.
- The Implementation Manual (GDN 2019) that was provided facilitated the classification of institutions in the set of stakeholders.

On the other hand, although it was possible to access official sources of information, the information gathering process has some limitations. In general, information on the institutions' web pages is limited and inconsistent. Most do not report whether they hire researchers, or how many they hire. In order to obtain this information, in some cases, direct contact by telephone was made with fellow researchers working at the institutions included in the mapping.

There were also difficulties in preparing the list of social science researchers. Comparing the information made available online by CONACYT and in the REDISAL database, as well as the information on the websites of academic and government institutions, revealed inconsistencies in the number and names of researchers. This is, in part, because very few records on the REDISAL database are up to date through 2020. In other cases, the area of research of some researchers is not reported. For public institutions, an updated list of researchers was requested through the OIRs.

The information published by research funding institutions, the private sector and civil society through their web pages is also limited. In most cases, they do not publish the number or names of the researchers they hire, and when they do, they do not report one or more of the following data on their researchers: area of research, email, academic background, department in which they work. To resolve this, information was requested from each of the institutions in these three categories; however, not all of the institutions responded to the requests, despite having sent follow-up requests and having done so by various means, including emails and telephone calls.

Considering the abovementioned limitations, it may be that the actual number of social science researchers currently working in the institutions is different from that reported in this mapping. This information was validated during the course of this study. It is worth mentioning that this work has revealed the lack of data on the actors that make up the research system. This information gap could be filled if CONACYT or other institutions received more political backing and resources to keep information up to date on the size and scope of social science research in the country.

3.2. Key actors associated with the development of social science research in El Salvador

This section contains a general description of the actors that are part of the social research environment in El Salvador. First is the number of institutions

that have been identified to date in each of the categories and subcategories, and then the main findings on the actors that produce research.

Table 4 shows there are 212 actors linked to social science research (column 1). Seventy-nine of them are research producers (column 3) and 133 are users (column 6) and the largest number of researchers work in HEIs. Institutions known to conduct or fund research were included in the category of producers; however, it was not possible to validate the number of contracted researchers at all institutions. Of all the surveyed producer institutions, 65 confirmed that they hire researchers (column 4), while 14 institutions did not inform us of whether they hire them (column 5).

Table 5 presents a ranking of research producers according to the number of researchers they hire. The number of researchers hired was available for 54 of the 65 institutions known to hire researchers, either from direct response or what is generally known in the research environment. Of the remaining 11 institutions, two stated that they could not share the number of researchers or their contact information due to confidentiality rules. Additionally, seven institutions had no information on their websites, and although they were contacted, there was no response. Finally, during the follow-up telephone calls to complete the survey, there were researchers who were no longer working at two institutions.

Government and funding agencies

In this category, 79 actors were identified, 63 of them located in the Metropolitan Area of San Salvador; 16 institutions that hire researchers, 10 government institutions and 6 research funding agencies.

Table 4. Number of actors in the social research environment in El Salvador

	TOTAL			(1	Produc			
				(hire researchers)		cners)	Users	
Category		TOTAL	Metropol- itan Area of San Salvador	Total	Con- firmed	Did not respond*	(Do not hire re- searchers)	
			(1)	(2)	(3)	(4)	(5)	(6)
C 1	Gove agen	rnment and funding cies	79	63	23	16	7	56
	C1.1	Government	58	44	11	10	1	47
		C1.1.1 Central government	16	16	7	6	1	9
		C1.1.2 Autonomous	12	12	3	3	0	9
		C1.1.3 Decentralized	27	13	1	1	0	26
		C1.1.4 Research councils	1	1	0	0	0	1
		C1.1.5 Other government bodies	2	2	0	0	0	2
	C1.2	Funding agencies	21	19	12	6	6	9
	02	C1.2.1 Foreign	19	17	11	6	5	8
		C1.2.2 Private foreign donors	1	1	0	0	0	1
		C1.2.3 International organization	1	1	1	0	1	0
C2	High	er education	34	28	34	34	0	0
		institutions						
	C2.1	Public	5	4	5	5	0	0
	C2.2	Private	29	24	29	29	0	0
C 3	Civil	society organizations	86	62	10	8	2	76
	C3.1	Local nongovernmental organizations	6	5	3	3	0	3
	C3.2	Nonprofit think tanks	8	7	7	5	2	1
	C3.3	Opinion leaders	10	1	0			10
	C3.4	Media	46	35	0			46
	C3.5	International nongovernmental organizations	13	11	0			13
	C3.6	Workers' unions	3	3	0			3
C4		te sector (industry)	13	13	12	7	5	1
	C4.1	Private for-profit	1	13]	1	0	0
	C- 7 .1	research center		ľ	,	,	J	J
	C4.2	Private sector organizations	5	5	4	3	1	1
	C4.3	Consultants	7	7	7	3	4	0
		TOTAL	212	166	79	65	14	133

Source: Prepared by the authors based on the DRA methodology (GDN 2020) with information from the mapping.

 $[\]ensuremath{^*}$ No data provided from this institution.

Table 5. Ranking of actors producing social research in El Salvador, according to the number of researchers they hire **

Category		Producers**	Size as per number of researchers						
				1-5	6-10	11-15	16-20	>20	
C1			nd funding	14	8	3	2	1	0
	agend			10	_		_	-	•
	C1.1			10	7	1	1	1	0
		C1.1.1	Central government	6	5	1	0	0	0
		C1.1.2	Autonomous	3	1	0	1	1	0
		C1.1.3	Decentralized	1	1	0	0	0	0
		C1.1.4	Research councils	0	0	0	0	0	0
		C1.1.5	Other government bodies	0	0	0	0	0	0
	C1.2	Funding a	gencies	4	1	2	1	0	0
		C1.2.1	Foreign donors	4	1	2	1	0	0
		C1.2.2	Private foreign donors	0	0	0	0	0	0
		C1.2.3	International organization	0	0	0	0	0	0
C2	Highe	gher education institutions		32	16	10	3	0	3
	C2.1	Public		5	2	2	0	0	1
	C2.2	Private		27	14	8	3	0	2
C 3	Civil	society		6	5	0	1	0	0
	C3.1	C3.1 Local nongovernmental organizations		2	2	0	0	0	0
	C3.2	Nonprofit	think tanks	4	3	0	1	0	0
	C3.3	3.3 Opinion leaders		-	-	-	-	-	-
	C3.4	Media		-	-	-	-	-	-
	C3.5	Internation organization	al nongovernmental ons	-	-	-	-	-	-
	C3.6	Workers' ı	unions		-	-	-	-	-
C4	Privat	e sector	(industry)	2	2	0	0	0	0
	C4.1	Private for center	-profit research	0	0	0	0	0	0
	C4.2	Private sec	ctor organizations	2	2	0	0	0	0
	C4.3	Consultant	ts	0	0	0	0	0	0
			TOTAL	54	31	13	6	1	3

Source: Prepared by the authors based on DRA methodology (GDN 2020) with information from mapping.

 $[\]ensuremath{^{**}}\xspace$ This includes only institutions where the number of researchers could be confirmed.

Government institutions were classified into the following subcategories: central government, autonomous institutions, decentralized institutions, and research councils. Research funding institutions were classified in these subcategories: International institutions, local institutions and international nongovernmental organizations (see Table 4).

Public institutions (government)

The government of El Salvador consists of three branches: legislative, executive and judiciary. ²¹ The legislative branch is responsible for establishing laws, ²² while the judiciary has the power to conduct trials and hand down sentences. ²³ The executive branch comprises the president, vice president and the ministries. ²⁴

The category **central government** includes institutions that are part of the executive branch, i.e. the ministries and their departments, such as the General Directorate of Statistics and Censuses (DIGESTYC), which reports to the Ministry of Economy, and the *Colegio de Altos Estudios* Estratégicos (College of Advanced Strategic Studies), which is part of the Ministry of National Defense. Although they are part of the central government, the state

creates **autonomous institutions** to provide social services, and these are included as a separate subcategory. Decentralized institutions include the Council of Mayors and Planning Office of the Metropolitan Area of San Salvador and the 14 municipalities that make up the Metropolitan Area of San Salvador, as well as the other 12 municipalities that are departmental capitals. Finally, the **Other state agencies** include the Legislative Assembly and the Supreme Court of Justice.

Given their role in making public policy, these institutions can be considered users of research; however, some have their own intelligence units or departments where they carry out research projects to inform decision-making. These studies are produced by their own technicians or by external consultants, and as they are often treated as confidential, they are not always made available to the public. Those institutions that have research or intelligence units were counted in the mapping.

The only research council identified for the country is CONACYT, a government body. This state entity was created in 1992 and designated by executive decrees as the body responsible for implementing and executing national policies on scientific and technological development, as well as promoting innovation (El Salvador, Legislative Assembly 2013). It is under the auspices of the Vice Ministry of Science and Technology, itself part of the Ministry of Education. It has broad responsibilities and systematically monitors scientific

²¹ Article 86 of the Constitution of the Republic of El Salvador, 1983 (El Salvador, Legislative Assembly 1983).

²² Article 121 of the Constitution of the Republic of El Salvador, 1983 (El Salvador, Legislative Assembly 1983).

²³ Article 172 of the Constitution of the Republic of El Salvador, 1983 (El Salvador, Legislative Assembly 1983)

²⁴ Article 150 of the Constitution of the Republic of El Salvador, 1983 (El Salvador, Legislative Assembly 1983).

²⁵ Article 110 of the Constitution of the Republic of El Salvador, 1983 (El Salvador, Legislative Assembly 1983).

research in HEIs and government agencies. In addition, efforts are made to promote research in the country through awards and acknowledgments for researchers and the institutions in which they work. It should be noted that CONACYT does not follow up on some institutions that have intelligence units (for example, the Directorate of Intelligence and Economic Policy at the Ministry of Economy).

Researchers in the focus groups stated that although CONACYT has a long history (almost 30 years), it has had very few results and its weaknesses are little activity in social science research, no coordination of actors, and few quality standards for research. Other participants stated that they know very little about CONACYT's social science activities. They acknowledge that the budget is limited.

One of the main producers of research and statistics in the central government is DIGESTYC, which is in charge of the production of economic statistics, such as the Consumer Price Index (CPI), and social statistics such as the Multipurpose Household Survey and Vital Statistics. They have recently incorporated a gender statistics observatory.

Among the autonomous institutions, we find public institutions that have research departments, specializing in topics of interest to their respective institutions. This is the case of the Central Reserve Bank, which conducts technical economic and financial research to provide advice to government decision-making processes (Central Reserve Bank of El Salvador n.d.) and the Superintendent of Competition, whose studies identify restrictions or failures in the functioning of markets (Superintendent of Competition n.d.).

Funding agencies

Included in the category of funding agencies are international development aid agencies, which grant developing countries resources on a concessional basis for the purpose of promoting their economic development and social welfare (Ministry of Foreign Affairs n.d.). They are classified into the following subcategories: international donors, international private donors, and international agencies. The subcategory of international donors included financial agencies, such as the IDB and the World Bank, multilateral agencies like UNDP and the United Nations Children's Fund (UNICEF), development assistance country donors (government agencies such as USAID and GIZ, the German development agency). The subcategory of private donors includes institutions such as Oxfam and, finally, the category of international organizations includes the Secretariat for Central American Economic Integration, comprising seven Central American countries.

A total of 12 of these institutions were identified, but only six hire full-time researchers; the rest finance research through consultants and promote the dissemination and use of the results.

HEIs

According to the law on higher education in El Salvador, HEIs are classified into three categories (art. 22):

- Technological institutions provide training in the various science, art and humanities specializations for technicians and technologists.
- Specialized HEIs train professionals in an area of science, technology, or art.

• Universities provide academic training through study programs with multidisciplinary studies in the sciences, arts, and techniques.

These institutions can be public and private:

- **Public:** Entities governed by public law with legal status and assets in its own right (art. 26). The government funds these entities through its budget line for supporting state universities in order to promote research and any other budget line necessary to provide for and improve the country (art. 27).
- Private: Permanent and nonprofit public entities that use their assets to fulfill the objectives for which they were created and invest the rest in research, quality teaching, infrastructure and social outreach (art. 28).

There are 41 HEIs in El Salvador: 34 of them offer social studies degrees, 29 are private and 5 are public. Public institutions are the only state universities in the country, graduate schools that offer advanced technical studies, a teacher training school that is part of the Ministry of Education, and two police academies. More than 80 percent of these institutions (28) are located in the Metropolitan Area of San Salvador,²⁶ while only 6 (18 percent), are in other municipalities: one is located in the west, two in the east, and one in the north of the country.

The law on higher education of El

the functions of higher education is research,²⁷ and these institutions are required to conduct at least one study per year in each area of study they offer,²⁸ with an allocated budget, and may be supported with public and private resources.

The law allows for the creation of research²⁹ units, schools, and centers to carry out this task. Most HEIs have a research unit or department. At least nine institutions have created their own research centers, institutes, or observatories;30 four of these have a research unit and an additional research center, institute, or observatory. The latter are independent from other research units and have their own management structure; in most cases, each has a coordinator. However, there was one case in which the research director of one institution was in charge of administration for two other institutions.³¹

Three institutions had created observatories dedicated to public opinion polls and their researchers were included in the mapping. There were also at least two private universities offering the services of their Ethics

Salvador establishes that one of

²⁶ The Metropolitan Area of San Salvador comprises 12 municipalities in the department of San Salvador, plus 2 municipalities in the department of La Libertad.

²⁷ Article 3, law on higher education.

²⁸ Article 37(d), law on higher education.

²⁹ Article 23, law on higher education.

³⁰ The director of each university research unit, center, institute, or observatory was identified. Prior to conducting the Research Administrator Survey, a decision needed to be made regarding the number of coordinators to survey in cases where universities had more than one research unit, each independent of the other.

³¹ It had to be decided whether this person needed to complete a survey for each organization of employment, or they should select the most relevant

Committee to outside entities, requiring approval for their preliminary projects, and in both cases, research was in the area of health. One of these universities reported that 52 research protocols had been reviewed by its Ethics Committee in 2019.

In some institutions, the research director or coordinator also performs research duties. This role is referred to in the GDN methodology: the "research administrator" —a role that is not always performed exclusively by a single person—refers to administration activities taken on by one or more members of the research team, usually either a senior researcher or a director of a research unit. These activities are carried out alongside their research.

All universities must report the number of researchers in their institution to CONACYT. CONACYT defines researchers as professionals dedicated to the creation of new knowledge, products, processes, methods and systems, and to the management of their respective projects, who have directed or participated in the execution of R&D projects, and who belong to entities where these projects are developed (CONACYT 2019b). The database provided by REDISAL lists the names of the researchers and their academic background, but some entries omit details about their research topics. There are significant disparities in the number of researchers in HEIs; the greatest number of researchers are reported by UCA, the Pedagogical University of El Salvador, and the Catholic University of El Salvador. Although UES reports close to 100 researchers, according to CONACYT data, more than half are dedicated to medical sciences, natural sciences, agriculture and engineering.

Civil society

This category comprises nonprofit institutions.³² Most have been created under the designation of "foundation", which Salvadoran legislation establishes as those created for the benefit of the public.³³ This category is divided into two subcategories, namely NGOs and think tanks. An NGO is any organization that has not been created by a government or by an agreement between governments (Arévalo 2010). Think tanks, on the other hand, produce research and analysis, advising on provide policy matters to enable policy makers and the public to make informed decisions (McGann 2021).

There were 86 institutions included this category, with only 10 classified as research producers, namely 3 NGOs and 7 nonprofit think tanks, according to each institution's definition of itself. In terms of geographic location, all are located in the Metropolitan Area of San Salvador. Two think tanks were identified: the Latin American Faculty of Social Sciences (FLACSO) and the Central American Institute for Fiscal Studies (ICEFI), based in Costa Rica and Guatemala, respectively.

Generally, whether they are NGOs or think tanks, civil society institutions' web pages provide little or no information about their research staff. In most cases, at least one researcher was identified at each institution. The institution with the most researchers was FUSADES, with 22.

As in the case of HEIs, this category also includes some individuals with

³² Article 9, law on nonprofit associations and foundations (Legislative Assembly 1996).

³³ Article 18, law on nonprofit associations and foundations (Legislative Assembly 1996).

dual responsibilities as researchers and "research administrators."

Private sector (industry)

Thirteen institutions have been identified in this category, all located in the Metropolitan Area of San Salvador. These include four business associations or trade unions, whose research focuses on industry performance and economic analysis. Additionally, Institute for Access to Public Information records on public contracting in various institutions were reviewed and seven consulting firms were identified as recipients of contracts to conduct studies or research. However, four of these companies did not respond when asked about the number of researchers they hire.

Finally, this category included the only private research center focused on scientific research. This is the first private research institute recognized by CONACYT, and focuses on the areas of psychology, psychopedagogy and neurosciences. Research in these areas had been reserved for universities, since there are several therapeutic centers in the country, but they do not conduct research in this area.

3.3. Characterization of stakeholders and their relationships

This section provides a description of the architecture of the national research system, detailing the groups that make it work, as well as an evaluation of their relative importance, their limitations, and the interactions among them.

The actors involved in social science research can be broadly grouped into producers, users, and funders. Each actor is classified into one of these three

categories according to its primary role (Figure 2), although many actors may play more than one role. For example, think tanks are primarily producers, but also users of the research produced by other actors. The government can take on all three roles: it is a user of research produced by academia, think tanks and other actors; it is a producer of studies undertaken by some of its agencies; and it is a funder of research that it commissions from third parties.

Figure 2. Actors in the social science research system

Producers	Users	Founders
Higher education institutions	Central government	International aid agencies
Think tanks Trade associations Consultants, etc.	Other state institutionsCivil society	Other international funding agencies
	 Opinion leaders Massmedia	Private sector

Source: Prepared by the authors based on DRA methodology (GDN 2020).

In order to characterize the actors and better understand their motivations, the challenges they face, their linkages and their relative importance in terms of interest and power of influence, five focus groups were organized with researchers from think tanks, foundations, HEIs, the public sector and researchers not linked to any institution in particular. In addition, a mixed focus group was held with representatives of international development aid agencies and foundations. There were 18 participants in total.

The focus groups were governed by guidelines, with questions exploring the reasons for producing, using or financing social science research, the challenges

faced by researchers, research ethics, the existence of researcher networks in the country, the role of CONACYT, factors that influence research results, relationships among actors, interests and power of influence. The main results are presented below.

Perception of social sciences

According to the participants, there is a great deal of ignorance in El Salvador regarding the contribution of the social sciences. In general, the population is unfamiliar with their purpose, uses and relevance, and even the areas in which some professionals in these disciplines can work. This has repercussions on society's perception of the knowledge generated by the social sciences, and in turn, means that they are not valued as subjects or as activities.

"A social science researcher is considered to be a person who just gives an opinion when actually it requires lots of studying and preparation to be able to do and say certain things. I think that this is significant: we are not in a society that understands what a social science is" (Participant in focus group 2).

In addition, the participants think that in El Salvador, social sciences are not assigned much value and research is not given much importance. They add that there is no "culture" of social or scientific research, that making decisions based on research is not considered important, and there is no clear agenda for social science research.

"The country is not research-oriented, in my opinion. By that I mean we don't have that culture of making decisions based on research. So, research has a very feeble role" (Participant in focus group 5).

The state is also affected by the lack of a culture of or little interest in conducting

research. As evidence, participants point to the fact that public policy decisions are made based on outdated data; as an example, they mentioned that the last censuses were conducted approximately 15 years ago.

The lack of knowledge about the usefulness of social science research also influences the low demand by the state and by other actors for research.

"Our industry is still sometimes very short-sighted about the importance of research, and more so the state" (Participant in focus group 4).

This low demand means that in some social science disciplines, such as linguistics and history, it is more difficult to find employment as a researcher and additional activities need to be found to generate income or supplement it. In addition, it is more difficult to get involved in research projects. Sometimes these projects arise in collaborative work done by friends or acquaintances, but they are not always paid, so they participate because they are interested in making a name for themselves, or because they consider research to be important.

"Because the other issue is that you can do research, but it doesn't put food on the table" (Participant in focus group 5).

Moreover, the consensus is that the predominant perception of the social sciences is politicized. Since the topics addressed are often considered "uncomfortable" for the state, it is believed that the ultimate purpose of social sciences is to hold institutions to account and the authorities are reluctant to have their policies questioned. In some cases, this politicized view of social research may generate resistance to acknowledging its contributions.

Relationships between stakeholders

The focus group participants agree that there are interactions between the different actors who share an interest in social science research. However, this is not done in a coordinated, systematic, or permanent manner. In many cases it arises circumstantially when interests align or funds to study a certain topic become available.

"Yes, actually, there are interactions, and at a general level, I would say that no coordination is defined" (Participant in focus group 5).

HEIs interact with civil society through social outreach. They work with other HEIs as research partners. Their relationship with the private sector is research-specific, and this goes both ways, i.e. information is requested, and support is provided when requested. They also interact with research funders, which may be international development aid agencies or other actors. Respondents believed that their relationship with the central government is informal and arises when the government requests support.

As for interactions with think tanks and other actors, the respondents' perceptions differ. Some respondents pointed out that there are successful experiences of joint work between think tanks, government, trade unions and academia. However, others mentioned that each actor is protective of its own area of work and that there are barriers that hinder collaboration.

"As a researcher, I have been able to work with every [actor]: higher education, civil society, government institutions, funding agencies and the private sector... you see, institutions are very protective" (Participant in focus group 2).

On the other hand, the government interacts with the private sector and civil society, because this responds to certain needs. It interacts with international development aid agencies as a partner and also as a recipient of funding. However, it is also a user of the research produced by think tanks. The government is seen as a user and partner of HEIs. Some respondents point out that the interactions between the government and the other actors is informal; it occurs in a circumstantial and, at times, somewhat forced manner.

The perception of another group of participants is that all stakeholders interact with each other in a dynamic, complex, and multidirectional manner. This group believes that relationships should be built on the research needs of the actors; however, they believe that some actors do not "know what they need."

"I see interactions that should be less concentric, perhaps more dynamic, because the actors are interrelated... there is a [wider] relationship between all [actors in the field] and [smaller] links between them" (Participant in focus group 4).

Regarding the existence of a research system in the country, the consensus among the participants is that the actors are fragmented, that there is a lot of competition to produce studies, and that there is no consolidated system; rather, specific partnerships to carry out joint work.

"I don't think that we have a social science research system in El Salvador, because everything is fragmented, everything is dispersed" (Participant in focus group 4).

"Yes, there are institutions that do research work; eventually there may be particular partnerships on some topic or some study. But as for a network, I think it that is yet to be created" (Participant in focus group 3).

In addition, they point out that more information about CONACYT and its activities needs to be disseminated. A strategic and coordinating vision is needed to unite the actors and spread the idea that they can be part of a system.

"In part, that is because there is no vision for a system, right? No one is aware that they can be part of a system" (Participant in focus group 2).

Motivation to undertake research

There are different perspectives on what motivates actors to do research. The end of the armed conflict and the signing of the Peace Accords in 1992 marked a turning point, when research was conducted to formulate proposals for the social reconstruction of the country.

"The post-war period lent itself to social research precisely to look into the effects of the war on our society, how we were going to move forward... the motivation in the end was for the social sciences to contribute to this social reconstruction" (Participant in focus group 2).

According to the participants, motivation is linked to the objectives of the institution that conducts or finances the research. Motivations for carrying out social science research include the desire to generate knowledge, to shed light on certain issues and offer solutions aligned with real circumstances, to defend convictions from a technical and nonideological point of view, to analyze and put into practice the

work of the public sector, and to demand accountability.

Others mentioned that the interest in researching certain topics is linked to the state of events at a given moment, such as migration, sexual diversity and elections. Therefore, the research agenda could be linked to the current situation in the country or to topics that are in fashion, and not necessarily longer-term issues.

On the other hand, participants state that HEIs do not acknowledge the effort involved in doing research and that the incentive system is inadequate.

"The university might be interested in doing research, but it has budgetary restrictions and its own internal processes. Is research carried out? Yes, research is carried out, but it is often based more on people's desire to do it and beyond any economic recognition that may exist. There is no adequate incentive system, and this has been a shortcoming for decades" (Participant in focus group 1).

Common challenges faced by social science researchers

Difficulties accessing data and information

Lack of data, outdated data, and difficulty accessing data in a timely manner are other challenges about which there is considerable consensus among those interviewed.

Obtaining public information in a timely manner is another relevant issue. The country does have a law on access to public information, which, although useful, has its limitations. For example, there are delays in data delivery, and although the law establishes that institutions must systematize and make available to the public information that they produce, not all of them comply with this requirement. In

addition, they mentioned that lately there are more restrictions placed on providing information, claiming that it is "classified."

There are also difficulties accessing previous research. Respondents stated that much of the information and research has been lost due to carelessness, fire, earthquakes, or flood damage. They added that no records remain of publications made by think tanks that were active during the 1980s but have since disappeared. Sometimes information about the country is better stored abroad.

Public policy design requires a broad range of information; however, some participants believe that there is little research to inform decision-making. In their opinion, academia and research centers focus on few topics, which are addressed in a reduced and specific manner. Other limitations they point to are that some research does not address the country's main problems and that the recommendations they offer are not viable.

"When designing a public policy, a broad range of information is required. So, there is very limited information for decision-making or for the design of public policies" (Participant in focus group 5).

In unsafe contexts, where the prevailing attitude is distrust, as in the case of El Salvador, the challenge is identifying new ways of approaching research subjects and obtaining information from them.

The available social statistics are limited and outdated

The country does not have an autonomous entity that produces social statistics. The main provider of this information is DIGESTYC, which is under the auspices of the Ministry of Economy, and therefore the

scope of the topics it covers is limited, as is the updating of data sources such as censuses, and the allocation of funds to cover different needs. As a result, according to some respondents, the information available is insufficient and data is slow to be updated.

This results in other research producers seeking to satisfy their information needs by conducting their own surveys, making research more expensive, both due to the costs associated with the survey process and those associated with the lack of safety.

Limited availability of digitized reference documents

There were limitations in gaining access to original sources and making digital queries. There is no virtual library or database in the country featuring research by national authors in the social sciences that can be shared by all stakeholders (think tanks, academia, etc.). Some libraries are available, but they are outdated, have more international than national products, or the personnel have no knowledge of the documents that are stored or their location.

The lack of digitized reference documents made it difficult to continue working during the COVID-19 lockdown.

Digitization would be useful, providing access to materials in case of unforeseen circumstances such as the pandemic.

Queries could also be made more quickly and would not depend on third parties such as librarians or document managers who filter them according to their knowledge or lack thereof.

Reluctance to share information

Participants stated the issue of data access also has a cultural dimension to it. They point out that neither individuals nor

institutions—mainly public agencies—like to share information. However, it depends on the matter under investigation. At times, people are unaware of the existence of certain information or material or do not know where it can be found.

Limited funding

The general perception is that there are few financial resources available for social science research. The scarcity of resources affects the research process. For instance, think tanks mentioned that financial resources are limited and insufficient to cover some aspects related to research such as virtual library membership dues or the cost of disseminating research results.

The challenge of finding sources of funding is faced by most of the actors. The state does not allocate funds to finance research, and there is no national fund for research, nor is there a national research institute with competitive funds for research on priority issues for the country. According to the participants, the lack of funding for research is linked to the perception that the social sciences are neither useful nor important.

"I think the support also reflects the real perceived need for the research" (Participant in focus group 4).

Given the fact that institutions must seek external resources to conduct studies, research is limited to the topics that fit the agenda of those that are funding it. It is often the case that finding funding for research is difficult if it is not linked to particular projects or interventions.

"Getting funding to generate knowledge is difficult. It generally becomes easier when it is associated with a particular intervention and research appears as a complementary or parallel line of work in that intervention" (Participant in focus group 1).

International funders are another alternative for obtaining financing. However, the funds they provide for studies and research concentrate on topics that are of interest to them, influencing the El Salvador's research agenda. According to the participants, there is little flexibility to obtain funding for other topics that are perhaps more relevant to the national context.

"[Do we get to] define the agenda? No. It is more along the lines of, I have this funding for the issue of disability, for instance, a public institution wants us to see what we can do [with it], or it is focused on another issue, and there is not much freedom to define [it]. And I do not see a relationship where the public sector can ask the aid agencies, 'look, we need this, this, this and this research' and the aid agencies respond [well to it]" (Participant in focus group 5).

On the other hand, the participants mentioned that it is difficult to compete for funds abroad because the country is small and unknown in some circles, and its contribution to social science knowledge, or other areas, often goes unacknowledged.

"We are a small country; some people think it is not very relevant to the rest of the scientific community and it is hard to find our place in this environment" (Participant in focus group 4).

In addition, some external funds are restrictive as they are only available to formal institutions and are not very accessible to researchers who are not linked to an institution. For these researchers, applying for these

opportunities requires more time and effort. In their opinion, the topics of interest are already defined, and there is little room for dialogue and for establishing research priorities jointly with the public sector.

According to the participants, the resources available for funding are poorly distributed, since there are very few resources for some social science disciplines such as linguistics or history.

Finally, respondents mentioned that the pandemic resulted in more restrictions on research funding, since once the funds have been negotiated, they remain fixed. But the lockdown caused delays in meeting deadlines, which had negative impacts, for example, on payroll costs. Based on this experience, the stakeholders think that future projects should incorporate a "contingency" plan to protect funds and the presentation of results.

Specific challenges for HEIs

According to the participants, an institution's priorities determine the resources it allocates to research. They stated that, although HEIs say that they are interested in doing research, in practice it is not necessarily a priority, since they allocate few financial resources and little time to research. An additional challenge they face is that when they obtain funding from sources outside the institution it becomes part of the general fund, which means that they must go through bureaucratic processes to use the funds, and this results in delays in carrying out the research. The participants pointed out that research funds should be more flexible, in order to be able to respond in a timely manner to the needs of researchers at different stages of the research process.

Along with the fact that funds are limited, there is no adequate economic incentive system in the country. Some participants believe that this has an impact on the lack of motivation to do research, while others mention that this is more a calling than a profession.

"If people can't capitalize on the results or the work they do, well, there is no incentive, other than the subjective part, doing research because you simply want to do research... in other words, 'ah okay, I'm going to do this research and I may get a pay raise or an award for doing it, so that is how I can capitalize on it.' That never materializes" (Participant in focus group 1).

According to the participants, teachers have to spend all their time and effort on teaching, and research takes a back seat.

"The teacher is overwhelmed with so many students, so many hours, so much marking. The time [available] for research is very limited" (Participant in focus group 2).

"I think that for the most part, research is not carried out beyond, perhaps, in some cases, preparing for a course" (Participant in focus group 4).

In addition, they pointed out that HEIs do not have a research policy with defined priority areas for research. These two aspects mean that research efforts only occur based on the individuals' initiative and on a standalone basis. In their opinion, students are not encouraged to do research, and any research that is done, is limited to being a requirement for graduation.

The quality of research

According to focus group participants, researchers lack vital skills. They identified

deficiencies in their understanding of methodologies, research skills, reasoning, and knowledge of diverse schools of thought.

"I see great strength in the theoretical frameworks proposed, in the preparation of the background information. But transferring this conceptual foundation to the empirical part, and then tying this empirical part back to the working hypotheses... that is where, let's say, there is a significant deficiency" (Participant in focus group 1).

One aspect that influences these deficiencies is that the training researchers have is weak. According to the participants, the academic content of the HEIs is outdated, and they have neglected research training in favor of more "practical" subjects. Only two universities have research methods as part of their curricula, and one of them has incorporated it only recently.

Another aspect linked to quality is unfamiliarity with research ethics. According to the participants, in some cases it is a challenge to make institutions aware of the need to take ethical measures in research involving human subjects, and that this involves more than the signing of a consent form. Often including ethical measures involves added costs; however, funders may be flexible to a certain degree and assume these costs if they are considered from the outset. Respondents mentioned that the "more serious" institutions do, at least, incorporate ethics in their studies.

On the other hand, there is not a deeply ingrained culture of submitting articles or studies for peer review before publication. Some respondents pointed out that there could be a lack of technical rigor in the research and that could lead to bias.

Communicating research results in plain language that is understandable to the average citizen is a challenge for researchers.

Dissemination of research findings is limited, and it is a challenge to ensure that the population has access to the knowledge generated in the social sciences. Disseminating research results is a way to give back to those who provided information and collaborated in the research. According to the participants, there needs to be journals to disseminate the knowledge generated in the social sciences on an ongoing basis. However, they pointed out that there are currently other media available such as podcasts, websites, blogs, audiovisual material, radio, and television programs that are not being leveraged.

Power of influence and interest in social science research

In order to understand the extent of the interests and power of influence of the different actors involved in social science research in El Salvador, the participants in each focus group were asked to classify the actors within a Mendelow matrix that measures the interest that each actor has in research against their power to influence it. In addition, they were given the option of excluding from the matrix the institutions that they considered not to be so relevant to research. For this exercise, "interest" was defined as the willingness to produce, disseminate, or use social science research. "Influence" was defined as the capacity to exert positive or negative influence on social science research and its public policy applications.

The majority believed that HEIs' interest in research was low or very

low. Interestingly, even HEIs believed themselves to have low interest in research. This is because, as previously mentioned, they allocate little time and funding to research. In addition, participants pointed out that few institutions have their own research centers which shows, in practice, that their interest is low (see Figure 3, Figure 4 and Figure 6).

"There are really very few universities that have consolidated research centers. Some have new research centers, [and] they are making many contributions, but I believe that there is always an objective of profit for everything [carried out] in the universities."

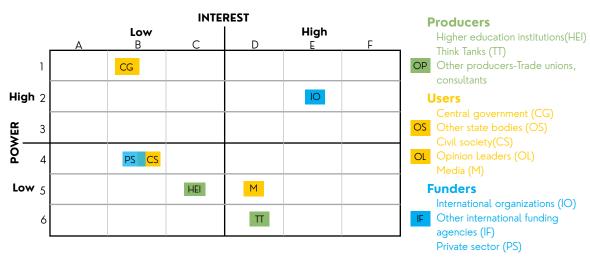
(Participant in focus group 2)

However, the participants in the mixed focus group and those from the public sector stated that in their opinion, HEI interest in research is relatively high, concentrating on certain topics but neglecting others that are not on their agenda, although they are in agreement regarding the scarcity of resources for conducting research (see Figure 5 and Figure 7).

With respect to power of influence, the general consensus is that HEIs have little power to influence public policies, which is evident in the fact that although much of the work they do has an impact or gets a reaction from the population, this lasts a short time and is quickly set aside. Respondents also noted that the government currently shows little willingness to adopt the results of research produced by HEIs and other actors (see Figure 3 Figure 4, Figure 6 and Figure 7).

"At this time, the government is not very willing to run with what the think tanks [suggest]; universities can make proposals based on research to guide the government's activities" (Participant in focus group 1).

Figure 3. Actor classification by interest in and influence on social science research: HEI focus group

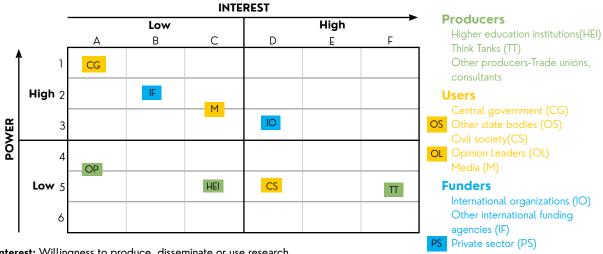


Interest: Willingness to produce, disseminate or use research.

Power: Ability to positively or negatively impact social science research and its application in pubic policies.

Source: Prepared by the authors based on the focus group discussion with HEI researchers.

Figure 4. Actor classification by interest in and influence on social science research: think tank focus



Interest: Willingness to produce, disseminate or use research.

Power: Ability to positively or negatively impact social science research and its application in pubic policies.

Source: Prepared by the authors based on focus group discussion with think tank researchers.

Think tanks are perceived by the majority of the respondents as actors with a high interest in social science research, with the exception of independent researchers because they work in research, and because of their strong capacity (see Figure 3, Figure 4, Figure 5 and Figure 7). However, the majority also believe that their power of influence is very low (see Figure 3, Figure 4, Figure 6 and Figure 7). According to the respondents, think tank legitimacy is currently under attack by the state, which refuses to recognize them as generators of knowledge, and is not open to using the results of their research.

"Currently, I think that think tanks are facing a crisis of legitimacy, due to this government. It's all to do with the opposition parties. Any assessment that they make" (Participant in focus group 2).

Other research producers (trade unions, consultants, etc.) are perceived as having low interest in research by think tanks and the public sector (see Figure 4 and Figure 7). However, independent researchers

think that the interest and influence of other producers, particularly certain trade unions, is relatively high, as they organize themselves to find spaces to publicize their research work (see Figure 6). However, the broader consensus is that their influence is low or intermediate.

"I think that most of the research processes, and things like them, and the most innovative ones, have been carried out in their sectors in recent years" (Participant in focus group 4).

There is a general consensus that the interest the central government has in research is very low. According to participants, this low interest is reflected in the fact that there is no evidence that the measures they implement are based on technical criteria. Respondents believe that the government does not attribute any importance to technical knowledge in the development of public policy, and that it is not interested in science in itself, but rather in seeking answers or solutions to some of the challenges it faces. They also mentioned that the government is

most interested in those results that support its aims. Finally, they mentioned that no funds are allocated to updating data sources, such as censuses, which provide important inputs for research and public policy making (see Figure 3, Figure 4, Figure 5, Figure 6 and Figure 7).

"We are faced with a government that does not like [to use] technical knowledge to develop public policy. It does not seek to clearly establish technical criteria to make decisions about one measure or another" (Participant in focus group 2).

"If the research is convenient, it will be used; if it supports their causes, they will say yes. But not if it goes against them" (Participant in focus group 1).

Regarding the government's influence, the majority of respondents said it had a high or very high level of influence because, according to them, when they want something done, it is done (see Figure 3, Figure 4, Figure 5, Figure 6 and Figure 7).

"Well, yes, it is high [power] and it pains me that it is so high... but we are accustomed to decisions being kind of centralized" (Participant in focus group 4).

In addition, the participants believe that the central government also indirectly influences the research agenda of other stakeholders, because it "forces" research centers and the population to follow up on issues related to the public policies it promotes.

"I think it encourages research in a particular way, because the current government comes up with all sorts of notions. So, it makes people go out and do research and gets research centers to follow up on certain topics. For example, when Bitcoin was announced. I don't think anyone knew much about

that matter a couple of months ago, but now the research centers are providing their opinions; opinion leaders are researching it" (Participant in focus group 3).

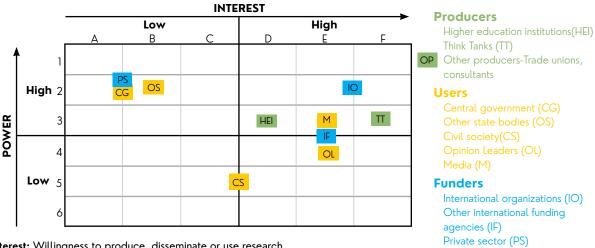
The participants of the mixed focus group, which includes funders and the public sector, believe that the **other** state institutions³⁴ have a low interest in research, although not as low as the central government (see Figure 5 and Figure 7). However, they clarified that institutions in this category are diverse, and those that are technical in nature have a strong interest in research. They also mentioned that their interest is limited to certain topics. Conversely, independent researchers stated that other state institutions have a relatively high interest (see Figure 6). The participants agreed that their influence is relatively high, especially within the scope of action of each institution; for instance, the power of influence of municipalities is high at the local level.

"Here it gets really unequal; for instance, OPAMSS [the Planning Office] actually needs scientific information for the work they are doing. For instance, the Superintendent of the Financial System should be extremely interested" (Participant in focus group 3)

There was no consensus regarding the degree of interest **civil society** has in research. HEIs, independent researchers and the mixed focus group consider the group to be diverse, and believe that, in general terms, it does not acknowledge the importance of research, but that civil society seeks out research when the

³⁴ Only three focus groups classified other state institutions in the chart.

Figure 5. Actor classification by interest in and influence on social science research: mixed focus group (including funders)



Interest: Willingness to produce, disseminate or use research.

Power: Ability to positively or negatively impact social science research and its application in pubic policies.

Source: Prepared by the authors based on focus group discussion with mixed group.

topics are on its agenda. For this reason, they rate its interest between low to medium (see Figure 3. Actor classification by interest in and influence on social science research: HEI focus group, Figure 5 and Figure 6). The public sector, on the other hand, believes that civil society's interest is relatively high (see Figure 7).

"My perception is that civil society looks for specific things that it demands. They tend to be good recipients if there is a shared agenda" (Participant in focus group 3).

Most think that civil society has limited influence on national policy, because the state has labeled civil society as the "opposition" (Figure 3, Figure 4, Figure 5 and Figure 6). However, it has strong influence over local politics, or in a community in which it is working (see Figure 7).

"Little power to exercise [its influence], let's say, on a national scale. But it does have it on a small scale, in a community, in a municipality where

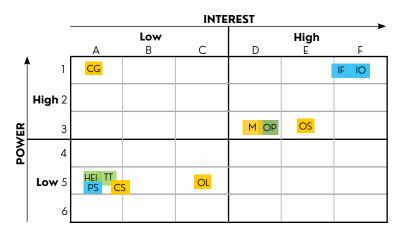
it's working; it has the power to use the information to implement things" (Participant in focus group 5).

The consensus is that media outlets have a relatively high interest in research, because on occasion they consult experts to back up their reports. Some media outlets carry out journalistic investigation, while others do their own surveys and use their own measurements (see Figure 3. Actor classification by interest in and influence on social science research: HEI focus group, Figure 5, Figure 6 and Figure 7). On the contrary, the think tanks assign them a low interest level, indicating that the media limit their efforts to certain topics that fit their agenda (see Figure 4).

"By their own contacts, at times, who seek them out to get an opinion, to support the OpEd column or news reports" (Participant in focus group 1).

Independent researchers, think tanks and the mixed focus group believe that the influence of the media is relatively high because they are able to generate

Figure 6. Actor classification by interest in and influence on social science research: focus group with independent researchers



Producers

Higher education institutions(HEI) Think Tanks(TT)

OP Other producers-Trade unions, consultants

Users

OS Central government (CG)
Other state bodies (OS)
Civil society(CS)

OL Opinion Leaders (OL) Media (M)

Funders

International organizations (IO)
Other international funding
agencies (IF)
Private sector (PS)

Interest: Willingness to produce, disseminate or use research.

Power: Ability to positively or negatively impact social science research and its application in pubic policies.

Source: Prepared by the authors based on focus group discussion with independent researchers.

discussion among the population on certain topics, and also, in certain circumstances, they become platforms to expose issues. On the other hand, HEIs and the public sector consider the media to have low influence.

"because at least they get the population talking, even if it is a small sector, but they get them to talk about research that can be done, or about transparency, or certain issues, which also helps us as social science researchers" (Participant in focus group 2).

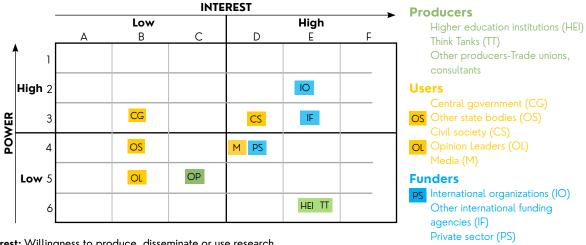
The participants of the mixed focus group maintain that **opinion leaders** have a high interest in using the results of research. However, they pointed out that some leaders have a political agenda (see Figure 5). The public sector and independent researchers believe that some opinion leaders misinform the population, and so they believe that their interest is relatively low (see Figure 6 and Figure 7). In all cases, they were thought to have relatively low influence.

The general opinion is that **international organizations** have a high interest in research. Evidence of this is the large amount of research they finance (see Figure 3, Figure 4, Figure 5, Figure 6 and Figure 7). However, the participants noted that their interest is in issues that fit the agenda that is established at their headquarters. In general, they are assigned a fairly high power to influence public policies, mainly on issues where their interests coincide with those of the state.

"Because if the international organization is in a government program, its influence increases. But if it is part of an organization that is looking at accountability issues, it practically drops to the bottom" (Participant in focus group 2).

Regarding the other **international funders**, most of the participants believe that their interest is almost as high as that of the international organizations. This is because they do some research and disseminate it. They are also sponsors of research and projects which they monitor

Figure 7. Actor classification by interest in and influence on social science research: public sector focus group



Interest: Willingness to produce, disseminate or use research.

Power: Ability to positively or negatively impact social science research and its application in pubic policies.

Source: Prepared by the authors based on focus group discussion with public sector personnel.

(see Figure 5, Figure 6 and Figure 7). However, think tanks believe that their interest is low because they only focus on certain topics (Figure 4).

"They are project sponsors; they have a little more power, especially with all the follow-up work and monitoring and evaluation that they are able to do" (Participant in focus group 5).

"I saw that they were not really interested in research topics as such, but rather in more social topics, such as gender equality and gender identity issues. Otherwise, in terms of scientific research and law, in our case, which is what we see, we did notice a rather low level of interest" (Participant in focus group 2).

Regarding other international funders, the perception is that they have influence, particularly when they have a representative office in the country. However, their influence is not as high as that of international organizations.

Most participants believe that the private sector has little interest in research

because their interest is limited to the topics that relate to their particular needs (see Figure 3, Figure 5 and Figure 6). Most participants think their influence is also low because as previously mentioned, the current government shows little interest in using research in public policy design (see Figure 3, Figure 6 and Figure 7).

"In general, when private sector institutions finance research, it is because they have something to gain from it; because they need something" (Participant in focus group 1).

Role of CONACYT³⁵

Researchers interviewed are of the opinion that CONACYT is more focused on the hard sciences, so its involvement in activities related to the social sciences is limited.

³⁵ A request was made for an interview with CONACYT to learn about its role in the social sciences and the challenges it faces. CONACYT offered to fill in a questionnaire, and at the time of writing this report, the response had not yet been received.

"I actually know very little about CONACYT; what I mean is, I know it has done things, but it seems to me that very little is done in the field of social sciences" (Participant in focus group 4).

Among the CONACYT activities they are aware of, they mentioned training, project implementation (without specifying areas) and the promotion of scholarships to study abroad.

"What you can see is that there is a kind of prompting to participate in international projects and scholarships, but it is subtle." (Participant in focus group 4).

Some participants feel that the institution's activities are concentrated in the capital city, and that other parts of the country are excluded. They think that the scope of its work is limited due to a lack of resources.

"You can see that it is very much focused on the area of San Salvador, on the capital. So here in the east of the country, sometimes, it is as if we get a little bit left behind" (Participant in focus group 1).

Participants think CONACYT should lead a process to define research priorities at the national level and do so in consultation with the public sector and other research stakeholders. However, they do not believe that it is doing so.

"I think CONACYT is disconnected from national-level priorities... [there is] no culture around defining priorities with governmental institutions. For instance, analysis of national program plans that need monitoring and evaluation (Participant in focus group 5).

In addition, given that funds to finance social science research are limited,

participants mentioned that CONACYT should make these funds available for research.

"One would hope that [CONACYT] would promote some kind of research competition, [that it] would have funds to award to the best projects" (Participant in focus group 1).

On the other hand, participants see the need for an institution that focuses on the social sciences to organize the country's research needs. This institution should coordinate and promote research efforts between academia, the state and other actors. This institution should define research priorities by consulting with public and private actors, promote research in the identified areas with competitive funds, and publicize the priorities among international funders so that they grant funds for use in those areas. However, they commented that, at present, it does not seem feasible for the government to promote such an institution. Participants are of the opinion that the role of CONACYT should be reviewed, and it should be assessed to determine whether it could take on this function. Regardless of whether it takes this role on, participants believe that the institution needs to renew and strengthen its human, financial and communication resources.

Regarding REDISAL, which is managed by CONACYT, most of the respondents said they had not heard of it. Those who did know about it, or had heard of it, stated that although it is a valuable effort, it is weak, especially financially, and received very little promotion, and that is why many do not know about it.

"CONACYT does not publicize it enough. I don't know if that's the right word. Promote the way it works and how you can be part of the network of researchers. So, what happens? People have the impression that there is no such thing" (Participant in focus group 2).

In addition, there is a perception that REDISAL is not fostering relationships and collaborative work among researchers.

"There is just no communication... The goal of a network is to promote the relationship between individuals who are working on similar areas or similar topics. But the truth is that there is none of that" (Participant in focus group 1).

3.4. Actors associated with research

This section covers the process of preparing the list of people involved in social science research in El Salvador, associated with the institutions identified and classified in the four categories: HEIs, government and funding agencies, private sector, and civil society. This list is considered the sampling framework, which will be used to select the sample to administer the surveys to researchers, research administrators or users in the public policy community.

Preparation of the list of social science researchers (sampling framework)

As mentioned, the preliminary list of actors was obtained by reviewing the available sources. This included the web page and most recent documents published by CONACYT with information on the scientific research capabilities of certain research institutions among state, public and private HEIs. The information collected by CONACYT includes research in areas beyond the interest of this study, such as natural science,

agriculture, engineering, and technology. Therefore, the researchers in these areas were excluded. Researchers in the health sciences were also excluded, except those doing research in the areas of public health and social medicine, which were included as part of the mapping.

Institutions not registered by CONACYT were included in a preliminary list of organizations that was based on FUSADES' experience, knowledge, and previous collaborations with other institutions. This list was shared with other FUSADES researchers in the social, economic, legal, and political areas so that they could help us identify those that had been left out. In addition, support was requested from the FUSADES communications area to help identify media and opinion leaders that were not on the preliminary list.

Based on the revised list of actors, a table was prepared with the following information on the institutions:

- Name.
- Geographic location.
- Whether the institution hires researchers (Yes/No).
- Number of social science researchers hired.
- Brief description of the institution and its research work.
- Unit(s) within the institution that conduct research. A search was also carried out for research centers, observatories, public opinion institutes, Ethics Committees, etc., associated with HEIs.
- Areas or topics of research.
- Contact information (research unit managers, public information offices, reference personnel, etc.)
- Web pages.

In addition, there was a preliminary prioritization of actors who could be interviewed for a more in-depth look at the results of the surveys of researchers and research administrators.

Once the list of actors had been drawn up, the database of researchers associated with the institutions classified as research producers began to be constructed. This information was obtained from various sources:

- Review of the REDISAL web page that is operated and updated by CONACYT.
- The details of the REDISAL researcher database were requested from CONACYT, and the following information was provided: given name, family name, email address, sector of employment, place of work, academic degree, area of research, date of last update. However, in some cases the academic degree, area of research and date of update were not included in the database.
- Review of government institutions' websites, and those of aid agencies, HEIs, NGOs, think tanks, media, business associations and trade unions.
- Since the web pages of the institutions that are not in the REDISAL database do not show information on their staff, emails were sent requesting the following information about their researchers: name, position, research area, unit or department, type of contract (permanent or temporary), email address and telephone number. However, not all the institutions provided the information. Some argued that their confidentiality policies prevented them from doing so; others did not respond to the emails, even

though they were contacted on several occasions to follow up on the request.

Sampling framework for the application of the surveys

The sampling framework for the surveys is composed of the complete list of researchers, administrators or users that could be identified for each of the categories and subcategories.

Initially, 598 researchers were identified. This was the starting point for the survey. However, during the telephone followup process undertaken to verify the completion of the survey, people were reported as ineligible for the survey, 12 did not work in the field of social science, 74 were no longer at the institution, and 63 were non-tenured faculty members. This makes for a total of 149 instances that were excluded from the initial number. In addition, for confidentiality reasons, no contact information was provided for 15 researchers, making it impossible to contact them. These cases were discounted, leaving a sample of 434 researchers (see Table 6).

At the same time, research administrators were identified. In the case of HEIs, REDISAL data were used to obtain the name and contact information of the person in charge of the research units, and then validated by telephone. For the rest of the institutions, information was collected and validated by various means mentioned in previous sections of this document. A total of 75 research administrators were identified (see Table 6).

Similarly, a list was put together with the potential users of social science research belonging to government institutions, international institutions, and other actors included in this study. The survey was sent to 143 people, in some cases to more than one person within the same institution.

Table 6. Classification of researchers and administrators that are part of the sample, by category and availability of contact information

Cate	gory		Produc- ers**	Coordinators 1_/	Researchers identified	Researcher contact information
C 1	Gove	nment and funding agencies	16	14	97	82
	C1.1	Government	10	10	68	53
		C1.1.1 Central government	6	7	26	26
		C1.1.2 Autonomous	3	2	37	22
		C1.1.3 Decentralized	1	1	5	5
		C1.1.4 Research councils	0	0	0	0
		C1.1.5 Other government Bodies	0	0	0	0
	C1.2	Funding agencies	6	4	29	29
		C1.2.1 Foreign donors	6	4	29	29
		C1.2.2 Private foreign donors	0	0	0	0
		C1.2.3 International organization	0	0	0	0
C2	Highe	r education institutions	34	48	322	322
	C2.1	Public	5	13	76	76
	C2.2	Private	29	35	246	246
C3	Civil 9	society	8	6	25	25
	C3.1	Local nongovernmental organizations	3	3	3	3
	C3.2	Nonprofit think tanks	5	3	22	22
	C3.3	Opinion leaders	0	0	0	0
	C3.4	Media	0	0	0	0
	C3.5	International nongovernmental Organizations	0	0	0	0
	C3.6	C3.6 Associations		0	0	0
C4	Privat	e sector (industry)	7	7	5	5
	C4.1	Private for profit research center	1	1	0	0
	C4.2	Private sector organizations	3	3	5	5
	C4.3	Consultants	3	3	0	0
		TOTAL	65	75	449	434
TOT	AL EXC	LUDED			149	
Not	eligible	to fill out survey			12	
	•	the institution			74	
Non-	-tenured	faculty member			63	

Source: Prepared by the authors based on DRA methodology (GDN 2020) with information from mapping.

^{**}Includes only institutions confirmed to hire researchers.

¹_/ Includes administrators of public opinion or research centers that are part of universities. In the case of public universities, it included administrators of research units in the faculties included in the GDN definition of social sciences. When central government institutions reported having more than one research unit that does not operate in the same area, all administrators were included.

Survey results

The survey was administered online, and was sent to all the researchers, administrators, and policy makers whose contact information was available. The three survey questionnaires (for administrators, researchers, and the public policy community) were online for a period of approximately four weeks. In addition, the period for receiving responses was extended on three occasions in order to achieve a higher response rate. At the same time, reminder emails were sent to those who had not completed the survey and phone calls were also made to confirm that they had received the email, and to remind them to complete the survey.

Some 64 percent of the identified research administrators completed the survey. The majority of those who responded are from HEIs. A total of 10.7 percent of the administrators were classified as refusals, i.e. they chose not to participate in the survey. Of this group, three people said they did not have enough information to fill it out and the rest did not specify the reason. Finally, it was not possible to contact and send reminders to 25.3 percent of those who did not respond to the survey, or to ask them why they had not done so, despite

having sent several emails on different occasions and made phone calls on different days and at different times (see Table 7).

Approximately 45.2 percent of the identified researchers responded to the survey. As in the previous case, the majority of those who responded belonged to HEIs. A total of 5.1 percent of the sample said that they did not want to respond to the survey (refusals). Researchers from a government institution said that only the head of department could fill out the survey, and other researchers said they were not interested or gave no reason. A total of 49.8 percent of the sample did not respond to the survey and could not be contacted personally, so a personal reminder was sent by email, and it was not possible to ask them why they did not fill it out (see Table 7).

A total of 18.2 percent of public policy makers and other potential users responded to the survey. A total of 10.5 percent were refusals, i.e. they expressed no interest in completing the survey, and they did not specify a reason. The remaining 71.3 percent did not complete the survey and could not be contacted during the follow-up period (see Table 7).

Table 7. Results of the data collection

		Researchers			Administrators			Public policy community		
		Completed	Reject- ed	No con- tact ¹	Completed	Reject- ed	No con- tact ¹	Complet- ed		
C1 Government and funding agencies		23	4	55	6	2	5	12	5	53
C1.1	Government	19	3	31	4	2	4	9	4	45
	C1.1.1 Central government	5	2	19	1	2	4	4	2	22
	C1.1.2 Autonomous	10	1	11	2	0	0	3	2	7
	C1.1.3 Decentralized	4	0	1	1	0	0	0	0	1
	C1.1.4 Research councils							0	0	1
	C1.1.5 Other government Bodies							2	0	14
C1.2	Funding agencies	4	1	24	2	0	1	3	1	8
	C1.2.1 Foreign donors	4	1	24	2	0	1	3	1	7
	C1.2.2 Private foreign donors	0	0	0	0	0	0	0	0	1
C2 Higher education institutions		154	18	150	34	4	10			
C2.1	Public	29	3	44	10	1	2			
C2.2	Private	125	15	106	24	3	8			
C3 Civil society		18	0	7	3	1	2	13	10	49
C3.1	Nongovernmental organizations	3	0	0	2	0	1		1	2
C3.2	Nonprofit think tanks	15	0	7	1	1	1	1	1	0
C3.3	Opinion leaders							2	2	2
C3.4	Media							6	6	37
C3.5	International nongovernmental organizations							3	0	6
C3.6	Workers' unions							1	0	2
	ivate sector	1	0	4	5	1	1	1	0	0
(industry)		_		_	_		_			
C4.1	Private research center	0	0	0	1	0	0			
C4.2	Private sector organizations	1	0	4	2	0	1	1	0	0
C4.3	Consultants	0	0	0	2	1	0			
General Total		196	22	216	48	8	19	26	15	102

Source: Prepared by the authors based on DRA methodology (GDN 2020) with information from surveys administered as part of this project.

l_/ Unable speak to these people because they work from home/are only contactable via email/were busy/could not take the call/we had the wrong telephone number/there was no answer/the call went to voicemail/ the phone number does not exist/no phone number was available.

3.5. Considerations from stakeholder mapping

- Currently, the prevailing opinion is that there is a need for greater coordination and promotion of social science research efforts between academia, the state and other actors. Although an institution is considered necessary to take this role, it is not considered feasible for the government to promote this initiative. The only public institution with a similar role is CONACYT, and its work is focused on HEIs, and on the work of some public institutions. Those who were interviewed for this mapping and belong to other types of institutions think that there is an evident lack of coordination between all the actors that do research.
- The role of research director or coordinator is usually one of the researcher's functions. It was found that the "research administrator" role in the GDN methodology is not always performed by a single person, as administrative activities are taken on by one or more members of the research team, usually a senior researcher or the head of a research unit, who perform these activities alongside their research tasks.
- There is no unified register of people working as social science researchers in the country, and the little information that does exist is not easy to access. Although there are professional researcher networks, such as REDISAL or REDIBACEN, they have at least two limitations, namely that they are not kept up to date and they are not available to the public.
- The number of persons involved in social science research is

- underreported, because there is no unified register of them, the information is not generated regularly, nor is it available; and affiliation to existing researcher networks is on a voluntary basis.
- The researcher networks that were available were not updated, and the number of researchers in the social sciences was overreported. For instance, the databases showed at least three professors and researchers from different universities who stated that they have not been involved in research for more than three years. There are also professors who are not full-time HEI staff (i.e. they are untenured) and therefore it is unclear whether they are involved in research.
- The sample also had to be reduced because there were instances of researchers who had initially been linked to one of the institutions but were no longer working there at the time of the survey.

3.6. Conclusions

In El Salvador, there is an extensive group of actors (producers, users, and funders) involved in social science research, whose interactions with each other are not coordinated, systematic or permanent, and according to respondents, they do not function as a research system.

Even though CONACYT exists, which, according to its mission, could play a coordinating role among different actors in social science research. It focuses on HEI and some government entities. In addition, the researchers know very little about activities it may carry out in the social sciences. Therefore, the council needs to strengthen its strategies to communicate its social science activities,

and to disseminate information among actors who are less familiar with its work, like civil society and the private sector.

There is also no institution in charge of maintaining a registry of all researchers in the country, nor is it possible to create one with the available sources of information. There are some researcher networks, such as REDISAL, which is coordinated by CONACYT, but because membership is voluntary, there are no exhaustive records, and social science researchers know little about these networks.

Social science research faces several challenges. First, access to data and information is laborious. Given that social statistics are limited and take time to be updated, and few sources of reference or documents are digitized and accessible online, it is increasingly difficult to obtain public information, and public institutions and other actors appear to be reluctant to share information. Furthermore, researchers seem to lack certain skills, for example, conducting research, rigorously applying scientific methods and writing for scientific journals in English, among others inherent to those who practice this profession.

Two challenges that affect the degree to which research influences public policy are unfamiliarity with the usefulness of social sciences, and limited financial resources. The general lack of familiarity with the usefulness and importance of social sciences leads to their contributions being little appreciated, and, therefore,

there is little interest in using social science research for decision-making. This lack of interest in applying research results is observed in the state, and among other actors that could demand or contract research as well. In addition, this lack of interest has a bearing on the fact that no National Research Agenda has been defined with the participation of all stakeholders.

Financial resources for research are limited, and this affects various stages of the process, such as paying for access to online libraries, remuneration for researchers, and dissemination of results. The lack of sufficient resources puts producers in the position of having to search for funds, which has an impact on the research agenda since, to a large extent, they must adapt to the issues and areas where funding is available. International funders play an important role in terms of financing; however, the topics they want to finance do not always match the needs of the country. Although the state contracts some research on issues in which it is interested, it does not have competitive funds that other actors can access.

Regarding interest in research and power of influence, there is a broad perception that think tanks have a high interest, but at this time, little influence. On the other hand, HEIs perceive themselves as having low interest and low influence, as do other actors. Central government is considered to have significant influence, but low interest, while international funders have high interest and also high influence.

4. DRA Framework

Highlights

- A El Salvador has been relatively effective in developing basic skills for the production of social research. There is a sector dedicated to these activities, composed of diverse actors, but it is concentrated in the Metropolitan Area of San Salvador limited to a few institutions.
- Limitations for conducting research in the country include restrictions on access to information, limits on time available for research activities, deficient training, and low investment, as well as a weak culture of research.
- The skills and resources available
 make it easier to share knowledge
 among research professionals than
 with the general public. In order to
 create public awareness, political
 discourse and activism, results need
 to be communicated in simple
 language, and the communication
 channels that are used need to
 coincide with those consulted by the
 population.
- There are indications that some researchers work in collaboration with policy makers. However, the extent to which the results of the studies are used in public policy is not clear.

4.1. Research production

The process of producing social science research requires that institutions and researchers have diverse inputs and that they carry out both administrative and research activities. With this in mind, this section looks into how effective El Salvador is in the production of social research, and the main challenges and opportunities it has. This involves

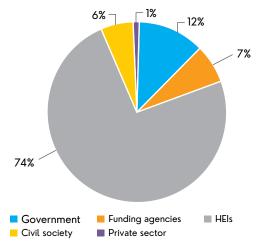
exploring the different aspects that influence production and how robust it is.

Research inputs

Economic and sociopolitical conditions have influenced the country's capacity for research over time, such that it has the basics mastered. Although there is no exact record of the resources available for producing social research, there is information available that makes it possible to characterize them.

First, the evidence consistently shows that the sector is relatively small. The mapping identified 434 social science researchers, equivalent to 140 per million economically active people. There is also a variety of types of research actor (see Chart 1). Three out of four social science researchers are in HEIs. The government comprises 12 percent, including central government, autonomous and decentralized institutions. Participation by funding agencies, civil society and the private sector is low; this mainly includes international donors, think tanks, NGOs, and private sector organizations.

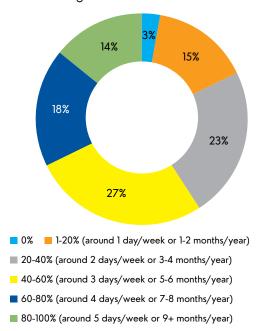
Chart 1. Social science researchers



Source: Prepared by the authors with data from the mapping done for this project.

As for the capacities of the human resources, there are limitations, notably, a lack of sufficient time for research activities and deficiencies in their training. On the one hand, time and workload limit the research activities that some actors can undertake, particularly those in government, funding agencies and HEIs (Chart 2). On average, researchers spend between 40 percent and 60 percent of their time on research, except for those in civil society who are in the 60 percent to 80 percent range and those in industry in the 20 percent to 40 percent range. Most of the latter two categories of actors think the time spent on research activities is sufficient; however, less than a third of government, funding agencies and HEI researchers consider it sufficient.

Chart 2. Average time allocated to research activities

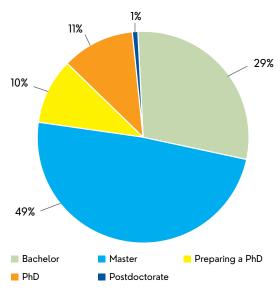


Source: Prepared by the authors with data from the survey conducted as part of this project.

Training seems to impede the adoption of the skills necessary for effective production of social science research. According to Chart 3, most of the researchers interviewed have a master's degree (49 percent) or an

undergraduate degree (29 percent). Experts interviewed pointed out that research skills are insufficiently developed during undergraduate studies and that at the graduate level there are gaps in the quantity and quality of study programs. In fact, the focus group participants reported deficiencies in the use of methodologies, research skills and the proficiency in diverse schools of thought. This could be attributed to the limitations of the academic options, with outdated content and the lack of research training. They also reported that there is little knowledge of research ethics, little culture of peer review and difficulties in communicating research results in a simple manner.

Chart 3. Social science researcher training



Source: Prepared by the authors with data from the survey conducted as part of this project.

Beyond human resources, infrastructure and institutional capacities facilitate the production of social science research, but there are also restrictions on the availability of and access to information. The researchers interviewed expressed slight satisfaction with the effectiveness of research infrastructure in terms of resources, institutions, and equipment

(workspace, computers, technical support, statistical programs, antiplagiarism programs, internet access, etc.). Although they expressed the same level of satisfaction with the accessibility, diversity, and quantity of information, there are significant challenges in this regard. Problems with data and information include data that simply do not exist, and where they do exist, they are outdated; difficulty of access, particularly public information that is classified; delays in delivery; and lost historical research. These issues can affect knowledge production, debate on the issues, and the design of evidence-based public policies or programs. Respondents also note that production of social statistics is insufficient and sporadic, because the main provider does not generate information on all social issues or in the required form. Other issues include the limited digitalization of sources and the reluctance to share information. For instance, only half of research products available online are free of restrictions on access and use.

In terms of financing, in general, El Salvador invests very little in R&D. According to United Nations Educational, Scientific and Cultural Organization (UNESCO) data, the average gross expenditure on R&D as a percentage of GDP was 0.16 in El Salvador, while in Costa Rica it was 0.38. The amount of investment in social research is even lower; for instance, according to CONACYT data, in 2018, out of every \$100 USD invested in R&D, about \$40 USD were allocated to social sciences, both in HEIs and in government. UNESCO recorded an average gross expenditure of \$44,470 USD per researcher in social sciences. However, we do not have the information needed to make comparisons between countries and better understand the magnitude of this investment.

Certainly, the limited availability of funds influences research production, just as the priorities of the producer institution determine the resources allocated. In the focus groups, it was mentioned that, although HEIs express interest in research, in practice it is not necessarily a priority, since few financial resources are allocated, and little time scheduled to carry it out. Moreover, along with limited funding, there is no adequate system of economic incentives for the profession. Some researchers felt that this has an impact on the motivation to study and do research and, therefore, to some extent, decreases the supply and demand of social research.

Research culture and support services

In El Salvador, there does not seem to be a strong culture of social research. Although the legal framework mentions a functioning system, it is not specific to social sciences or exclusive to research activities, and some researchers did not express that they were part of a formal system. Undoubtedly, this environment also directly affects the production of social science research and the acknowledgment of the importance of using it as a basis for defining public policies to promote development. In this regard, one focus group participant stated the following:

"There is a resistance, first to acknowledge the importance of the social disciplines and, second, to support efforts that allow these disciplines to make contributions to the understanding and functioning of society in general."

HEI participant)

Although multiple actors are involved, they are not involved in any coordinated or systematic manner. Furthermore, there seems to be no clarity regarding the existence and functioning of a social science research system, nor a solid institutional framework to support it. Most of the actors who produce research say there is no national agency directing social science research, some say they do not know, and others state that there is one. In fact, half of the researchers and research administrators stated that there was no such agency. Those who acknowledged its existence believe it is slightly effective in providing norms and standards, guidance, tools, forums, ethical reviews, and policies. Although it is not known which institution these actors consider to be the coordinating body for social science research, the only body with a similar role is CONACYT. However, its work in the last 30 years has focused only on HEIs and some government entities. Therefore, it does not monitor the participation of all the actors considered in this analysis. In addition, it has achieved few results and is weak in terms of activities related to social science research, coordinating between actors, and developing research quality standards. Similarly, 58 percent of researchers and research administrators stated that there are no policies related to social science research. However, there are some who say that a policy does exist but rated it only slightly effective in communicating the strategy and purpose, aligning it with priorities, promoting social research, getting financing, defining processes, supervising, and organizing ethical reviews.

Not recognizing an institutional framework in charge of social research, and the lack of clarity in this regard, could have an effect on the scope of the research efforts of the different actors and may limit their work. Certainly, it is timely to discuss the need for a framework, or a partnership of institutions to develop a vision, mission, strategy, and research agenda, as well as the type of policies and protocols that would work for a social science research system. Given this environment, it is not surprising that the level of interest in research, and power to influence public policy, differs among producing institutions and varies according to their respective perceptions. In fact, this could limit opportunities to invest according to priorities in a social research agenda, develop programs that provide reliable and periodic information, and foster the necessary conditions for knowledge exchange and informed decision-making. In this regard, some stakeholders find it difficult to find this strategic vision in the country's current political context, where there are issues around transparency, access to information, freedoms, and other aspects. Respect for rights and freedoms, such as freedom of expression, assembly, and academic freedom, are fundamental conditions for the production of research.

On the other hand, the soundness of the research output is influenced by the country's research culture, including factors like insufficient interest in strong peer review, and the lack of training support services. Peer review helps to reduce bias and ensure technical rigor in research. However, most of the researchers surveyed noted that papers are not peer reviewed before they are published. Despite this, 61 percent have had access to mentors for their research, and, on average, they said they were satisfied with the guidance, constructive feedback, and learning provided, as well as their personal growth. Training sharpen skills and creates new ones. The researchers interviewed stated they were slightly satisfied. In the last three

years, they have received seven weeks of training in research design, management, methodologies, and tools. On average, research administrators estimated that \$390 USD per social science researcher has been spent on capacity building. Support services help with planning and implementing research, developing proposals, and recruiting. Overall, researchers and research administrators are mildly satisfied with this.

Research and training results

The social sciences have become more relevant over time and, as a result, scientific production has increased; however, it remains low. At least half of the researchers interviewed had not published articles, working papers, books, research, or policy briefs in the last three years. According to an international report, El Salvador produced 76 papers between 2018 and 2020, which comes to 0.18 per social science researcher. According to CONACYT data, social research is mainly conducted by HEIs in the form of technical reports and articles in journals and newsletters. In this regard, the low production could be linked to different types of resources being unavailable, lack of clarity about a functioning system, and a limited research culture. Each institution's interests and priorities also affect research production, as do the limitations on time and training.

In addition, the effectiveness of university researcher training is limited, and this could also affect the supply of and demand for social research output. On the one hand, according to the premise that the higher the percentage of university personnel with doctorates, the higher the quality of their training, universities in El Salvador would not be considered to be effective enough in training research professionals. On average, 13 percent of

university personnel working in the social sciences have doctorates. However, although almost half of the students enrolled in higher education are working toward a social science degree, there is no guarantee that quality research skills are being developed in these programs. Finally, of those young people between the ages of 18 and 25 who have earned a higher education degree, only 1.23 percent were in the social sciences. This percentage is the result of multiple aspects, such as the quality of training and a lack of capacity to attract and retain students, as well as challenges inherent to the Salvadoran socioeconomic context, where some need to abandon their studies due to economic reasons.

Opportunities and sustainability

Social research production is also strongly affected by the low value attributed to research and its professionalization, and by the fact that its relevance and contribution is not sufficiently recognized. Three out of four researchers surveyed do not believe that there are attractive opportunities for researchers, and some in the focus groups warned that the incentive system is inadequate. Overall, researchers are slightly dissatisfied with the research career incentives, such as financial incentives, social recognition, and job security. At the same time, they are slightly satisfied with other benefits, such as professional growth, competitiveness, and social benefits. To some extent, it is detrimental to the functioning of the research market that there is dissatisfaction with a career in research in terms of opportunities, financial incentives, job security, professional growth, and low social recognition. Evidence of this is that researchers in certain areas find it more difficult to gain employment and

remuneration, and they need to carry out additional activities to supplement their income. In fact, many have had to accept unpaid work because of the relevance of the research or in the interest of gaining professional experience and recognition.

Of course, the lack of clarity about the way the research system functions, and the lack of importance given to research in different spheres (from civil society to government), hinders the creation of opportunities that could be sustainable for researchers. Without this, there is no context to foster interest in producing research products, to build research skills, to allocate financial, institutional and human resources for topics of interest, and to coordinate research efforts based on country and institutional priorities. Without counting HEIs, who are required to produce research by legal mandate, there are only 36 researchers per one million economically active people.

Finally, it is important to recognize that information is very limited, making it difficult to know with absolute certainty the country's capacity to produce sound social science research, quantify it, measure its quality and compare it. Firstly, for several reasons, the statistics available for analysis are inaccurate. There are no records, so it is not possible to quantify all the people who work as social science researchers. Although there are networks of research professionals, not all the actors are in them, and the records are not kept up to date, nor are they all made available. The stakeholder mapping was unable to account for the total number of researchers working in the social sciences, but it did identify 68 percent of those working in the producer institutions. In the framework of this project, the social sciences include some areas of the humanities (philosophy,

history, linguistics), so for the purposes of this analysis, CONACYT and UNESCO indicators may be underreported. Secondly, there are several unknowns, such as the way belonging to national and international networks helps to fill gaps in research, what the turnover for social science researchers is, or how many researchers leave the country and how many of them support Salvadoran research from abroad.

This notwithstanding, the evidence gathered makes it possible to characterize and analyze social science research in El Salvador, and to have parameters that could be useful for comparative analysis with other countries. In short, the country has built capacity for the production of social research. Several institutions with human, institutional (infrastructure, equipment, information) and financial resources participate in social research. However, the quantity and quality of knowledge products is influenced by factors like the supply, demand and quality of training, insufficient time allocated for research work, access to reliable and updated information, limited availability and allocation of funds, lack of clarity about the way the system functions, and the lack of a research culture. Therefore, it is important that the actors acknowledge what the best practices are, and the areas for improvement, in order to optimize the production of social science research in a timely and sustainable manner.

4.2. Dissemination of research

The DRA project (GDN 2020) understands research dissemination to mean the communication of research results and products. This includes public policy makers, academia, civil society, and the

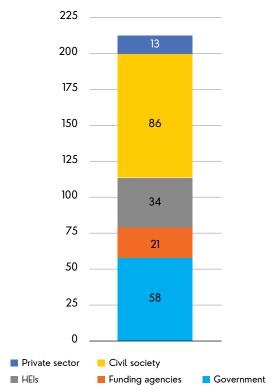
private sector discussing and sharing their findings, or taking on work commitments associated with research. It involves generating interest, forming attitudes, and changing behaviors, in order to strengthen the commitment to producing knowledge through research.

Understanding how widely disseminated research is in El Salvador requires finding out how effective research communication is in creating public awareness, discourse, and civic activism. This involves looking into the different actors working in social science research and how effectively they collaborate and interact with each other; how well researchers are able to communicate and disseminate their products nationally and internationally; how effective communication and socialization events are; and the extent to which social science issues are covered in the media. Using the results of the research conducted during the DRA project, the following sections attempt to respond to these issues.

Actors and networks

As described in the "Historical perspective" section, actors other than universities began to play a more important role in social science research in El Salvador during the 1980s. In 2021, the stakeholder mapping identified 212 actors involved in this activity, including state institutions, funding agencies, HEls, civil society organizations and the private sector. Chart 4 shows that the civil society sector accounted for the largest number of actors, followed by the government and HEIs. However, 41 percent of researchers are concentrated in only five institutions, one of them being the Central Reserve Bank, and the other four HEIs, namely UES, UCA, the Technological University of El Salvador and the Catholic University of El Salvador. In short, although the variety of actors participating in social science research has increased in the last century, the researchers are concentrated in HEIs.

Chart 4. Number of actors in the social research environment in El Salvador



Source: Prepared by the authors with data from the mapping done for this project.

Furthermore, 78.3 percent of the actors associated with social science research are concentrated in the Metropolitan Area of San Salvador. Accordingly, 47.2 percent of researchers in this field of work do so in institutions located in San Salvador. This situation could be due to the financial, productive, institutional, and cultural concentration in the Metropolitan Area of San Salvador, as evidence has shown that there are better economic and social conditions there than in other regions in the country (FUSADES 2019a). Thus, in addition to the preponderance of HEIs, social science research activities are also concentrated in the Salvadoran capital.

As for the relationship between the actors, this was classified as "circumstantial" by some of those interviewed during the mapping. Despite being geographically centralized, there is a perceived disconnection in the activities carried out by different institutions, and, in general, they are not functioning as a system. To illustrate, out of 194 researchers interviewed for the DRA project, 74 percent state that they sporadically, or even worse, never collaborate with other people outside the institution where they work. In addition, they mention that there is no "culture" of discussing research among different sectors in El Salvador, and that present conditions do not promote this. In this sense, the respondents believe that CONACYT should play a more active role in promoting coordination among actors, and by means of mechanisms like a registry, catalyze relationships and collaborative work among researchers.

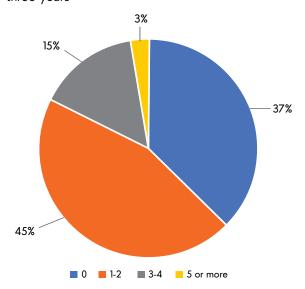
Communication of research

There are elements that can help Salvadoran researchers disseminate their products nationally and internationally. The context analysis noted that despite limitations in digital infrastructure and connectivity difficulties, most institutions involved in social science research in El Salvador have access to the internet and instruments to disseminate their results. In addition, there are 14 journals published in El Salvador that specifically focus on the social sciences and are registered in Latindex.³⁶ Universities and think tanks are either members of international research networks or maintain working relationships with them, as described in the "International context" section. This

At the same time, links that may exist between institutions do not appear to be there in the case of researchers. Of the total of those interviewed for the DRA project, only two out in five belonged to a professional network or association, whether national or international. This limits the rest in their ability to disseminate the results of their work in those areas.

Another challenge identified by respondents is the scarcity of funds to carry out research dissemination activities. For instance, there is a need for financial resources for strengthening

Chart 5. Number of communication training sessions respondents participated in in the last three years



Source: Prepared by the authors with data from the survey conducted as part of this project on 2021.

link with foreign entities contributes to the fact that 74.2 percent of social science research in the last three years has been produced in collaboration with an entity from another country (SCImago 2021). In this sense, it is possible to see a marked contrast between the disconnection between actors within the country, as described in the previous section, and the high degree of synergy with institutions abroad.

³⁶ Available from https://www.latindex.org/latindex/inicio.

communication skills. However, two in five researchers interviewed had not received any training of this type in the last three years (see Chart 5). Those who did benefit from such training were "moderately" satisfied but acknowledged that more needs to be done to improve these skills. Mapping respondents noted that there is a pressing need for training in how to communicate research results in simple language that "the common citizen" can understand. Likewise, the "International context" section revealed that Salvadorans have a low command of the English language, which is a challenge for publishing articles in international journals. Regarding the need for funds for dissemination activities and to strengthen communication skills, the participants of the focus groups stated the following:

"What I think is that sometimes there are very good studies, but there are never enough funds to publicize them. So, there is research, but people don't find out about it."

Mixed group participant

"Ways need to be found to strengthen the way research results are shared with the population, with target populations that are not necessarily in the scientific academic environment, reaching these other types of populations with more appropriate language." HEI participant

Research communication products

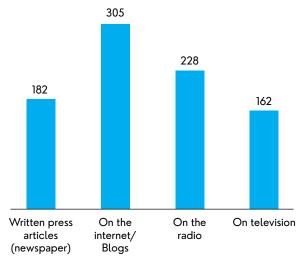
Organizing events can be a mechanism for social science research institutions to disseminate the results of their work. The survey conducted as part of the DRA project revealed that, in the last three years, on average, these institutions have mainly organized conferences for a national academic audience. However,

the information gathered does not measure the effectiveness of these events, as we do not know exactly, for instance, the number of people that attended them, or other actions that are brought about by holding these types of activities. These are aspects that would be worth looking into in future research.

There did appear to be consistency between the results of the survey and what was expressed by the stakeholder mapping respondents. While the survey revealed that most of the events targeted academic audiences, the mapping process pointed out the need to explore strategies for disseminating results effectively among the audiences outside the academic community. At the same time, it was emphasized that these messages need to be transmitted in a language that is suitable for this other type of non-scientific audience.

Media outlets are also platforms for disseminating social science research. Nevertheless, more than half of the researchers interviewed stated that they had not published anything in the media

Chart 6. Number of research dissemination activities over the last three years



Source: Prepared by the authors with data from the survey conducted as part of this project on 2021.

in the last three years. Considering only those who had, most of them had been published in blogs or internet publications, while television was the least used channel (see Chart 6). In the section on "Cultural aspects", it was mentioned that television and the internet are the main sources Salvadorans turn to for information about scientific work. Therefore, the media used by researchers to communicate the results of their work do not completely coincide with those that people turn to for information. In addition, significant efforts need to be made so that more than a minority of researchers publish their work through the media.

Popularizing science

The DRA project considers that the popularizing science is achieved when the public values research-based evidence and actively seeks out diverse scientific products (GDN 2020). In order to get a sense of the state of this aspect of a country, the relationship between the media and social science research needs to be evaluated, as well as social science research coverage in the media. However, in the Salvadoran case, the results seem to indicate that there is a disconnection between these elements.

Generally, researchers interviewed stated that they are rarely contacted by journalists or the media when their research is published. At the same time, both researchers and research administrators expressed moderate satisfaction with media coverage of social science research. The surveys and focus groups conducted within the framework of the DRA project reveal that there is a perceived lack of coincidence between the work done by the national scientific community and the agenda/interests of the media, since the latter are guided more by current affairs. In

this sense, it would be relevant for future research to explore the perspective of journalists, their perception of the social sciences, the frequency with which topics associated with social science research are covered, and their take on what is needed to increase the relevance of these types of efforts.

The section on "Governance and regulatory framework for social science research" noted that there has been a National Policy for the Popularization of Science and Technology in the country since 2017. In addition, a semiannual survey measures the effectiveness of the activities carried out by the Vice Ministry of Science and Technology in the context of the policy. The most recent results available to the DRA project were from the survey carried out in 2018. These revealed that only 1 in 10 Salvadorans had stated that they knew of a national institution dedicated to scientific and technological research (CONACYT 2018). In this regard, it would also be interesting for future studies to look into the way these findings inform efforts to improve public initiatives aimed at popularizing science.

Overall, over the last 30 years, there has been an increase in the variety of actors involved in social science research in El Salvador. However, although they are concentrated in the capital, and enjoy geographical proximity, they do not interact with each other on a regular basis. At the same time, there are conditions and resources that can facilitate the dissemination of research results, but limitations remain in terms of researchers' abilities to do so. This limits their ability to effectively share their findings with people outside the scientific community, for instance, through the mass media. Consequently, the popularization of

the social sciences is affected, and the population remains disconnected from the output of this branch of knowledge. Therefore, in the Salvadoran context, there are still barriers to overcome for research to be able to create public awareness, discourse, and civic activism.

4.3. Use of research in public policy

The methodology that is the basis for this analysis considers the acceptance of research and its use in public policy as an integral part of the research system (GDN 2020). In order to understand where the country stands in terms of this aspect, the following section identifies the way policy makers perceive the value of social research, whether it corresponds to their needs and interests, and whether there

is a demand for independent, robust and transparent research. Before evidence is incorporated into public policy, the interaction of policy makers and researchers also needs to be explored, asking whether researchers are directly involved, or if they are approached for advice, and whether researchers generate material that conveys their results.

Politically friendly research

Researchers and research administrators have different views on academic freedom. The responses to question 1 in Table 8 show that academics perceive policy makers as having little influence on the independence with which research is carried out in El Salvador. In contrast, administrators (responses to questions 2 to 5 in Table 8) point out that only occasionally do the political conditions

Table 8. Perception of researchers and administrators of the influence of policy makers on research independence

Question about research independence	Never	Rarely	Occasionally	Sometimes	Often	Always
How frequently do you think that policy makers influence researchers in terms of the independence of their research?	19%	23%	27%	23%	8%	0
Research results that affect public policy can be openly discussed among researchers and policy makers.	7%	29%	33%	18%	13%	0
Researchers are able to produce independent research without undue influence from public policy makers.	4%	9%	16%	47%	29%	0
Policy makers provide the necessary space for social science researchers to obtain the necessary data.	11%	24%	36%	22%	9%	0
The current political environment fosters the production of independent research results.	13%	29%	29%	20%	11%	0

Source: Prepared by the authors with data from the survey conducted as part of this project.

Note: The first question corresponds to the opinion of the researchers; the others are responses by the research administrators.

and space to collect information allow for the production of independent results and, once this evidence is obtained, discussion between academics and policy makers is rare or sporadic. Therefore, it is not certain that research production is robust and independent in the Salvadoran context.

In this scenario where there is only partial freedom, and access to information is difficult, there appears to be only moderate demand for research to inform public policy making. Among the members of the public policy community interviewed, 44 percent said they had hired researchers, almost exclusively nationals. However, because the response rate among this subset of actors was 18 percent, the actual demand for social science evidence may differ, and may even be lower. As for researchers, just over one-third also have a role as administrators, and 16 percent of other researchers indicated that they had done research at the request of policy makers (see Chart 7). Of these, only 5 percent of the researchers and 18 percent of the administrators reported having received funds to carry out the requested research. The academics who reported having been hired to work on these projects were mainly working for government institutions or funding agencies and had

more national experience and training in quantitative methods. Also, the priorities in the projects financed were the areas of education, economics, and sustainable development, with less investment in more qualitative disciplines. Given the differences between the apparent demand for research and researchers who meet this demand, it is worth considering whether the responses obtained from the public policy community are applicable in general, whether a few researchers are receiving the most requests, or whether they are unaware of the provenance of the institutional research they are undertaking.

Responses by members of the public policy community interviewed suggest that they benefit from the output of research, but academics admit that they generate almost no such material. In the last three years, only 26 percent of researchers produced any such documents, with an average output of less than two reports and one policy brief over the entire period. With respect to this low production of material for policy makers, it is noteworthy that some academics are at the opposite end, with up to 30 reports and 24 policy briefs generated in the three years. These discrepancies in the production of research material could explain why few researchers actually have an influence

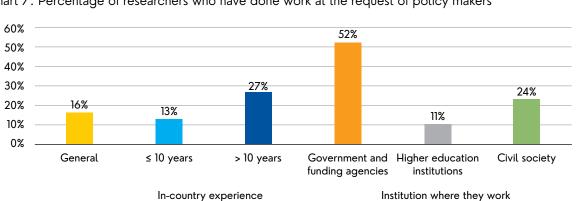
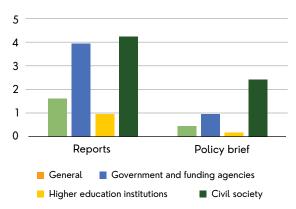


Chart 7. Percentage of researchers who have done work at the request of policy makers

Source: Prepared by the authors with data from the survey conducted as part of this project.

Chart 8. Average number of materials produced per researcher according to the institution where they work



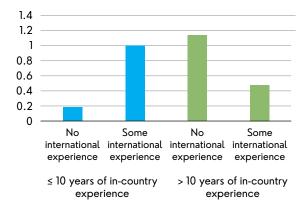
Source: Prepared by the authors with data from the survey conducted as part of this project.

on decision-making, and this could be a mechanism to be considered by the rest of the academics in the improvement of public policies. Furthermore, in preparing these documents, there are significant differences according to the institution where the researcher works. In the case of policy briefs, the national experience they have also has an influence (see Chart 8 and Chart 9).

In addition, 45 percent of the public policy community interviewed for this study said they had produced or co-produced policy material with a researcher, using social science findings. Such disparate results between academia and policy makers increase the possibility of work being concentrated in the hands of a few individual researchers. However, concerns remain as to whether policy makers and users as a whole believe that they benefit from research outputs and whether co-production with researchers is consistent.

After publishing a paper or report, the frequency of interaction with politicians is considered null by 78 percent of researchers. Some academics do state that it is frequent, but these are isolated

Chart 9. Average number of policy briefs produced per researcher according to their national and international experience



Source: Prepared by the authors with data from the survey conducted as part of this project.

cases. Intercommunication is higher among those with more experience and formal education, as well as among those working at civil society institutions or for the government or funding agencies.

In addition, a low percentage of researchers have played or currently play the role of policy maker (only 1.6 percent of them, both in central and local government). The DRA analysis methodology (2020) considers this indicator to be a proxy for the fluidity with which exchanges are carried out between both sectors in the system, mainly because it is a direct means of disseminating research findings. Therefore, the fact that it is so low has a direct impact on the possibility that policy makers will be aware of these results, and since they do not have experience in the public sphere, researchers themselves may not be aware of the most effective mechanisms for communicating with them. Furthermore, it could mean that they are unaware of the real dynamics of policy making, the language used to prioritize criteria, the criteria that are taken into account to evaluate them, the time frame in which options are analyzed, the type of information decision-makers seek,

whether they are willing or open to being informed, or who the main driving forces are, and, as a consequence, they may not know how to correctly focus their advocacy and interaction efforts.

Evidence-based policy making

Formal and informal interaction between policy makers and researchers is low. There are few researchers on policy advisory bodies in both central government (8.2 percent) and local government (4.6 percent). The academics that are more involved at both levels are those who work in governmental institutions and funding agencies, or those with international experience. Among local governments, having greater national research experience is also a significant differentiator. In addition, 48 percent of academics say that they never interact with policy makers and 28 percent feel that the frequency of these interactions is low (see Chart 10). These responses contrast with those of the administrators, since 56 percent of them indicate the existence of formal relations and almost 50 percent of them are informal collaborations between their institution and policy makers. The disparity in these results suggests that

these relationships occur mainly with the research administrators, while participating researchers remain out of the loop, and the signs of a concentration of work in few hands persist.

The perceptions of the influence of research on public policy vary among academics, and they participate very little in policy design. Researchers have the impression that the institution to which they belong is able to have an impact, but 26 percent of administrators declare the opposite. Academics rate this influence as slightly effective, and members of the public policy community suggest that it is frequent. Only 11 percent of researchers have participated in public policy design in the last three years, while 33 percent of respondents in the public policy community indicate that they have collaborated with researchers on policy design. The areas of these joint work efforts are unknown, whether they coincide with the areas where research has been requested and funded, or whether they use the results of research already completed in other disciplines. However, the interaction with academics changes after they have published a paper or report.

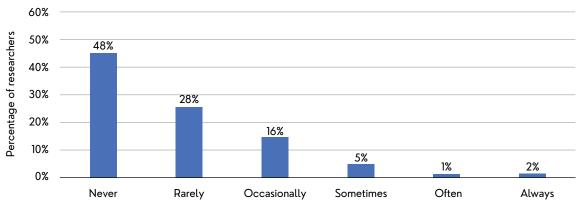
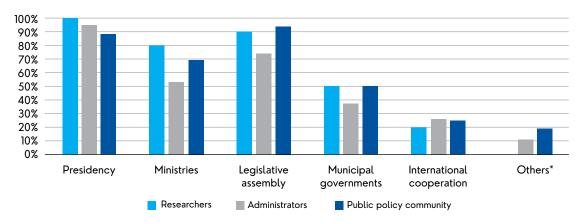


Chart 10. Frequency with which researchers interact with public policy makers

Source: Prepared by the authors with data from the survey conducted as part of this project.

Chart 11. Perceived anti-scientific trend



Source: Prepared by the authors with data from the survey conducted as part of this project.

Across the board, members of the social research system think that the overwhelming attitude is to ignore or deny the results of evidence-based research. Academics and those in administrative roles have a similar perception, with just over half of each group mentioning this attitude. In contrast, the information available from members of the public policy community suggests greater consensus, with 80 percent mentioning this attitude. In addition, about half of all respondents in this analysis consider these attitudes to be recent, and agree that they come mainly from the president, the ministries and the Legislative Assembly (see Chart 11).

Evidence-based policy products

Researchers believe that their work is rarely used in policy documents and question when collaboration is requested for these documents, as well as the effectiveness of the support provided. Only 22 percent of academics feel that their work is recognized and sought by policy makers. However, the majority of researchers do not know the number of times their work has been cited in this

type of document. Only 4 percent said they did know, and the average number of citations was 4.4, but the responses are fewer. Nevertheless, the results of this study suggest that 67 percent of the members of the public policy community use evidence drawn from social science research in the deliberations and decisionmaking in the process of policy making. In addition, there is a perception that the pandemic affected access to social science research. The characteristics this is based on, and whether the finding actually reflects a significant use of science, are unknown. Regarding support for policy implementation, there are also conflicting views, as academics consider it to be slightly ineffective, but members of the policy community surveyed rate it as frequent.

Better policies through research

The perceived usefulness of social science among members of the public policy community appears to be high. More than 80 percent of respondents assign evidence from social research at least moderate usefulness. This is consistent with the results obtained among

^{*}Includes other public or private funders or researchers.

Salvadorans, where 86 percent believed that the use of scientific and technical knowledge improves the capacity for decision-making (CONACYT 2018). However, it is not possible to assert with certainty that this is a representative opinion in the sector, so further research is still needed. In addition, academics who participated in focus groups noted that:

"[The government] has very little interest in subjecting its public policies to research. If it were really interested, there would be more research on various issues."

Independent researcher

"Governments have not necessarily been making decisions on the basis of evidence, but on the basis of other, non-scientific considerations." Mixed group participant

Analysis in this section reveals that social research can be presumed to be undertaken with moderate independence, with data collection restricted by policy makers and by the current political context. In turn, although the results of the public policy community suggest that research output is in demand, this results in little investment, and there are indications that policy maker requests for research

and interactions are concentrated among a few researchers. In addition, the production of material to communicate scientific findings to policy makers is scarce, as is the interrelationship between academia and decision-makers. Together, these factors inhibit the use of evidence in policy making and present challenges that need to be overcome if the perception of usefulness is to lead to progress for society.

Much needs to be improved in order to ensure that the results of social research are used in formulating public policy. Firstly, for researchers, it is vital that the research agenda is defined independently, and that more materials be produced to communicate the results to policy makers. Both steps are essential to identify the possible applications of research, and to provide what is needed for policy design, implementation, and evaluation. Secondly, among policy makers, changes are required to ensure information can be accessed, and that local evidence can be included in national policies. This also requires improving the system as a whole, since the current structure does not ensure interaction between policy makers and researchers.

5. Conclusions

Highlights

- The performance of the social science research system in El Salvador is relatively modest. Several factors affect the quality of research production, the extent to which it is disseminated, and the degree to which it is used in public debate and public policy.
- Among the main factors that negatively affect the level of performance are the low value assigned to social sciences, the dearth of institutional plans and resources for scientific capacity building, and limited connections to and exchange with international academic networks.
- There is a lack of leadership and little coordination among research system actors, resulting in a dispersion of resources and skills, affecting the quality of studies, the capacity to disseminate them, and their influence on democratic debate and sustainable development policies.
- The quantity and quality of knowledge products is constrained because not enough time and resources are devoted to research, there are restrictions on the availability of and access to information, and the culture of research is weak.
- The capacity for communicating and advocating for research has not been developed sufficiently to improve the connection between the scientific community and two key audiences, namely public policy decision-makers and the general public.
- Evidence suggests that there are few researchers working with policy makers, and the low demand for research and limited efforts in generating and disseminating the findings of research suggests that evidence is used little in policy making.

The evaluation of the social science research system in El Salvador shows that its level of performance is relatively modest and there are several areas for improvement. Although it is acknowledged that social research is an important area in the national scientific production, several factors affect the quality of production, the extent of its dissemination, and the degree to which it is used in debates and in the formulation of public policies for development.

The evolution and consolidation of the social science research system depend on the interaction between several sociopolitical, economic, and international determinants. The sociopolitical determinants that stand out are the low regard for the social sciences as a scientific discipline, the biased view of social sciences in the political environment that could restrict academic autonomy and limit access to information that is relevant for research, and the lack of understanding of the role social science research could play in the formulation and implementation of public policies for promoting the wellbeing of citizens. In economic terms, research system performance has mainly been limited by the lack of institutional plans and resources to develop scientific capacity, communication and adoption of research results. In addition, the labor market for researchers is small, and there is a lack of incentives for developing a career as a social scientist. As for the international environment, the research system's current capabilities keep it from leveraging the connections with international academic networks, the use of other languages to exchange knowledge (mainly English), and the

grants and resources that are available for social research.

According to the perceptions of the social science research producers, users and funders, coordination among them is weak, and they lack incentives and leadership to carry out research, making it impossible for them to acknowledge that there is a functioning system in which they can take part. This situation leads to a dispersion of resources and skills, and an inability to produce relevant and quality studies in any systematic way. Furthermore, their capacity to influence the democratic debate on sustainable development and public policies is hindered because the relationships that prevail among them and with the public officials responsible for public policy making and implementation are informal and circumstantial. Furthermore, even though there is a National Council for Science and Technology (CONACYT), whose mission would allow it to promote social research, in practice this institution does not necessarily perform this function. The council focuses mainly on the hard sciences, it only follows up on scientific research carried out by HEIs and government agencies, and has few resources at its disposal. If there is relatively little interest in social science research at the governmental level, it is hard to see how strengthening CONACYT with resources could promote the development of social research as a first option. An alternative could be to foster the creation of a national social science research network driven by academia and private research centers to promote the exchange of knowledge, the formation of research groups on specific topics, the delivery of training in research methods, encourage peer review of scientific articles, and ensure research ethics are enforced. This network could eventually

become a social science research council.

The following is a summary of the way different aspects of the production, dissemination and use of research can also influence the configuration and outcomes of the social science research system. Likewise, there is a note on aspects that system regulators need to pay attention to, or that provide a starting point for planning investments in capacity building to enhance the production, dissemination, and use of research. There is also mention of the levers of change that could contribute to designing public policies in line with the local context, strengthening institutions involved in social science research and increasing their capacity to influence the formulation of public policies for development, and the generation of informed debates.

Effective social science research production.

El Salvador has been relatively effective in developing basic skills for social science research production. Despite the influence of economic and sociopolitical conditions, evidence shows that there has been a sector consistently dedicated to this branch of science over time. Several actors that have human, institutional (infrastructure, equipment, and information) and financial resources are involved in social research. Nevertheless, the size of the sector and its output are compared with that of other countries, such as Costa Rica, much can still be improved to enhance the effectiveness of social science research production.

Multiple factors influence the quantity and quality of production. For one, resources are limited, such as insufficient time for research activities, insufficient training, constraints in the availability of and access to information, and little investment in R&D. It is important to ensure that researchers are given the time and workload that assigns greater priority to social science research. In addition, a balance needs to struck between different research activities, including training in research methods on an ongoing basis, managing funds for research projects, proficiency in English to gain access to global scientific knowledge, and skill building to effectively communicate research findings and influence public opinion and decision-makers who make public development policies. In the medium to long term, the academic options for research training need to be improved, and English language learning needs to be promoted in the formal educational system, mainly at the secondary and higher education levels. Moreover, no doubt learning a second language, such as English, and developing intellectual curiosity and critical thinking, creativity and inquiry are skills that should be encouraged from the early grades.

As for addressing the issue of restrictions on information availability and access in the short term, working groups could be created to gather relevant information and undertake studies. For instance, in 2020, several HEIs pooled resources and joined efforts with a think tank to form the COVID-19 Observatory to monitor the pandemic, with an advisory board comprising academics from foreign universities. This initiative generated data and research on the evolution of the epidemic, and a knowledge bank with different studies was made widely available, helping the public understand the impact of the virus on the economic and social dynamics of the country. In general, the practice of creating national and international networks and working

groups with actors in the research system is a good option for generating and sharing knowledge, and optimizing and managing resources to expand the local capacity to produce research.

Another decisive challenge is the weak culture of social research, since it affects the production and recognition of the importance of designing evidence-based public policies. This is directly linked to three aspects. First, actors lack clarity regarding the existence and functioning of the social science research system and the solidity of the institutions that underpin it. This affects the scope of research efforts by the different actors and limits their work. Second, there is no strong research culture in the country, and according to the researchers interviewed, this means no peer review, little training in research, and insufficient support to undertake research. This undoubtedly affects the soundness of production. Third, the lack of importance given to research and its professionalization also influences the demand and supply of social research. Consequently, it is important for the actors to be see themselves as the driving force behind the research system. In addition to getting them to identify more with the system and have a greater sense of belonging to it, it is also essential that they recognize good practices and areas for improvement in order to enhance the production of social science research in a timely and sustainable manner. Another opportunity lies in recognizing that there is value in the use of information by the different actors, both users and producers, in the social science research system.

The capacity research has for communication and advocacy

The effect of communicating social science research to promote public

awareness, discourse and civic activism is still limited. Although the conditions exist to facilitate the dissemination of knowledge among professionals involved in social science research, this is not the case when sharing these ideas with the general public, inside and outside the country.

Communicating social science research results to the general public faces challenges in terms of the language and the channels used for this purpose. Researchers recognize they lack the skills needed to express ideas in simple language and to make effective use of media. This leaves a gap between the scientific community and the Salvadoran population, which is not conducive to generating awareness of the importance of research or a culture around promoting its development.

Overcoming this limitation requires strengthening researchers' skills to effectively disseminate the results of their work to different audiences, for instance, social scientists, public policy decisionmakers, municipal officials, donors, and the general public. The communication skills they need to develop are the ability to express complex ideas clearly and simply, both verbally and in writing, and to learn about different means of dissemination and how to use them. As such, researchers should know about and learn how to use different formats to disseminate the findings of research, including traditional media (print publications, press, radio, and television), and non-traditional or digital media, such as social media on the internet, digital files, audio and electronic books, among others. However, developing communication skills requires investment by research institutions in this type of continuous training. In addition, it is

recommended that the design and implementation of strategies for the dissemination of research results becomes an essential part of their work plans.

Salvadoran social science researchers have the capacity to generate knowledge products whose content is useful for the national scientific community. However, the disconnection among its members stems the flow of information between the different actors in the community, and consequently, dissemination of research is limited in scope. Therefore, it is advisable for spaces to be established to facilitate regular and systematic communication among institutions dedicated to social science research. For instance, forums and roundtable discussions on specific topics with researchers and officials from public institutions, spaces that probably already exist, but whose usefulness is not widely understood or included as part of a communication and advocacy strategy.

For the dissemination of research to be effective in the international arena, it is essential to establish solid working relationships between national researchers and researchers from other countries, in languages other than the local language. Accordingly, strengthening social scientists' command of the English language would enable Salvadoran professionals to participate in academic or technical discussion spaces not only regionally but also globally. This would also allow them to publish in prestigious international media relevant to the social sciences. In this way, a virtuous circle of two-way communication would be generated in which the exchange of knowledge would contribute both to strengthening El Salvador's research capabilities and to positioning local social scientists in the international academic world.

Research used in public policies for sustainable development

The available evidence is insufficient to unequivocally conclude the extent to which research results are used in formulating public policy. There was a low response rate to the survey among the public policy community and other potential users. Therefore, it is possible that there is selection bias and that the views recorded in this section are not consistent with those more broadly held in their wider group. In addition, policy makers and academics disagree on the extent to which the former requires particular research from the latter, how much material is produced or coproduced using research findings, and the level of participation of academia in policy design and implementation. These discrepancies, along with the lack of agreement among academics themselves, suggest that few researchers work in collaboration with policy makers and that little evidence is used in policy making. In this context, the reason research is not extensively used in the public policy arena is influenced by two sets of factors: low demand for evidence and limited efforts in the production of studies and dissemination of findings.

To promote the use of research in public policy, social science research institutions and professionals must respond to two challenges. The first challenge is the way findings are used and preparing the conditions for decision-makers to request more research. This study suggests that the social sciences and their advances are perceived as useful, but this does not lead to increased contact or involvement of academia in policy making or implementation, nor is there a rise in the number of requests for studies or their funding. On the contrary, there

is little critical thinking and research, little discussion of the available evidence among different sectors, the attitude among actors with decision-making power is to take no notice of or deny the results of research; and the population does not believe that research provides answers to their problems. Consequently, the relevance and pertinence of social research conducted in the country is questioned, as is the quality of the products currently developed by academia. In order to strengthen the relations between academics and the public policy community, it is vital to find mechanisms and incentives that help increase their interactions. Along these lines, researchers would benefit from understanding the process of public policy making, knowing who the decisionmakers and mediators are, and seeing the interaction between technical and political dimensions. This would give them a more complete vision of the scope of the research they generate, who could find it useful, and to what end. In this regard, it is particularly important for researchers to evaluate the topics they address in their studies, their effects on and repercussions for citizens, and the institutional and individual efforts to communicate the results of their research in an appropriate manner.

The second challenge that social scientists face is how to develop reliable research and communication material that ensures dissemination of results to different audiences. In the Salvadoran system, there is still a lot of room for improvement to achieve robust, independent, and transparent studies. The available evidence indicates that freedom of research is questionable, and this is associated with limited access to information, and the fact that the political environment is not always conducive to

the development of research. Likewise, deficiencies have been identified in the capacity academics possess for the production and execution of studies, which affects the credibility and reliability of the results. There are misgivings regarding whether topics selected are of public interest, and issues with documents failing to present their findings concisely, in understandable and clear language. Undoubtedly, improvements in

both researcher training and institutional advocacy are essential steps for relevant evidence-based policy making. In addition, academia must strengthen its capacities for research, communication, and advocacy, increasing its efforts to popularize science. This contributes to disseminating scientific knowledge and promoting the value of the social sciences and their contributions to improving the quality of life and well-being of citizens.

6. Policy recommendations

Assessing the performance of the social science research system sheds light on its conditioning factors, challenges, and potential areas for improvement. The following are proposals to enhance the quality of research, broaden its dissemination and turn it into key inputs to nurture public debate and public policies for sustainable development.

This is a series of recommendations to strengthen four key aspects that can improve the quality of social science research and its contribution to sustainable development, namely the governance and culture of the research system, the quality of knowledge production, the effective dissemination of social science research, and the intensive use of research results in the design and implementation of public policies.

Governance and culture of the social science research system

 Look into the extent to which CONACYT could take on a more active role in the promotion and development of social sciences. Currently, the perception is that an institution is needed to promote and manage resources for social science, to carry out broad consultation and define research priorities based on the needs of the country, and also to promote research through competitive funds and establish dialogue with international funders to get them to provide funds. Given that, under current conditions, it is considered unlikely that the state will strengthen CONACYT so that it can carry out all these functions, it would be more realistic for it to concentrate only on some of them, and to support

- other initiatives by other actors in the system. For instance, CONACYT could promote mechanisms for registering researchers that include their areas of research, in order to facilitate joint work. CONACYT could also encourage initiatives to bring researchers together and provide spaces for academic exchange, for instance, conferences to share work in progress and learn about the work being done by others.
- that can contribute to the development of social science research and bring the institutions involved in this work closer to CONACYT. This would foster the creation of spaces for exchange and reflection on the performance of the research system and would also facilitate the practical creation of common objectives, cooperative ways of working and arrangements that strengthen the performance of the research system and use research in public policies to respond to strategic development issues in the country.
- Encourage nongovernmental institutions involved in social science research to create a national network, enabling them to increase their identity and sense of belonging to the research system. The research system emerges as the actors consciously interact in concrete activities, such as the exchange of knowledge and the development of capacities to produce and manage research that is relevant and useful for public policy decisionmaking. This network could become a social science research council that could work in coordination with CONACYT.

• Foster a robust research culture. It is important that the actors of the system assume responsibility for strengthening the research culture. It would be advisable that they work together on a campaign to acknowledge the value of social research and its relevance in the development of the country. It is also important to encourage different institutions to commit to allocating funds, time, and effort to this campaign. There are still barriers that need to be overcome for research to be able to create public awareness, debate, and civic activism. This must begin by making the actors in the system themselves feel empowered and part of the social science research system. In other words, they need to see themselves as the driving force behind a solid research culture.

Quality of knowledge production

• Strengthen information systems, ensure access to reliable and up-to-date information, and guarantee national and international exchange of knowledge. Access to data is important, therefore access to public information should continue to be promoted. Moreover, overcoming restrictions on access to data and public information can also be achieved by seeking partnerships with and participation in national and international networks that facilitate collaborative work, thereby increasing local capacity and resources to produce and exchange information that is of use to producers and users of research. Along these lines, creating local networks can help to generate and discuss knowledge, encouraging the exchange between producers and users of social science research, both within the country and with the international community.

- Generate the necessary conditions so that the social research system is integrated into the international context, consolidating national capacities for conducting research. In the short term, the institutions in the system need to strengthen their units in charge of cooperation and project management, and their plans to support the search for opportunities to strengthen research capacities and integrate themselves into the international scientific community. In the medium and long term, it is vital that all researchers gain a command of English, that more scholarships for training in the social sciences be made available, and that there are incentives for HEIs to generate world-class knowledge.
- Improve the availability, demand, and quality of training in order to enhance research skills. In the short term, there ought to be an increase in opportunities for continuous education and training in research methods. This involves setting up programs in the social sciences, institutions allocating funds to provide training opportunities for their academic and technical personnel, and researchers recognizing the importance of developing these skills. Strengthening research skills requires that training in research methods and ethics be strengthened. In addition, it is important for universities to identify students with research skills and design support programs to strengthen them. Internship programs in research centers would help strengthen research skills and create synergies between centers. In the long term, awareness of the importance of social science research needs to be raised, research training needs to be included at the secondary and higher education levels

- (undergraduate and graduate), and the development of research skills and English language skills needs to be promoted, starting in the early grades.
- Encourage greater investment in and more efficient use of R&D, particularly in the social sciences. Investment in research should contribute to improving the performance of researchers, research administrators and institutions, increase the amount of social research done individually and in a coordinated manner, improve the quality of production, inform the efforts of others, and create comparable metrics to provide accountability in social science research and measure its performance. Progress along these lines begins with taking stock of the best practices and areas that need improvement and using this to define plans and strategies to maximize the quantity and quality of social science research production in a timely and sustainable manner. Likewise, when knowledge production for policy and program design is funded by international development assistance agencies, they should include funds for strengthening local research skills. They could step up their efforts to contribute to fostering a more effective dialogue between decisionmakers and researchers on social issues of national interest.

Effective dissemination of social research

 Make changes to formal education to improve social science researcher communication skills. Changes can start at levels prior to higher education, in subjects such as language, strengthening written communication skills, and teaching them the use of traditional and non-traditional means of communication. University programs

- ought to increase the importance given to subjects that teach the dissemination of knowledge in a clear and simple manner in the social sciences. Responsibility for these actions would be shared between the Ministry of Education and formal education institutions.
- Ensure the delivery of nonformal continuous education to strengthen the oral and written communication skills of professionals who are already engaged in social science research. Continuous education can also increase knowledge about various communication tools and their different uses in disseminating research results. This would be the shared responsibility of the Salvadoran Institute of Professional Training (INSAFORP) and the institutions implementing training services.
- Acknowledging the importance of popularizing social science research, allocate resources for capacity building and dissemination activities. This involves the public sector funding efforts like curricular changes, educational entities, and events to popularize social sciences. The private sector also has a part to play in supporting continuous training for researchers with economic resources or time allocated to this activity, as well as tools and means that promote the socialization of research results. FUSADES, for instance, invests in a Communications Department that is in charge of supporting the development of communication skills, managing researcher relations with the media, as well as advising researchers on their own management of public relations and supporting them with the production of knowledge products in audiovisual formats.

- Leverage available communication tools such as the internet, multimedia content, digitization of documents and media space to disseminate research results. It is important for communication to focus on providing recommendations that are operational and translating research results in language that is understandable, in order to reach diverse populations beyond academic circles and those currently interested in the research.
- Broaden the scope of the meeting spaces beyond those already established by social science research institutions in an isolated and independent manner. Involving more actors and establishing synergies with new entities would lead to the formal establishment of a system. Given that the initiative would be led by its members, they would identify with it. In this process, it would be valuable to have the support of CONACYT, as a public organization associated with scientific research, with an impact on the generation of policies that strengthen and benefit the development of these types of activities in the country.
- Leverage the working relationships between national and international institutions, in order to communicate research results and for the local level to gain access to capacity building.
 Actions in this framework can include exchanging experiences, adapting successful practices, and acquiring new knowledge and work tools, among others. Likewise, international partnerships can help to establish more connections in this field, and in this way, Salvadoran social sciences can enhance their presence outside national borders.

Intensive use of social research in public policy for development

- Evaluate research relevance, pertinence, and linkage to public policies. Academia should proactively shed light on the way its work connects with public policies, the way they improve current processes, and the implications of implementing its findings; and it should conduct research on issues that are relevant for these purposes. Researchers should focus their efforts on filling knowledge gaps in areas that have the potential to impact the population and the social development of the country.
- Build academics' capacity to conduct rigorous research and produce material that communicates its findings in such a way that it is effective, streamlined, and concise from a public policy perspective. There is a potential for academia to influence policies by creating content that communicates the results of its studies and the implications to both the population and policy makers. Leveraging this opportunity requires identifying the ideal medium and language to convey the main messages of their work. This calls for training researchers in basic communication skills, and continuous updating of techniques and methodologies, enabling them to carry out research even in areas with little aggregate information. This effort has to be made by the individuals themselves and the institutions to which they belong and requires coordination between actors.
- Establish mechanisms to support research and increase not only the credibility of its results but also its capacity to influence public policies. There is the potential to improve

the credibility of the results of collaborative work among various related institutions, including agencies or private organizations that can make direct use of the findings. Similarly, another way that academics can shore up their studies is membership of international networks related to their fields of work. This opens the up the possibility of conducting research with others who are national and international specialists in the areas of study. In both cases, involving more actors in the development of research projects expands the potential impact, scope, and coverage of the study, as well as the impact, dissemination, and support of the conclusions when there is an exchange of positions among the parties, and this reduces the costs associated with the study and its dissemination.

 Build research institutions' and researchers' capacity for advocacy. This implies that, once diverse products are created, their dissemination should be enhanced with materials that specifically target the population and decision-makers. The task of dissemination starts with researchers knowing how to express their ideas clearly, an effort that is not limited to academics, but should be accompanied by institutional work in line with publicizing findings, recommendations, and repercussions. In other words, institutions should include a line of work in their institutional communication strategy that contributes to linking research with public policies. At the same time, the use of less traditional means of academic communication, such as social networks, should be evaluated,

in order to reach out to different audiences, especially decision-makers and the population in general.

In conclusion, it is worth reiterating that the recommendations in this report arise from the analysis of its findings. Nevertheless, this exercise of inquiry into the performance of the social science research system should be seen as a starting point, identifying aspects that ought to be studied in greater depth.

Future research could further investigate the strengths of CONACYT and the challenges it faces in promoting the development of both hard and social sciences. It would also be interesting to examine the way the results of the survey on the popularization of science and technology are used to identify effective strategies to improve public and private initiatives that seek to disseminate scientific knowledge and make research results more relevant to everyday life. Along these lines, it would be valuable to do an in-depth study on the degree to which dissemination strategies implemented by research institutions are effective in influencing public opinion and decision-makers. Future analysis could help to understand more precisely the way members of the public policy community use research results, and how their interaction with researchers could be encouraged and strengthened. Finally, it would be interesting to explore the media's perspective on social science. Such a study could look into the media's perception of social science, and the frequency with which social issues are covered and scientific knowledge is used as evidence, as well as their views on what is required to increase the relevance of social research.

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