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GDN Global Development Network

Doing Research in
MALI

COUNTRY REPORT

May 2026

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

ROCARE-Mali is a non-governmental organization focused on educational research. It aims to promote national expertise in educational research and a culture of research in order to improve educational policies and practices in Mali. This expertise encompasses the strengthening of research capacity, the dissemination of knowledge, and collaboration among researchers, practitioners, and policymakers in the field of education.

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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 policymakers, 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 system[1] 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 studies[2] 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 about their policy-oriented research environment and how it can be improved.

Doing Research Assessment: understanding, mapping and assessing research systems[4]

A unique feature of the Doing Research Assessment 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.

Context analysis, Mapping of research actors, Doing Research Framework

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

1 In this document, the terms 'research system' and 'social science research system' are usedinterchangeably.
2 See www.gdn.int/sites/default/files/GDN-2017-DRpilot-synthesis.pdf
3 See www.gdn.int/sites/default/files/u116/DRAIndicators.pdf
4 See www.gdn.int/doing-research-assessment-methodology

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 policy making
Outputs	1.3 Research output & training	2.3 Research communication products	3.3 Research-based policy tools
Outcomes	1.4 Opportunities & sustainability	2.4 Popularization of science	3.4 Research for better policies

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This evaluation of the social science research system in Mali represents the outcome of a collective endeavor involving multiple stakeholders, whose intellectual contributions, availability, and provision of both technical and financial resources merit formal recognition and appreciation.

We extend our profound gratitude to the Global Development Network (GDN) for the confidence vested in our team, and for commissioning, designing, and financing this study. Our appreciation is likewise directed to the Ministry of Higher Education and Scientific Research, whose institutional, technical, and administrative support proved indispensable throughout the research process.

The scholarly value of any research initiative is determined above all by the richness, pertinence, and rigor of the empirical evidence collected, as well as by the methodological quality of data processing and analytical interpretation. In this regard, we acknowledge with deep appreciation the commitment of the researchers, supervisors, and field investigators who undertook this demanding task.

We are equally indebted to all individuals who generously facilitated the research process by providing documentation, completing survey instruments, and consenting to interviews. This acknowledgment further extends to the institutions that devoted time, effort, and logistical resources to enable the successful completion of this project.

Finally, it is essential to recognize the intellectual mentorship of Professor Selly Camara, as well as the guidance and oversight provided by the GDN team, whose contributions ensured the scientific integrity and academic rigor of this work.

SUMMARY

The Global Development Network (GDN), an international organization founded in 1999, advances social science research in developing countries through its *Doing Research Assessment* (DRA) program. This initiative is designed to evaluate national social science research systems and to identify structural impediments to their effective functioning. Following an initial pilot phase conducted between 2014 and 2016 across eleven countries, GDN inaugurated a feasibility demonstration phase in 2018 in collaboration with national institutions. In 2022, five research teams were constituted in Francophone Africa, including one in Mali, with the mandate to analyze national research systems and propose strategies for their enhancement.

The imperative to strengthen knowledge of the social science research system in Mali is particularly acute given the prevailing socio-economic and political challenges. Contextually grounded and methodologically robust research is indispensable for informing evidence-based public policy and consolidating local institutional capacities. Nevertheless, this domain remains under-documented, thereby constraining its potential contribution to reform processes and to the country's trajectory of sustainable development.

Against this backdrop, ROCARE-Mali, with the institutional and financial support of GDN, has undertaken a systematic evaluation of the Malian research system employing a rigorous methodological framework. This synthesis outlines the methodological design, the contextual parameters of the study, the mapping of stakeholders, the dynamics of knowledge production and utilization within the DRA framework, as well as the principal recommendations derived from the assessment.

Regarding the methodological approach, exploratory scoping interviews were undertaken in the form of open-ended discussions with selected resource persons. These interactions were essential for eliciting individual perspectives on prevailing challenges and for identifying salient questions that could more effectively orient the research process. Key stakeholders shaping the social science research landscape in Mali were systematically identified. To this end, the research team employed a multi-method strategy that combined documentary analysis, semi-structured interviews, and collective brainstorming sessions in order to map principal stakeholders, examine their interrelations, and assess their relative influence. Nevertheless, several constraints emerged, including limited access to information, the complexity of institutional and interpersonal linkages, and the broader political environment. To address these difficulties, the team strategically mobilized its professional networks and employed triangulation of sources to enhance the reliability and validity of the findings.

The field surveys, employing questionnaires and semi-structured interviews, were initially scheduled for a duration of fifteen days but were ultimately conducted between December 2023 and March 2024 due to multiple constraints, including respondent unavailability and institutional barriers. A team composed of nine field investigators and four supervisors was mobilized to engage three categories of stakeholders: teacher-researchers, research administrators, and political decision-makers. Out of a population of 1,120 teacher-researchers identified across 21 institutions, a stratified sample of 400 was selected; however, only 301 respondents were effectively surveyed, representing a completion rate of 75.25%. Female participation accounted for 16.94% of respondents, exceeding the targeted proportion of 12.78%. The surveys encompassed 15 institutions, although several were excluded owing to security concerns or administrative restrictions.

The findings reveal notable discrepancies between projected distributions and the actual disciplinary representation. Certain fields, including economics, law, and linguistics, were comparatively underrepresented relative to forecasts, with participation rates of 14.29% versus 17.95%, 21.26% versus 24.29%, and 9.97% versus 14.19%, respectively. Conversely, other disciplines such as demography, education, and management exhibited higher-than-anticipated participation, with respective figures of 13.62% versus 6.43%, 9.30% versus 7.05%, and 6.64% versus 4.55%. The majority of surveyed teacher-researchers fell within the age cohort of 47 to 56 years (42.86%), and a substantial proportion (92.69%) were affiliated with institutions located in the Bamako district. Regarding academic qualifications, 175 respondents held doctoral degrees, 24 possessed postdoctoral credentials, 94 reported master's degrees, and 8 held bachelor's degrees.

Research administrators were interviewed within the same institutions, yielding a total of 49 respondents, predominantly male (42 men versus 7 women), with a strong concentration in Bamako (87.78%). The majority (59.52%) belonged to the 47–56 age cohort, and 45 of the 49 respondents possessed doctoral qualifications. With respect to the political community, 11 stakeholders affiliated with strategic structures were interviewed, again reflecting a clear male predominance and a

concentration within the 47–56 age group (63.63%). Although the number of respondents from the political community was relatively limited, the informational value of the data collected remains substantial. The evidence generated through these surveys, when triangulated with documentary analyses and international databases, provided the empirical foundation for the DRA framework. This framework elucidates the principal determinants shaping the production, dissemination, and policy utilization of social science research outputs in Mali.

In terms of contextual analysis, Mali, a vast landlocked state in West Africa with a territorial expanse of 1,241,238 km² and a population of 22,395,489—of which 49.7% are women—stands out for its geographical, demographic, and socio-economic heterogeneity. With a youthful population experiencing rapid growth (3.3% annually), the country faces pressing challenges in education, employment, and social service provision, particularly in light of significant urban concentration (46.2% of the population) and marked regional disparities between the north (9%) and the south (91%). Mali's historical trajectory, characterized by successive empires and kingdoms, has profoundly shaped its cultural and social identity. Its ethnic and linguistic diversity constitutes a valuable resource, although persistent challenges related to literacy and economic development remain salient.

The demographic, geographic, historical, and socio-economic configuration of Mali carries substantial implications for the organization and governance of the research and higher education system. It underscores the necessity of a structural, equitable, and strategically oriented reform agenda for higher education and research, premised on controlled expansion, decentralization, recognition and valorization of indigenous knowledge, prioritization of critical developmental domains, and governance mechanisms that are more integrated, accountable, and results-driven.

Despite a slight improvement in the literacy rate between 2011 and 2021, less than a third of the adult population can read and write, with marked disparities between men and women. Furthermore, rapid population growth is increasing the pressure on educational infrastructure, while access to education remains limited. Poverty remains widespread, with nearly 45% of the population living below the threshold poverty in 2021, a low life expectancy (60.4 years), one of the lowest HDIs in Africa (*48th out of 53 countries) and basic social services* that are still largely insufficient, particularly in terms of access to drinking water, electricity and healthcare.

The employment situation remains concerning, particularly for young people, with an unemployment rate approaching 15% in 2017 among individuals aged 15–35. In comparative perspective, youth unemployment rates (15–24 years) in several neighboring countries and within the region vary considerably: Mauritania (20.97%), Central African Republic (10.61%), Burkina Faso (7.59%), Cameroon (6.38%), Benin (4.11%), Chad (1.52%), and Niger (0.51%). Mali thus occupies a position among countries with relatively high youth unemployment, ranking below Mauritania but above most of the countries considered, notably Niger and Chad where rates are exceptionally low. Nevertheless, this comparison remains methodologically limited, as the age cohorts under consideration differ. Under typical circumstances, individuals aged 15–24 are more likely to be enrolled in education, whereas those aged 25–35 are more actively engaged in the labor market and seeking employment.

The decentralization process, characterized by the expansion of administrative regions (from 10 to 19) and local authorities (from 703 to 825 municipalities), presents significant challenges for local governance and equitable development. In addition, the health and environmental context—marked by a high prevalence of malaria (354 cases per 1,000 inhabitants) and persistent infrastructural deficits (with Mali ranked 36th out of 54 African countries)—underscores the urgent need for coherent and responsive public policies. Taken together, these dynamics position Mali as a critical case study for the social sciences, offering insights into the complex interplay between demographic trends, governance structures, public policy, and development trajectories.

In the domain of research, Mali possesses a structured system that inherits a longstanding intellectual tradition, epitomized by the University of Sankoré in Timbuktu during the 15th and 16th centuries. Under colonial administration, knowledge production was primarily oriented toward administrative and exploratory imperatives. Following independence in 1960, national priorities shifted toward the expansion of higher education, with the establishment of elite schools, often to the detriment of research activities. The Institute of Human Sciences (ISH), founded in 1962, continues to serve as one of the principal institutions devoted to the advancement of the social sciences. The university landscape has undergone significant transformation, beginning with the creation of the University of Mali in 1993, which was subsequently restructured into several institutions in 2011. By 2022, the country comprised six (06) public universities, eleven (11) public institutes and higher education establishments, and two hundred and six (206) private institutions of higher learning.

The Ministry of Higher Education and Scientific Research (MESRS) is responsible for steering national policies in this domain, supported by specialized structures such as the National Center for Scientific and Technological

Research (CNRST). While social sciences are represented across several centers and institutes, the institutional configuration remains relatively limited. The Malian research system continues to confront significant challenges. A substantial majority of students (81.42% in 2021–2022) are enrolled in social science disciplines, yet data concerning teacher-researchers in this field remains insufficiently precise. The student–teacher ratio (73:1) far exceeds the UNESCO benchmark (25:1), and this imbalance not only undermines the quality of instruction but also weakens the research support infrastructure. It constrains effective mentoring, diminishes the likelihood of successful research projects, and slows the development of national capacity in scientific production. Addressing these constraints requires the recruitment of additional teacher-researchers, the establishment of structured training programs for academic supervision, the recognition and valorization of mentoring activities, and the promotion of alternative support mechanisms such as co-supervision, peer tutoring, and collective supervision seminars.

Research funding in Mali remains markedly insufficient, amounting to only 0.7% of GDP in 2016, with a pronounced reliance on external sources (50.2%). Within competitive funding mechanisms, such as the Competitive Fund for Research and Technological Innovation (FCRIT), the social sciences are significantly underrepresented, accounting for merely 5 out of 47 projects in 2017. Despite the gradual expansion of the institutional framework, social science research continues to suffer from limited structuring, inadequate recognition, and insufficient financial support. Enhancing its contribution to national development requires increased investment, stronger integration into research policy agendas, and the reinforcement of both human and material capacities.

On the socio-political front, Mali has been undergoing a profound security and political crisis since 2012, which has considerably weakened state institutions. Initially concentrated in the northern regions, the crisis subsequently extended to the central areas, aggravated by the activities of rebel groups and terrorist organizations. This instability culminated in a fourth military coup in August 2020, followed by a transitional political process characterized by uncertainty. Despite formal commitments to governance and security reforms, Mali continues to rank among the weakest performers in democratic governance and transparency, with widespread public distrust of state institutions. Freedom of expression and press liberties remain under strain; although Mali has ratified numerous international agreements guaranteeing these rights, journalists and civil society stakeholders face persistent threats and restrictions. Nevertheless, social science research has remained relatively insulated from direct political interference, though insecurity has constrained access to field sites. This situation may be explained by a combination of factors, including the limited visibility of social science outputs, the strategic choices of political authorities, and the absence of a robust critical tradition within the social sciences.

In summary, Mali's socio-political environment is characterized by chronic instability, which continues to impede socio-economic development and undermine efforts toward effective governance. The ongoing political transition, compounded by persistent security challenges and entrenched inequalities, constrains prospects for short-term improvement. Establishing a stable political framework and consolidating institutional capacities remain indispensable prerequisites for inclusive development and the advancement of academic research.

Mali's economic context is defined by a multidimensional crisis, further aggravated by insecurity. Socio-political tensions, the COVID-19 pandemic, and the imposition of ECOWAS economic sanctions have deepened structural vulnerabilities. Following a recession in 2020 (-1.2%), economic growth rebounded to 3.1% in 2021, driven by the resumption of productive activities and robust cotton output. Nonetheless, inflation accelerated to 3.9% in 2021 and 4.5% in 2022, surpassing the UEMOA thresholds, largely due to rising global commodity prices exacerbated by the war in Ukraine. Public finances showed improvement in 2021, with increased revenues and grants amounting to 1,886.3 billion FCFA francs, yet fiscal stability remains fragile.

The budget deficit narrowed marginally (-4.7% of GDP in 2021 compared to -5.5% in 2020), though it continues to pose significant concerns. The economy remains heavily reliant on the primary sector, with family-based agriculture increasingly constrained by soil degradation and the adverse impacts of climate change.

Chronic underfunding of higher education continues to constrain social science research in Mali, thereby limiting its capacity to generate rigorous analyses of public policy. Although salaries and allowances for teaching and research staff have been increased, the purchasing power remains inadequate, compelling many to engage in supplementary activities at the expense of research productivity. Greater economic diversification and enhanced investment in research are indispensable for promoting inclusive and sustainable growth. Research financing in Mali remains discretionary rather than institutionalized, and it is not systematically tied to fluctuations in tax revenue. This absence of automatic mechanisms undermines the predictability and

sustainability of research investments, which are critical for long-term economic diversification.

At the international level, the advancement of research in Mali is contingent upon integration into global scientific networks and access to external funding. Despite formal commitments to openness and collaboration with regional and international institutions, national research remains underfunded, with allocations amounting to only 0.7% of GDP in 2016—below the 1% threshold recommended by the African Union. Moreover, funding is disproportionately directed toward applied sciences, to the detriment of the social sciences, which remain heavily reliant on external resources. While such dependence provides opportunities for collaboration, it simultaneously constrains the autonomy of Malian researchers, compelling them to align their agendas with donor priorities rather than national needs.

Mali nevertheless benefits from a wide range of institutional partnerships, notably with CAMES, IRD, CIRAD, and CODESRIA, as well as through integration into networks such as ROCARE and RESET GMV. These collaborations provide essential resources in the form of funding, training opportunities, international visibility, and instruments for academic evaluation and recognition. Integration into regional and global scientific networks is particularly critical for addressing the challenges of development and innovation in Mali. Such partnerships also facilitate researcher mobility and enhance the practical application of scientific outputs.

The evaluation system for teacher-researchers operates through two principal bodies: the CNELA at the national level and CAMES at the regional level. Between 2017 and 2024, 443 Malian teacher-researchers were registered on the CAMES lists of qualified candidates, of whom only 10.61% were women. Among these, 171—including 14 women (8.19%)—were identified as working in fields classified as social sciences within the scope of this study, in addition to 8 of the 103 qualified candidates.

The CNELA, for its part, reported a success rate of 56.52% between 2008 and 2021 and 77.06% between 2022 and 2023 for teacher-researchers across all disciplines. Of the 561 individuals registered on the eligibility lists during 2022–2023, 240 (42.78%)—including 21 professors, 172 lecturers, 2 teaching assistants, and 45 assistants—were affiliated with fields classified in this study as part of the social sciences. At the researcher level, among 1,190 candidates registered on the lists of qualified applicants between 2014 and 2023, only 154 (12.94%) were engaged in domains identified here as social sciences. The recent alignment of CNELA sessions for teacher-researchers and researchers has the potential to strengthen the structuring of academic trajectories.

In conclusion, while the international integration of Malian researchers provides access to funding, training, and collaborative opportunities, it simultaneously raises critical questions regarding the orientation of research under the influence of external donors. A more assertive and coherent national policy prioritizing the social sciences would enhance their relevance and impact on local realities, thereby reinforcing their contribution to national development.

According to the mapping report, stakeholders engaged in social science research in Mali can be classified into four principal categories: (1) higher education and research institutions (universities, institutes, and research centers); (2) governmental and funding bodies (ministries, the National Transitional Council, and financial support agencies); (3) the private sector (enterprises, chambers of commerce, and consulting firms); and (4) civil society organizations (NGOs, media outlets, and think tanks). Researchers are predominantly employed within institutions belonging to the first category, while the remaining groups engage them on a more occasional and project-specific basis.

The relationships among these stakeholders are characterized by interdependencies, limited communication, and a pronounced reliance on external funding. Higher education institutions, under the oversight of the state, assume responsibility for training and scientific production, while simultaneously shaping research policies and allocating resources. The private sector and civil society stakeholders contribute to policy formulation and commission studies, thereby influencing the orientation and application of social science research.

Stakeholders in the field of social science research in Mali can be classified according to their relative power and interest. Stakeholders with high power and high interest include the government, which constitutes a key stakeholder requiring active engagement. Funding bodies are characterized by high power but low interest, necessitating regular monitoring and information-sharing. Higher education and scientific research institutions fall into the category of low power but high interest, requiring sustained involvement and satisfaction. Finally, the private sector and civil society stakeholders exhibit both low power and low interest, and therefore demand only minimal attention.

The target sample was initially derived from a list of **2,779 teaching and research staff** provided by the authorities. However, this list was incomplete, containing only administrative information. A subsequent data collection exercise yielded more detailed information on **2,330 researchers,** of whom **1,171 were identified as specialists** in the social sciences. Stratified random

sampling was employed to ensure representativeness of teaching and research staff across institutions, disciplines, academic ranks, and geographic locations. Institutions were grouped into six subcategories based on their nature (universities, institutes, research centers) and their location (Bamako or provincial areas). Certain private institutions were excluded due to the absence of adequate research infrastructure. In line with the methodological recommendations of the DRA framework, a sample of **400 teacher-researchers** was selected from the **1,120 targeted,** with provisions for expansion depending on field conditions.

The mapping exercise reveals a fragmented landscape of social science research in Mali, characterized by weak coordination among stakeholders and a pronounced dependence on foreign funding. The rigorous methodology adopted has produced both a usable stakeholder map and a representative sample, thereby contributing to a more comprehensive understanding of the functioning and challenges of this sector.

As for the DRA framework which refers to research results, it relates to the dynamics of the production, dissemination and application of social science research results in Mali.

Regarding the contribution of research-to-research production, it is noteworthy that Mali counts 117 social science researchers per million inhabitants, compared to 39 researchers across all disciplines in 2017. This figure remains below the African average of 198 researchers per million inhabitants (UNESCO, 2023) and far below international levels, which range between 3,500 and 4,500 researchers per million inhabitants in OECD countries. Women represent 12.13% of social science researchers, a proportion lower than the 15.10% recorded across all disciplines in 2017, and significantly below both the African average of 31% (UNESCO, 2023) and the international benchmark of 50% women in higher education and research (UN, UNESCO). Among social science researchers, 42.95% hold doctoral degrees, of whom 10.33% are women—a proportion above the African average (25–30%) but below the international standard of approximately 60% (OECD). Public expenditure on research and development (DIRD) in social sciences is estimated at $7,262.06 (4,406,290 FCFA) per researcher. Despite the African Union's target of allocating 1% of GDP to R&D, Mali reached only 0.18% in 2021, distributed primarily among government (46.4%), private enterprises (30.9%), and higher education institutions (18.3%). This percentage is below the current African average of 0.5% and far beneath the international average of 2–3.5% of GDP, with some countries such as South Korea exceeding 4% (OECD). Data accessibility remains limited, with a score of 2.80/6 and only 18.87% of scientific outputs available in open access—below the African average of 30–40% and the international objective of moving toward universal open access (UNESCO, Plan S, Open Science). Research infrastructure scores average 2.62/6, with the highest rating for workspace (3.39) and the lowest for anti-plagiarism software (1.80). Faculty members devote on average 30% of their time to research, although only 34.32% consider this allocation sufficient. Teaching obligations mandated by decree further constrain the time available for research activities.

In terms of research culture and support services within the framework of research production, it is observed that the National Centre for Science and Technology Research (CNRST)—the sole institution within Mali's research administration covering all disciplines—received a quality score of 3.61/6. Female administrators account for 14.28% of those in leadership positions, a proportion below the legally mandated quota of 30%. The quality of the national research policy, although not exclusively focused on the social sciences, records an average score of 3.79/6. Women occupy 29% of policy leadership positions, according to the Africa Barometer 2024, a figure that remains below the statutory threshold. Mentoring activities achieve an average score of 3.98/6, though they remain largely informal, and the proportion of female mentors is indeterminate. On average, each social science researcher produces 0.14 peer-reviewed publications, with women contributing 18.49% of outputs. Access to constructive peer feedback is reported as satisfactory by 45.51% of respondents.

Research capacity development registers an average score of 2.72/6, with the highest ratings attributed to methodology (3.13) and scientific writing (3.11). Among postdoctoral fellows, only 12.5% are women. Funding allocated to capacity-building activities amounts to 26,731.49 FCFA per social science researcher. Administrative support services record an average score of 2.43/6, with limited access to assistance for research planning and implementation (3.03) and proposal writing (2.69). Administrators report slightly higher scores, with a maximum of 3.34 for proposal writing support.

With respect to research outputs and training within the framework of research production, the analysis indicates that academic performance is assessed primarily through two key indicators. The average number of publications per social science researcher is estimated at 0.15 according to SCImago, whereas survey data from researchers themselves suggest a higher mean of 4.61. In terms of citations, SCImago reports an average of 16.49 citations per document, while surveys reveal markedly lower figures, with an average of 1.37 total citations, 0.10 cited works, and an H-index of 0.09. Regarding research training, 38.50% of university staff hold doctoral

qualifications. The average duration of continuing research training over the past three years is 4.06 weeks per researcher. Finally, official data from 2023 indicate that only 0.18% of young people aged 18 to 25 obtain a higher education degree annually in Mali.

In terms of opportunities and sustainability within the framework of research production, the job market for researchers in Mali is characterized by ambivalent perceptions of career prospects, with an average rating of 2.98/6. Only 35.3% of teaching and research staff consider these opportunities attractive, although job security receives relatively high satisfaction (3.36/6), largely due to the guaranteed status of civil service employment. The quality of the incentive system for research production records an average score of 3.26/6, with the highest levels of satisfaction linked to employment security (3.79) and professional competitiveness (3.69). Moreover, the number of social science researchers employed outside the higher education sector is estimated at 17.90 per million active individuals in Mali. Research evaluation is formally anchored in the existence of national standards for research quality and practice, with an average score of 3.46/6. A majority of respondents (64.24%) confirmed the presence of an organization responsible for overseeing social science research, with AMAQ-SUP identified as the sole official body for comprehensive evaluation across disciplines. However, no documentation specifying standards tailored to the social sciences was identified. The absence of such standards constitutes a structural weakness, but simultaneously presents an opportunity for national stakeholders to engage in collective efforts aimed at formalizing, appropriating, and institutionalizing scientific practices in this domain. Such an initiative would enhance the quality, credibility, and policy relevance of social science research, thereby reinforcing its contribution to national development.

Regarding the stakeholders and networks involved in disseminating research, National geographic research reveals a pronounced concentration of social science researchers in the capital city, Bamako, where 92.74% are located. Among these, 47.80% are affiliated with the 10% most prominent institutions, while 52.62% are employed in institutions situated within Bamako. Concerning stakeholder diversity and collaboration, the level of diversity received an average score of 3.68/6, with women, academic researchers, and community organizations being the most actively engaged. The inclusiveness of political dialogue on social issues registered an average score of 3.38/6, reflecting moderate participation from both academic and non-academic researchers, but limited involvement from minority groups and policymakers. Intersectoral collaboration is assessed as satisfactory, with an average of 12 co-authors per teaching and research staff member over a three-year period. Of these collaborations, 49.03% occur within the same institution, while 32.89% involve foreign institutions outside the region. Research on communication skills highlights a low number of training courses completed over three years, with an average score of 1.5/5 and 40.53% of respondents reporting no training at all. Nevertheless, the overall quality of communication skills and training is relatively strong, with a score of 4.31/6. The highest ratings are attributed to oral presentations (4.49) and academic writing (4.36), while event organization (4.18) is identified as the least effective dimension.

With respect to research dissemination, particularly through local journals, the availability of social science journals in Africa remains limited, with a ratio of 0.05 per researcher. In Mali, this figure declines even further to 0.01 for national journals published in local languages. In terms of international visibility, collaboration in social science research is notably constrained, with only 0.89% of researchers engaged in international partnerships. Among teacher-researchers, collaborations with foreign organizations remain marginal, with ratios of 0.05 for foreign donors, 0.10 for regional institutions, and 0.16 for institutions outside the region. Regarding international research projects, each institution participates in an average of 13.22 projects, yet 55.81% of faculty members reported no involvement in any international projects during the past three years. Membership in professional research networks also remains limited, with only 34.21% of faculty members affiliated. Of these, 80.58% belong to national networks, 11.96% to regional networks, and 8.74% to international networks.

The analysis underscores the tensions between the opportunities offered by internationalization and the weak institutional and political anchoring of the social sciences in Mali, evidenced by the extremely low rates of international collaboration (0.89%) and donor partnerships (between 0.05% and 0.16%). On the one hand, these figures highlight the limited global exposure of Malian social science researchers. On the other hand, as previously noted, international integration constitutes a significant opportunity, particularly in terms of access to funding and training. This situation reveals a paradox: while the benefits of internationalization are widely acknowledged, they remain scarcely mobilized. Moreover, the problematic dependence on foreign donors raises concerns, as external priorities may shape research agendas to the detriment of local needs. In this sense, the weakness of international collaborations could reflect a cautious reserve aimed at safeguarding scientific autonomy. Yet, for the few collaborations that do exist, there remains a risk of research agendas being captured by development strategies dictated by external partners. Against this backdrop, the call for a robust national policy in support of the social sciences emerges as a structuring

response to the challenges identified. Such a policy would provide a framework for internationalization that maximizes its benefits—namely, access to resources, networks, and training—while preserving scientific sovereignty. It would also promote greater recognition of local research, particularly publications in national languages (ratio of 0.01), by enhancing their visibility within the broader scientific community.

With regard to research communication products aimed at disseminating research, particularly through conferences and public debates, social science institutions and researchers in Mali organize an average of 13.50 conferences over a three-year period, distributed across national (4.50), regional (5), and international audiences outside the region (4). Teacher-researchers demonstrate higher levels of participation in conferences hosted by their own institution (average score 3.06) or another national institution (2.59), compared to regional events (2.11) or international ones (1.76). In parallel, an average of 4.50 public debates involving researchers, policymakers, and civil society stakeholders are organized per institution or researcher. In terms of online research visibility, only 13% of faculty members maintain a personal webpage, whereas 55.10% of administrators report that their institution hosts a website highlighting staff activities and research outputs. Regarding media outreach and promotion, the average number of social media posts is five over a three-month period. Other forms of communication have recorded comparatively low levels in recent years, including articles in the mainstream press (0.39), blog posts (0.28), radio appearances (0.36), and television appearances (0.26).

In terms of the popularization of science within the broader framework of research dissemination, social recognition and media coverage of research activities remain limited. The frequency of contacts with journalists is particularly low, with an average score of 1.58/6. More than half of faculty members (51.82%) reported never engaging with the media following publication, and only 1.66% indicated doing so on a regular basis. The overall quality of communication with the media averaged 2.99/6. Faculty members noted relatively stronger coverage through social media (3.29) and internet platforms (3.19), whereas administrators assessed overall coverage as satisfactory, assigning higher scores to internet and social media outlets (3.46 each), followed by print and television. Radio received the lowest ratings across both groups.

Within the framework of policy-oriented research and its role in political implementation, the political value of research is perceived as limited, with teacher-researchers reporting a low level of independence (average score of 2.15/6), although research administrators indicate only a weak influence of policymakers on research outcomes. The demand for contributions from researchers to policy development is also low, averaging 22.63% over three years, with commissioned research remaining infrequent. Grants provided by policymakers are rare, reaching only 9.30% of faculty members and 1% of administrators, and are generally of modest value. Policy-relevant research is further characterized by weak collaboration between researchers and policymakers across the different stages of the policy cycle, with particularly low scores for the design phase (2.09/6 among researchers). On average, each researcher has produced 4.5 communication materials for policymakers—such as reports and policy briefs—over the past three years. However, only 30% of policymakers have co-produced documents with researchers during the same period. Overall, the link between research and policy remains tenuous. The frequency of contact with policymakers following publication is low (1.25/6), and only 3.15% of faculty members have held political responsibilities, primarily at the decentralized level (3.30%).

Three key observations emerge from the analysis of the relationship between limited research independence and constraints on freedom of expression and of the press: the perceived contradiction between perception and reality, a climate of freedom under tension, an academic sphere in unstable equilibrium, and a dissonance among stakeholders. The first observation highlights the perception of low levels of research independence among teacher-researchers, which may be interpreted as a climate of mistrust or apprehension, even in the absence of direct political interference, as research administrators contend. This reflects a broader prevailing environment characterized by threats to freedom of expression, pressures on civil society, and informal restrictions. The second observation underscores that pressures on freedom of expression and of the press unfold within a context that encourages self-censorship and caution, including within academic circles. Such dynamics contribute to the fragility of the academic space, where autonomy is formally acknowledged yet practically constrained by political, social, and institutional tensions.

This dynamic may explain the perceptions expressed by faculty members, even when pressures are not exerted directly upon them. The paradox between the formal legal recognition of freedoms and the persistence of restrictive practices in reality is also evident in the domain of research. Although social science research appears relatively spared, an important nuance must be considered: this protection is mediated through practical constraints such as insecurity, which restricts access to the field. Consequently, even in the absence of explicit censorship, researchers' autonomy is undermined by the prevailing security and political environment,

reinforcing perceptions of limited independence. Finally, a discrepancy emerges between the perceptions of faculty members, who report low independence, and those of research administrators, who emphasize limited political influence. This divergence can be explained by differences in exposure: administrators tend to operate within institutional and normative frameworks, whereas researchers confront informal pressures, uncertainties in the field, and the ambiguity inherent in their relationship with political power.

Within the domain of research-informed policymaking and its role in policy implementation, formal collaboration is manifested through the participation of researchers in advisory bodies. Nevertheless, policy engagement remains limited, with an average participation rate of 4.32%. Among surveyed faculty members, only 3% reported involvement in central-level bodies, while 5.6% participated in decentralized structures. Informal collaboration—primarily through the consultation of researchers—also reflects weak interaction with policymakers, with an average score of 1.80/6, and 43.9% of faculty members indicating that they had never engaged with policymakers. Despite these low levels of interaction, 84.48% of faculty members and administrators perceive their institutions as possessing the capacity to influence policy. However, this perception contrasts sharply with the low average score of 2.09/6 for the overall quality of collaboration. This discrepancy highlights a significant tension between perception and practice: while academic stakeholders acknowledge an institutional potential for policy influence, this capacity does not materialize into concrete outcomes due to the absence of structured and sustained collaboration mechanisms with policymakers.

In the domain of research-based policy tools for policy implementation, the instrumental use of research in public policy remains limited. With regard to citation frequency, political documents and academic publications receive an average score of 2.67/6, yet a significant proportion of respondents (33.6%) report not knowing whether their work is cited, and the average number of specific citations remains very low (0.63/6). Concerning the frequency of political support for research utilization, the overall score is 3.10/6. This support is perceived as weak by teacher-researchers (2.20/6), but relatively strong by members of the political community (4/6), thereby revealing a notable disparity in the evaluation of the practical contributions of researchers to policymaking.

In relation to research informing policymaking through the processes of policy implementation, the influence of research on policy outcomes is assessed primarily through policymakers' perceptions of its usefulness. Survey data indicate that this indicator receives an average score of 3.55/5. Nearly half of policymakers (45.5%) report incorporating social science research into their decision-making, while 36.3% state that they do not, and 18.2% remain undecided. With regard to perceived usefulness, 44.4% of respondents consider social science research useful and another 44.4% very useful, underscoring its critical role across all stages of the policy cycle.

In conclusion, the evaluation of the social science research system in Mali presents a mixed picture. Despite the existence of a structured institutional framework and growing integration into international scientific networks, the sector continues to suffer from chronic underfunding, weak organizational structures, and limited institutional recognition. These challenges are further exacerbated by socio-political instability, heavy dependence on foreign funding, and restricted access to reliable data.

The study also highlights disciplinary imbalances, low participation of women, and a pronounced concentration of researchers in Bamako, which constrains the diversification of research activities. Although scientific output is significant, it struggles to achieve international visibility due to weak inter-institutional collaboration and limited access to publication platforms. Moreover, the impact of research on public policy remains modest, with insufficient interaction between researchers and policymakers.

To address these challenges, priority strategies should include strengthening financial support, improving research infrastructure, enhancing the integration of researchers into international networks, and more effectively leveraging research results. A more assertive national policy, combined with strategically managed international partnerships, is essential to foster autonomous research that is better aligned with the country's developmental needs.

For to strengthen the system of research in science social at Mali, several measures can be considered:

1. Establishing an Integrated and Inclusive National Research Governance Framework

Constitute a National Council for Research and Open Science Coordination, under the auspices of the CNRST, convening universities, research institutes, governmental ministries, technical and financial stakeholders, the private sector, and civil society organizations. This council shall be mandated to ensure the coherence of scientific policy frameworks, advance strategic research planning, strengthen inter-institutional collaboration,

and oversee the systematic evaluation of social science research performance.

Responsible stakeholders: CNRST, MESRS

2. Expanding Research, Innovation, and Scholarly Publication Funding

Develop a sustainable and transparent funding architecture, primarily oriented toward: social science and interdisciplinary inquiry; the establishment and international indexing of national scholarly journals; and the promotion of open-access dissemination, including publications in national languages. This mechanism will broaden the resource base by mobilizing public, private, and international partnerships, thereby advancing toward the continental benchmark of allocating 1% of GDP to research and development (R&D).

Responsible stakeholders: MESRS, MEF, CNRST

3. Establishing a National Portal for Open Science and Institutional Archives

Develop a national digital infrastructure interconnected with SCImago, Scopus, and UNESCO, designed to centralize scholarly publications, open data repositories, doctoral theses, and institutional reports. This portal will enhance the international visibility, transparency, and traceability of Malian social science research outputs.

Responsible stakeholders: CNRST, IESRS, DNEN, AGETIC

4. Institutionalizing Academic Mentorship and Continuous Scientific Training

Establish a National Framework for Academic Mentorship, aimed at strengthening methodological competencies, scholarly writing, and research ethics among early-career scholars; promoting women's participation and leadership in academia; and formally recognizing the role of mentors within academic career trajectories. This initiative seeks to professionalize the next generation of researchers while addressing and mitigating gender disparities in scientific practice.

Responsible stakeholders: IESRS, DGESRS, CNRST, MESRS

5. Developing a National Framework for Scientific Evaluation and Valorization

Design a national evaluation framework tailored to the social sciences, complementary to AMAQ-SUP, incorporating peer review as a benchmark of quality assurance; science communication and societal impact as key performance indicators; and metrics attentive to gender equity and locally produced knowledge. This framework will foster institutional recognition of researchers and facilitate the integration of scientific findings into public policy processes.

Responsible stakeholders: AMAQ-SUP, CNRST, IESRS, MESRS

6. Modernizing Research Infrastructure and Strengthening Administrative Support

Invest in digital infrastructure (including anti-plagiarism software, virtual libraries, and databases); establish collaborative research environments; and create research support units within each higher education institution (including faculties) to facilitate project design, management, and monitoring. These mechanisms will enhance organizational efficiency and foster greater researcher autonomy.

Responsible stakeholders: IESRS, CNRST, PTF, Private Sector

7. Promoting Gender Participation and Equity in Research

Implement incentive policies that advance women researchers into leadership roles and funded projects; ensure equitable access to mentorship and training opportunities; and establish a dedicated research grant program for women in the social sciences. The objective is to strengthen gender diversity and broaden representation in scientific production.

Responsible stakeholders: MPFEF, MESRS, IESRS.

8. Reducing Teaching Load and Enhancing Research Time

Revise legislative and regulatory frameworks governing teaching obligations to rebalance workloads, thereby increasing the proportion of time allocated to research activities for faculty researchers. This measure will stimulate scientific productivity, expand participation in international academic conferences, and improve the quality of scholarly publications.

Responsible stakeholders: MESRS, MTFPDS, MRECRI, IESRS

9. Establishing Sustainable Mechanisms for Science–Policy Mediation

Institutionalize research–policy interface units within universities and ministries to: translate empirical findings into policy briefs and advisory memoranda; integrate

researchers into technical and consultative committees guiding public policy; and provide joint training for scholars and policymakers in the systematic application of evidence. This initiative will reinforce the demand for and utilization of research outputs in national governance processes.

Responsible stakeholders: CNRST, Ministries Sectoral, Think Tanks

10. Promoting Scientific Communication and Popularization

Dedicate an annual budget for scientific communication within higher education and research institutions to: train scholars in knowledge popularization, accessible writing, and media engagement; establish specialized communication units; and embed the dissemination of research results into the criteria for academic promotion and institutional evaluation. This measure will enhance the social visibility and media presence of the social sciences in Mali.

Responsible stakeholders: MESRS, MEF, CNRST, IESRS, (public and private media)

Conclusion

By implementing these recommendations, Mali will more effectively harness the capacities of its social science research community, thereby strengthening their contribution to national development and evidence-informed decision-making.

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ACRONYMS AND ABBREVIATIONS

ADEA	Association pour le Développement de l'Education en Afrique
ADF-Galle	Association for the Development of Activities of Promotion and Formation-Galle
AFD	French Development Agency
AGETIC	Agence des Technologies de l'Information et de la Communication
AIDI	Indice de développement des infrastructures en Afrique
AMALAN	Académie Malienne des Langues
AMAQ-SUP	Agence Malienne d'Assurance Qualité de l'Enseignement Supérieur et de la Recherche Scientifique
AMSS	Association Malienne pour la Survie au Sahel
ANEH	Agence Nationale d'Evaluation des Hôpitaux
ANSSA	Agence Nationale de la Sécurité Sanitaire des Aliments
ODA	Official Development Assistance
ARGA	Alliance pour Refonder la Gouvernance en Afrique
ASTII	Initiative Africaine des Indicateurs de Science, Technologie et Innovation
AUF	Agence Universitaire de la Francophonie
AfDB	African Development Bank
BAfD	Banque Africaine de Développement
WB	World Bank
BTP	Bâtiments et Travaux Publics
CAMES	Conseil Africain et Malgache pour l'Enseignement Supérieur
CAMMBFK	Conservatoire des Arts et Métiers Multimédia Balla Fasséké Kouyaté
CCIM	Chambre de Commerce et d'Industries du Mali
EC	European Commission
CEA	Commission économique pour l'Afrique des Nations Unies
ECOWAS	Economic Community of West African States
CERFITEX	Centre de Recherche et de Formation pour les Industries Légères et Textiles
CESCE	Conseil Economique, Social, Culturel et de l'Environnement
CIRAD	Centre de coopération Internationale en Recherche Agronomique pour le Développement
CNAM	Centre National d'Appui à la lutte contre la Maladie
CNDIFE	Centre National de Documentation et d'Information sur la Femme et l'Enfant
CNELA	Commission Nationale d'Etablissement des Listes d'Aptitude
CNESOLER	Centre National de l'Energie Solaire et des Energies Renouvelables
CNESS	Comité National d'Ethique de la Santé et des Sciences de la Vie
CNIES	Centre National d'Information, d'Education et de communication pour la Santé
CNRA	Comité National de Recherche Agricole
CNRST	Centre National de la Recherche Scientifique et Technologique
CNT	Conseil National de Transition
CODESRIA	Conseil pour le développement de la recherche en sciences sociales en Afrique
CPS	Centre Pédagogique Supérieur
ICT	Information and Communciation Technologies
IDRC	International Development Research Center
CREDD	Cadre stratégique pour la Relance économique et le Développement durable
CREDOS	Centre de Recherche et d'Etudes sur la Documentation pour la Survie de l'Enfant
CRRVA	Conseils Régionaux de Recherche et de Vulgarisation Agricole
CSCRP	Cadre Stratégique pour la Croissance et la Réduction de la Pauvreté
CSDR	Cadre stratégique de développement de la recherche
CSEC	Conseil Supérieur de l'Education et de la Culture
CSLP	Cadre Stratégique de Lutte contre la Pauvreté
CTS	Comité Technique Spécialisé
DFM	Direction des Finances et du Matériel

DGESRS	Direction Générale de l'Enseignement Supérieur et de la Recherche Scientifique
DIRD	Dépenses intérieures de Recherche et Développement
DNEN	Direction Nationale de l'Economie numérique
DNP	Direction Nationale de la Population
DNPD	Direction Nationale de la Planification et du Développement
DRA	Doing Research Assessment
DRH	Direction des Ressources Humaines
EDSM	Enquête Démographique et de Santé au Mali
EHESS	Ecole des Hautes Etudes des Sciences Sociales
EMOP	Enquête Modulaire et Permanente auprès des Ménages
ENA	Ecole Nationale d'Administration
ENETP	Ecole Normales d'Enseignement Technique et Professionnel
ENI	Ecole Nationale d'Ingénieurs
ENI-ABT	Ecole National des Ingénieurs Abdramane Baba Touré
ENMP	Ecole nationale de médecine et de pharmacie
ENSup	Ecole Normale Supérieure
EPSC	Etablissement Public à caractère scientifique et culturel
ESJSC	Ecole Supérieur de Journalisme et des Sciences de la Communication
FAO	Food and Agriculture Organization
FCRIT	Fonds compétitif pour la recherche et l'innovation technologique
FDPri	Faculté de Droit Privé
FDPU	Faculté de Droit Public
FHG	Faculté d'Histoire et de Géographie
FLSL	Faculté des Lettres et des Sciences du Langage
FMI	Fonds Monétaire International
FNUAP	Fonds des Nations Unies pour la Population
FSAP	Faculté des Sciences administratives et politiques
FSHSE	Faculté des Sciences Humaines et des Sciences de l'Education
GAR	Gestion axée sur les résultats
GDN	Global Development Network
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GRAD	Groupe de Recherche Actions pour le Développement
GREAT Mali	Groupe de Recherche en Économie Applique et Théorique
HCCT	Haut Conseil des Collectivités Territoriales
HDI	Human Development Index
HDR	Human Development Report
ICRAF	Centre International de Recherche en Agroforesterie
ICRISAT	Institut International de Recherche sur les Cultures en zones Tropicales Semi-arides
ICSS	Institut Mérieux, l'Institut des Sciences des Sociétés
IER	Institut d'Economie Rurale
IERGG	Institut d'Etudes et de Recherches en Géronto-Gériatrie
IESRS	Institution d'Enseignement Supérieur et de la Recherche Scientifique
IFAN	Institut Français d'Afrique Noire
IGM	Institut Géographique du Mali
IHERI-ABT	Institut des Hautes Etudes et de Recherches Islamiques Ahmed Baba de Tombouctou
IITA	Institut international d'agriculture tropicale
IMRAP	Institut Malien de Recherche-Action pour la Paix
INFET	Institut National de Formation, d'Equipement et en Transport
INFJ	Institut National de Formation Judiciaire
INFSS	Institut National de Formation en Sciences de la Santé
INFTS	Institut National de Formation des Travailleurs Sociaux
INJS	Institut National de la Jeunesse et des Sports
INRSP	Institut National de Recherche en Santé Publique
INSAH	Institut du Sahel
INSP	Institut National de Santé Publique
INSTAT	Institut National de la Statistique

IPR	Institut Polytechnique Rural
IPR/IFRA	Institut Polytechnique Rural de Formation et de Recherche Appliquée
IPU	Institut de Pédagogie Universitaire
IRD	Institut de Recherche pour le Développement
Iris	Institut de relations internationales et stratégiques au Mali
IRN	Réseau de recherche international
ISH	Institut des Sciences Humaines
ISS Africa	Institut des Etudes de Sécurité au Mali
IZSEJB	Institut Zayed des Sciences Economiques et Juridiques de Bamako
LACET	Laboratoire d'Anthropologie Comparative Engagée et Transnationale
LCV	Laboratoire Central Vétérinaire
LMD	Licence, Master, Doctorat
LNS	Laboratoire National de la Santé
MATD	Ministère de l'Administration territoriale et de la Décentralisation
MEEFP	Ministère de l'Entrepreneuriat national, de l'Emploi et de la Formation professionnelle
MEF	Ministère de l'Economie et des Finances
MEN	Ministère de l'Education National
MESRS	Ministère de l'Enseignement supérieur et de la Recherche scientifique
MFWA	Media Foundation For West Afrrica
MINUSMA	Mission multidimensionnelle intégrée des Nations Unies pour la stabilisation au Mali
MPFEF	Ministère de la Promotion de la Femme, de l'Enfant et de la Famille
MRECRI	Ministère de la Refondation de l'Etat, chargé des Relations avec les Institutions
MRPCN	Ministère de la Réconciliation, de la Paix et de la Cohésion nationale, chargé de l'Accord pour la paix et la réconciliation nationale
MRTC	Malaria Research and Training Center
MSAS	Malian Society of Applied Sciences
MSDS	Ministère de la Santé et du Développement Social
MTFPDS	Ministère du Travail, de la Fonction publique et du Dialogue social
NU	Nations Unies
OECD	Organization for Economic Co-operation and Development
WHO	World Health Organisation
ONG	Organisation non gouvernementale
ONU	Organisation des Nations Unies
ORTM	Office de Radiodiffusion et Télévision du Mali
PIB	Produit intérieur brut
PNSTI	Politique nationale de la science et de l'innovation
UNDP	United Nations Development Program
PPP	Partenariat Public-Privé
PTF	Partenaire Technique et Financier
PTF-SE	Partenaires techniques et financiers impliqués dans le secteur de l'éducation
R-D	Recherche-développement
RDH	Rapport sur le Développement Humain
RECOTRADE	Réseau des communicateurs traditionnels pour le développement au Mali
RESET GMV	Recherche, expertise scientifique et savoirs pour la gestion durable des terres et des territoires de la Grande muraille verte
RESIMAO/WA	MISnet Réseau des Systèmes d'Information des Marchés en Afrique de l'Ouest
RGPH	Recensement Général de la Population et de l'Habitat
ROCARE	Réseau Ouest et Centre Africain de Recherche en Education
SHaSA	Stratégie d'Harmonisation des Statistiques en Afrique
SNRA	Système National de Recherche Agricole
SNV	Organisation Néerlandaise de Développement
STI	Science, Technology and Innovation
SWEDD	Gouvernement et organismes de financement
TP	Travaux publics
TV	Télévision
UA	Union Africaine

UB	University de Bamako
UE	Union Européenne
UEMOA	Union Economique et Monétaire Ouest-Africaine
U-Gao	Université de Gao
ULSHB	Université des Lettres et des Sciences Humaines de Bamako
UM	Université du Mali
UNESCO	Organisation des Nations Unies pour l'Education, la Science et la Culture
UNICEF	Fonds des Nations Unies pour l'Enfance
US	Université de Ségou
USAID	United States Agency for International Development
USi	Université de Sikasso
USJPB	Université des Sciences Juridiques et Politiques de Bamako
USSGB	Université des Sciences Sociales et de Gestion de Bamako
USTTB	Université des Sciences, des Techniques et des Technologies de Bamako
U-Tombouctou	Université de Tombouctou
VIH/SIDA	Virus de l'Immunodéficience Humaine / Syndrome d'Immunodéficience Acquise

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INTRODUCTION

To address persistent research gaps, strengthen evidence-based development policies, and advance societal well-being, the Global Development Network (GDN)—an international public organization founded in 1999—facilitates rigorous social science inquiry across developing and transition economies. Central to this mission is its flagship initiative, Doing Research, designed to conceptualize, map, and evaluate national social science research systems, with the objective of identifying and interrogating structural impediments to knowledge production in the Global South. To operationalize this agenda, GDN has constituted research teams in selected contexts. Between 2014 and 2016, seven pilot teams were established in eleven countries spanning Africa, Asia, and Latin America, foregrounding a set of "determinants" deemed critical for analyzing research system dynamics and performance (GDN 2017a). In 2018, GDN advanced the institutionalization of the *Doing Research Assessment* (DRA) methodology by embedding it within national institutions during the Proof-of-Concept phase, thereby fostering both methodological feasibility and the consolidation of a transnational network of research centers, including those in Nigeria. Building on this trajectory, in 2022 five teams were inaugurated in Francophone Africa—specifically in Benin, Burkina Faso, Cameroon, Mali, and Chad—mandated to systematically evaluate their respective social science research systems and to generate analytical reports that diagnose structural constraints to scholarly production and dissemination.

The need for a better understanding of social science research systems In Francophone Africa, and particularly in Mali, this need is now more pressing than ever. In a context marked by major development and governance challenges, robust and contextualized research is essential to inform public policy and strengthen local capacities for analysis and innovation. However, the social science research landscape in Mali remains insufficiently documented, thus limiting its potential impact on strategic decisions and the reforms necessary for the country's sustainable development.

In this context, ROCARE-Mali, guided by a strong commitment to advancing endogenous scientific production, is undertaking the systematic evaluation of the national social science research system through the Doing Research program. This initiative, coordinated by the Global Development Network (GDN), provides a robust methodological framework for diagnosing the strengths and limitations of the Malian research landscape, while simultaneously identifying pathways for institutional enhancement and sectoral consolidation.

This report is organized to deliver a comprehensive analysis of the research environment, including stakeholder mapping and sampling strategies, as well as the dynamics of knowledge production, dissemination, and utilization within the social sciences in Mali—elements that constitute the DRA framework. It is conceived to complement ongoing national initiatives in research capacity enhancement, while simultaneously addressing persistent deficiencies, particularly in the areas of comparative data generation, systemic institutional structuring, and stakeholder networking. Through this evaluative process, ROCARE seeks to more effectively inform research policy, reinforce the professional capacities of scholars, and ensure the stronger incorporation of scientific evidence into national decision-making frameworks.

I - CONCEPTUAL BRIEF THEORETICAL FRAMEWORK

1.1. Theoretical framework

Evaluating a national social science research system necessitates a theoretical framework capable of articulating its institutional, cognitive, social, and policy dimensions in relation to the processes of knowledge production, dissemination, and utilization. Theories of change provide a pertinent heuristic lens for examining how and why research interventions may or may not generate sustainable developmental outcomes. The literature identifies four major conceptual frameworks: Lundvall (2007), through the theory of *national innovation systems*; the European Commission (2009), via the theory of change in research and innovation policy; the IDRC (2013), with its approach positioning research in the service of development; and Williams et al. (2013), who apply the theory of change to the evaluation of complex programs.

Although distinct in orientation, these models collectively enrich the understanding of learning dynamics, causal linkages between inputs and impacts, and the enabling conditions for social and institutional transformation. The subsequent analysis provides a critical and integrative reading of these theoretical perspectives, underscoring their relevance for assessing the social science research system in Mali.

For Lundvall, innovation and research are conceived not as isolated activities but as systemic processes of collective learning. His model is articulated around three phases: (1) capacity building, involving the development of educational, scientific, and technological institutions; (2) interaction and learning, characterized by cooperation among diverse stakeholders such as enterprises, researchers, government agencies, and civil society; and (3) structural transformation, wherein innovation functions as a driver of economic progress and sustainable social development. This perspective stands in contrast to linear theories of innovation—often referred to as the "input–output" model—advanced by Bush (1945), Nelson (1959), Rosenberg (1976), Freeman (1974), and Kline & Rosenberg (1986), which conceptualize research as a sequential process: investment → research → result → impact. Lundvall's framework, by contrast, underscores the importance of feedback loops and the inherently interactive and social dimensions of innovation.

The European Commission (EC) advances a model structured around three analytical levels: (1) inputs, referring to mobilized resources such as funding, skills, and infrastructure; (2) outputs, encompassing direct results including publications, patents, networks, and knowledge transfer; and (3) impacts, denoting long-term effects on competitiveness, economic growth, and societal well-being. This model is inspired by managerial logics, particularly results-based management (RBM). It diverges from more contextual approaches, such as those proposed by the IDRC, which highlight the social and political complexity of research processes rather than focusing solely on technical performance. The EC framework has, however, been criticized for its instrumental orientation and its tendency to adopt a linear conception of change.

With regard to the IDRC, it conceptualizes the theory of change through three interrelated phases: (1) knowledge production, characterized by contextualized, interdisciplinary, and participatory research; (2) knowledge utilization, involving dissemination, translation, and appropriation by policymakers; and (3) social transformation and policy, whereby research exerts a sustainable influence on political stakeholders, institutional practices, and everyday life conditions.

This perspective diverges from purely economic or technological interpretations of research. Whereas Lundvall and the European Commission (EC) emphasize innovation and competitiveness, the IDRC foregrounds social justice, equity, and the strengthening of local capacities. It explicitly rejects the notion of scientific neutrality, instead advancing a vision of engaged and transformative research.

In parallel, Williams and his colleagues contend that any theory of change must account for the inherent complexity of social systems. Their framework is organized around three dimensions: (1) contextual understanding, entailing the identification of stakeholders, systems, and interactions; (2) adaptive mechanisms, incorporating flexibility, experimentation, and continuous learning; and (3) emergent outcomes, acknowledging unforeseen and evolving effects. This approach stands in contrast to deterministic and linear models—such as those advanced by the European Commission—that presuppose stable causal relationships between actions and outcomes. Williams et al. advocate instead for an epistemology of complexity, wherein results emerge from dynamic, adaptive, and interactive processes.

Despite their divergences, these four theoretical frameworks exhibit a high degree of complementarity. Lundvall provides the overarching structural foundation within which the other approaches are embedded. His model foregrounds the institutional dimension—encompassing infrastructure, governance, and collective learning—which the IDRC and EC frameworks subsequently elaborate in terms of measurable outcomes such as outputs, impacts, and social transformations. The EC model contributes essential methodological instruments: it enables the structuring of indicators, the clarification of the intervention logic, and the assessment of system performance. When combined with Lundvall's systemic perspective, it establishes operational benchmarks that translate a structural framework into a measurable system. The IDRC framework introduces a normative orientation, while Williams and his colleagues extend the ethical concerns implicit in Lundvall and the EC models. Their approach foregrounds the social utility of research and its capacity to influence behavioral change and policy transformation. Integrated with the preceding frameworks, this perspective shifts evaluation beyond performance metrics to encompass the social and political relevance of research outcomes. Moreover, Williams' contribution adds the dynamic and adaptive dimension necessary for understanding research systems in practice. It complements Lundvall by embedding flexibility within innovation systems; challenges the EC by questioning the linearity of the input–output model; and enriches the IDRC by providing analytical tools to trace emergent transformations at both social and institutional levels.

In addition to their complementarity, relevance constituted a decisive criterion in the selection of these four theoretical frameworks. Within the context of Mali's social science research system, Lundvall's model underscores the necessity of forging connections among universities, research centers, policymakers, the private sector, and civil society. It highlights the importance of institutionalized organizational learning and situates structural transformation of the scientific system as a prerequisite for national development. Accordingly, it legitimizes an evaluative orientation centered on systemic capabilities, inter-institutional cooperation, and collective learning processes.

For the evaluation of Mali's social science research system, the European Commission (EC) framework provides a valuable foundation for mapping resources and outputs, structuring indicators of efficiency and effectiveness, and linking social science research to measurable impacts on public policy. It thereby complements Lundvall's systemic perspective by introducing an evaluative and quantitative dimension that operationalizes systemic analysis.

In a policy environment where donor influence is particularly pronounced, the IDRC approach emphasizes research grounded in local realities, fosters the co-production of knowledge between researchers and policymakers, and strengthens national ownership of research outcomes. It is therefore indispensable for an evaluation oriented toward the societal relevance and impact of social science research.

Finally, in the context of Mali, where the research system is marked by institutional fragility, policy instability, and resource constraints, the framework advanced by Williams and colleagues proves particularly valuable. It enables the assessment of the adaptive capacity of research institutions, facilitates the analysis of unforeseen dynamics such as informal collaborations and emergent social innovations, and promotes the institutionalization of a culture of continuous organizational learning within research structures.

1.2. Conceptual framework

For the purposes of this study, the concepts outlined above are defined in accordance with the methodological guidelines of the *Doing Research Assessment* (DRA), developed by the Global Development Network (GDN) in 2020. Although multiple definitions may coexist depending on theoretical orientations and disciplinary traditions, this report adopts the DRA framework as its reference point in order to ensure conceptual consistency and a shared interpretive lens. This framework operationalizes theoretical orientations into concrete analytical categories and variables, thereby enabling the systematic evaluation of the national social science research system.

Political application research: Refers to the appropriation and utilization of research-based knowledge for application within specific policy domains.

Social science research: Denotes professional engagement in the design and production of knowledge through research, refinement, and development of concepts, theories, models, techniques, instruments, software, or operational methods (OECD, 2015). This definition is grounded not in formal qualifications or educational attainment but in the actual practice of research and knowledge generation. Relevant professions include lecturers, senior lecturers, assistant professors, associate professors, full/principal professors, researchers, research associates, and research assistants. Institutional employers encompass universities, independent research institutes, consulting bodies, specialized units or centers, non-governmental research organizations (including foundations), and research consulting firms.

Political decision-maker: Refers to an individual occupying a formal position within the governing apparatus of a state, whether at the central or decentralized level, and engaged in routine political functions. This category encompasses stakeholders across both legislative and executive branches, including members of parliament, mayors, deputy mayors, municipal councilors, and other elected or appointed officials, irrespective of institutional hierarchy.

Research dissemination: Denotes the systematic communication and circulation of research outputs through diverse channels that facilitate interaction among academics, policymakers, civil society, and the private sector. It involves not only the transmission of findings but also the creation of dialogical spaces for discussion, negotiation, and appropriation of knowledge. The process aims to stimulate interest, cultivate practices, and influence behaviors in order to foster the institutionalization of evidence use within decision-making and societal development.

Indicator: Constitutes a methodological instrument designed to provide quantitative or qualitative evidence of a phenomenon, process, or outcome. Indicators serve as tools for monitoring change over time, benchmarking performance, informing decision-making, and assessing the effectiveness and efficiency of policies, programs, or institutional interventions.

Mentoring: Refers to an academic and professional relationship in which a senior faculty member (mentor) assumes an active role in guiding the career trajectory of a junior colleague (mentee). This process encompasses structured support in teaching, research, scholarly writing, career advancement, and professional development, while also addressing personal growth and work–life balance. Mentoring is conceived as a reciprocal and developmental practice, whereby the mentee progressively acquires expertise and autonomy, ultimately transitioning into the role of an experienced academic and researcher.

Performance of the social science research system: Refers to the system's overall capacity to create an enabling environment for the production of high-quality research, its effective communication, and its subsequent utilization by diverse stakeholders, including academia, policymakers, civil society organizations, and donor agencies.

Research production: Denotes the process through which research is generated by individual scholars and research organizations, encompassing the mobilization of inputs and the execution of activities that directly contribute to the research production function.

Research quality: Characterizes research that systematically addresses clearly defined and socially relevant questions, adheres to rigorous methodological standards, and contributes substantively to the advancement of knowledge. Quality research is distinguished by its relevance to local contexts as well as its applicability to broader national and global development challenges.

Social science research: Constitutes the professional practice of mobilizing, interpreting, and applying creative and systematic inquiry to generate and defend scientific knowledge about societies and human behavior. The conduct of social science research is inherently political and critically evaluative, with a pronounced orientation toward addressing development challenges. This activity involves both producers and users of research—often overlapping roles—whose interactions and responses shape the research cycle. Four principal categories of stakeholders are identified within social science research systems: higher education institutions, governmental and funding bodies, industry, and civil society organizations.

Social sciences: Constitute the domain of scholarly inquiry concerned with the study of society and human behavior. This field encompasses disciplines such as psychology, cognitive science, economics, business studies, education, sociology, law, political science, social and economic geography, media and communication studies, as well as interdisciplinary approaches (OECD, 2015). The Global Development Network (GDN, 2020) further identifies a broad spectrum of disciplines within the social sciences, including economics, sociology, political science, anthropology, international relations, ethnography, demography, development studies, geography, education, gender and sexuality studies, history, law, linguistics, management, philosophy, psychology, social work, public administration, and sustainable development.

Research system in social science: Refers to the ensemble of institutions, practices, organizational structures, and regulatory frameworks that collectively enable the production, dissemination, and utilization of social science research. Within this document, the terms "research system" and "social science research system" are employed interchangeably to denote this institutional and functional configuration.

Research user: Designates organized stakeholders who engage with and utilize social science research within the system. These include civil society organizations, media institutions, and political stakeholders, among others, who play a critical role in shaping the demand, appropriation, and application of research outputs.

1.3. Simplified conceptual plan

The conceptual diagram presented below depicts the systemic process through which resources invested in social science research in Mali are translated into social, economic, and political impacts. It is informed by the logic models of the European Commission (2009) and the IDRC's theory of change (2013), while simultaneously integrating the contextual specificities of Mali—namely, fragile institutional capacities, fragmented stakeholder constellations, and the limited incorporation of research evidence into public policy processes.

Resources (inputs)

↓

Institutional Capabilities

↓

Scientist Production (outputs)

↓

Broadcast and use of knowledge

↓

Social, Economic and Politics Change (impacts)

The first component of the model, drawing on the European Commission (2009), addresses the resources mobilized to sustain research activities. These encompass public and private funding streams, qualified human capital, scientific infrastructure, doctoral training programs, and regulatory frameworks, all of which are indispensable for a functional research system. In the Malian context, however, such resources remain scarce and unevenly distributed. Consequently, the evaluation of the national research system must assess not only the availability, quality, and sustainability of these inputs but also the governance and financing mechanisms that condition their effectiveness. The central evaluative question thus becomes: *are the resources mobilized adequate, coherent, and aligned with national development priorities?*

Yet resources alone do not automatically yield high-quality research; they must be converted into effective institutional capacities. This second dimension corresponds to the systemic strengthening phase, which involves the governance of universities and research centers, mechanisms of inter-institutional coordination, human resource policies, systems of scientific quality assurance, and ethical and knowledge transfer frameworks. The IDRC's approach (2013) emphasizes that institutional capacity extends beyond the mere presence of researchers to encompass their ability to interact, engage in collective learning, and generate socially useful knowledge. Within the Malian context, evaluation must therefore examine the degree of research professionalization, the stability of governance arrangements, and the existence of an enabling environment conducive to knowledge production and social innovation.

The third phase entails the transformation of institutional capacities into concrete outputs, including scholarly publications, research reports, databases, scientific communications, as well as methodological innovations and participatory approaches. The evaluation of Mali's research system must therefore consider not only the volume of scientific production but also its quality, thematic pertinence, and accessibility. Particular emphasis should be placed on the positioning of the social sciences within the national research agenda, given their frequent marginalization relative to the technical and natural sciences. Scientific output constitutes a critical indicator of system vitality; however, its true significance lies in its capacity to inform dissemination processes and practical applications.

The fourth dimension, central to IDRC's theory of change (2013), emphasizes the nexus between research and society. It encompasses the translation, dissemination, and appropriation of research findings by policymakers, economic stakeholders, civil society organizations, and the media. Within the Malian context, this stage remains one of the weakest links in the system. Institutional arrangements for knowledge transfer and science–policy dialogue are insufficiently structured, thereby constraining the potential societal impact of research. Evaluation must therefore interrogate the system's ability to render research visible, comprehensible, and actionable through mechanisms such as observatories, action-research platforms, and collaborative partnerships between researchers and policymakers.

The ultimate purpose of the social science research system is to generate measurable and sustainable transformations in public policies, social practices, and institutional behaviors. Such impacts may manifest across multiple dimensions: socially, through enhanced understanding of inequalities, community dynamics, and educational or cultural needs; economically, through the design of evidence-based policies aimed at improving employment, productivity, and territorial cohesion; and politically, through the strengthening of governance capacities, planning mechanisms, and the evaluation of public policies. Drawing inspiration from the European Commission model (2009), this phase underscores the utilization of research results as a central indicator of impact. Accordingly, the evaluation of Mali's research

system must assess the extent to which research informs concrete political decisions, national planning processes, and sectoral strategies in domains such as education, health, and governance.

The conceptual framework should not be interpreted as a linear sequence of stages but rather as an interactive and dynamic cycle in which each component reinforces the others. Resources mobilized as inputs enhance institutional capacities, which in turn foster scientific production, thereby stimulating dissemination and ultimately contributing to social transformation. Conversely, observed impacts feed back into the formulation of research policies, generating processes of collective and adaptive learning within the system—a dimension emphasized by Williams et al. (2013).

Finally, this framework must be further enriched by Lundvall's (2007) systemic vision, which assumes a central and transversal role by linking each stage—from resource mobilization to societal impact—through the logic of interaction and collective learning among stakeholders within the national research and innovation system.

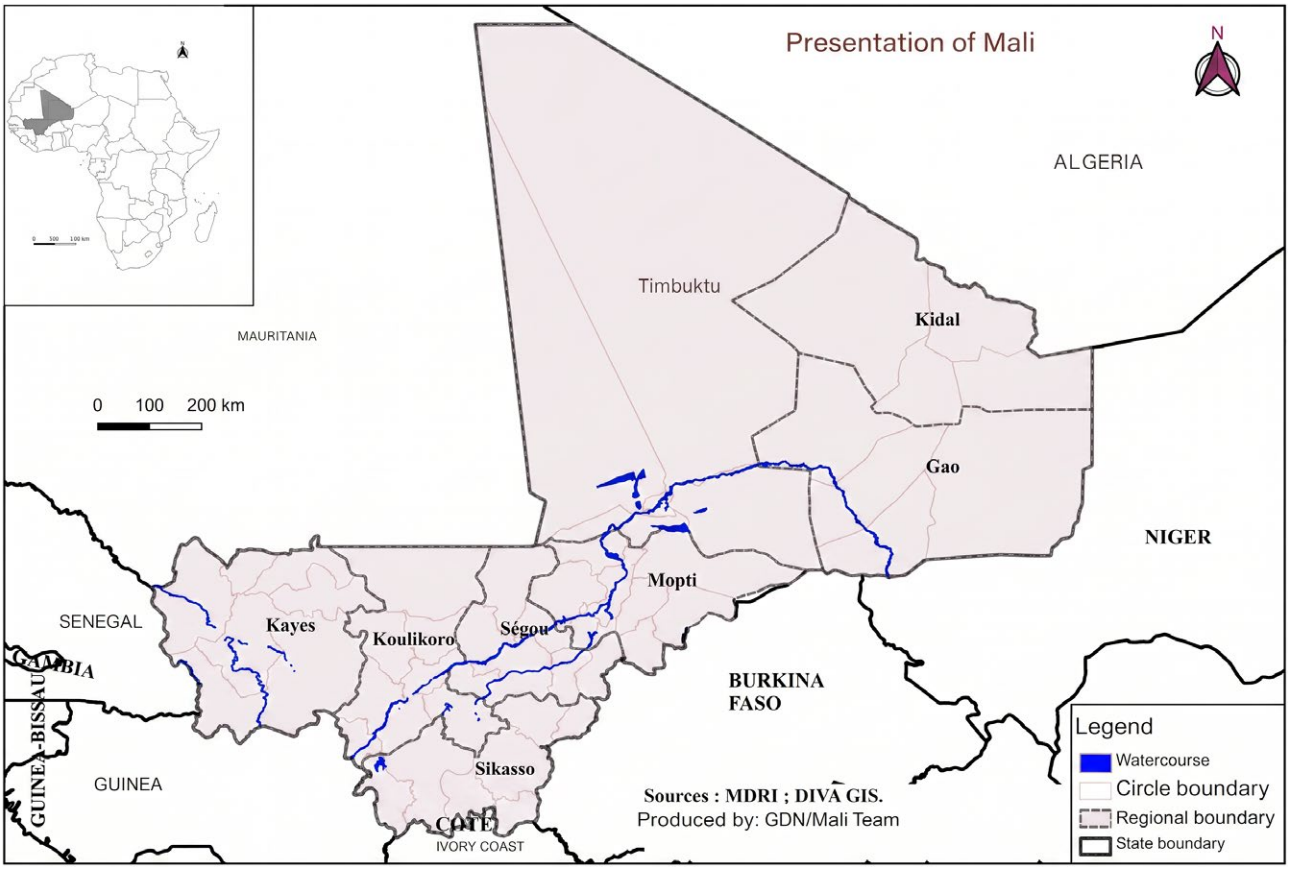
Whereas the conceptual framework inspired by the European Commission (2009) and IDRC (2013) delineates a sequential process of transforming resources into social outcomes, Lundvall's perspective foregrounds the importance of feedback loops, the co-construction of knowledge, and institutional cooperation among researchers, universities, policymakers, the private sector, and civil society. In the evaluation of Mali's social science research system, this systemic orientation enables a departure from linear performance analysis, directing attention instead to the quality of interactions, the capacity for collective learning, and the governance of knowledge—all of which condition the production, dissemination, and, most critically, the appropriation of research outputs to inform public policy and foster sustainable social transformation.

Thus, the conceptual model provides a systemic evaluation framework that allows for the assessment of the system's efficiency (conversion of resources into results), the social and political relevance of research, and the sustainability of the transformations generated within Malian society.

II – ANALYSIS CONTEXT

2.1. Presentation of Mali

Figure 1: Presentation of Mali



Mali is a vast landlocked state situated at the core of West Africa, encompassing an area of approximately 1,241,238 km². The Republic of Mali shares boundaries with Algeria to the north, Niger and Burkina Faso to the east, Côte d'Ivoire and Guinea to the south, and Senegal and Mauritania to the west. The country is traversed by two major river systems: the Niger River (4,200 km in length, with 1,780 km flowing through Mali) and the Senegal River (1,800 km, nearly half of which lies within Malian territory). Both rivers possess significant hydroelectric and agricultural potential, underpinning the national economy through infrastructure projects such as the Office of Niger irrigation scheme and the Sélingué and Manantali dams. At the center of the country, the Inner Niger Delta—a vast floodplain—transforms into an inland sea during the rainy season, characterized by a temperate climate and rich biodiversity. Climatically, Mali experiences two distinct seasons: a prolonged dry season (October–May), which includes a relatively cool period (October–February), and a rainy season (June–September). Average temperatures range from 24°C in January to 35°C in May. The physical geography is dominated by extensive alluvial plains interspersed with limestone and sandstone plateaus. Approximately two-thirds of the national territory, located in the northern regions, consists of arid desert landscapes.

Mali account 22 395 489 residents of which 49.7% of women according to the fifth 2022 General Population and Housing Census (RGPH5). In 2020, the Malian population was estimated has 20 537 000 residents and has 21 112 000 residents in 2021 (DNPD, 2023).

The age structure of Mali's population continues to reflect a persistent demographic trend characterized by a predominance of youth, with an age pyramid marked by a broad base. Currently, 47.02% of the population is under 15 years of age, constituting the majority of the economically inactive segment. Both observed and projected demographic patterns indicate that the age structure—and consequently the dependency ratio—is unlikely to undergo significant transformation in the coming decades, largely due to sustained fertility levels and life expectancy dynamics. According to the fifth

General Population and Housing Census (RGPH5), 49.90% of Malians fall within the 15–64 age bracket, 53.6% are children aged 0–17, 32% are youth aged 15–34, while individuals aged 65 and above account for only 2.9%. The pronounced youthfulness and rapid demographic expansion represent both a potential driver of economic development and a source of structural challenges. With an average annual intercensal growth rate of 3.3% between 2009 and 2022, Mali's population is projected to double in less than 22 years, reaching an estimated 46.2 million inhabitants by 2050. This trajectory raises pressing concerns regarding the provision of basic social services and equitable access to natural resources. Viewed against the long-term demographic trend from 1976 to 2022, the country has experienced a 3.5-fold increase in population size, underscoring the magnitude of demographic pressures on national development.

The projected doubling of Mali's population in less than 22 years will generate profound repercussions across all sectors, with particularly acute implications for higher education. On the one hand, demographic expansion will inevitably result in a substantial increase in the number of young people. Given Mali's already youthful age structure, this growth will intensify existing pressures on the education system, especially at the tertiary level. On the other hand, the rising number of secondary school graduates will translate into a surge of applicants to universities and other higher education institutions. This escalating demand will necessitate significant expansion of institutional capacity, both in terms of infrastructure and academic human resources.

To respond effectively to these demographic and socio-economic dynamics, Mali must prioritize the training of managers, technicians, teachers, engineers, and professionals capable of supporting sustainable development. Within this context, higher education assumes a pivotal role in the formation of human capital. Moreover, population growth will contribute to the diversification of student profiles—urban and rural, male and female, advantaged and disadvantaged backgrounds—requiring the system to guarantee equitable access to quality education. Finally, Mali will need to substantially increase investments in the sector, through the establishment of new universities, the recruitment of qualified faculty and researchers, and the enhancement of training quality, in order to meet the demands of a rapidly expanding and diversifying student population.

The foregoing analysis demonstrates that Mali's rapid demographic expansion constitutes both a formidable challenge and a potential opportunity for the country's higher education sector. To transform demographic pressure into a driver of development, it is essential to anticipate future demand and reinforce strategic planning within the education system, particularly at the tertiary level. Data from the RGPH5 indicate that population density has risen steadily over time, increasing from 5.2 inhabitants per km² in 1976 to 18 inhabitants per km² in 2022. According to the 2009 census, density varied considerably, reaching as low as 0.4 inhabitants per km² in the Kidal region, while the Bamako District recorded nearly 7,400 inhabitants per km². Moreover, the region's most severely affected by the country's crisis—Kidal, Gao, and Timbuktu—cover almost two-thirds of Mali's territory yet account for only about 9% of the population. The average urbanization rate stands at 46.2%, compared to 49.5% in West Africa and 43.1% in Sub-Saharan Africa. Ensuring access to education for the entire school-age population thus represents a major challenge, particularly in sparsely populated and geographically expansive areas.

Mali's population is composed of diverse ethnic groups, including Arab, Bambara, Bozo, Bwa, Dogon, Khassonké, Malinké, Moor, Minianka, Fulani, Senufo, Songhai, Soninké, Sarakolé, and Tuareg communities. This diversity underpins the country's rich linguistic and cultural heritage. According to Article 31 of the new constitution adopted on July 22, 2023, national languages have been designated as official languages of Mali, while French remains the working language. Law No. 96-049 of August 23, 1996, which promotes national languages—particularly within education—recognized thirteen national languages: bamanankan (Bambara), bomu (Bobo), bozo, dogoso (Dogon), fulfuldé (Peul), hasanya (Moorish-Arab), mamara (Minyanka), maninkakan (Malinké), soninké (Sarakolé), sɔngoy (Songhai), syenara (Senufo), tamasayt (Tamasheq), and Khassonké. These thirteen national languages, alongside French, are employed in administration and education, reflecting Mali's commitment to linguistic pluralism and cultural inclusivity.

The 2021/2022 Human Development Report of the United Nations Development Program (UNDP) ranked Mali 48th out of 53 African countries in 2022, and 186th out of 191 countries globally in terms of human development. According to the 2021 INSTAT Statistical Yearbook, the average life expectancy in Mali is 56 years. The crude birth rate stands at 44.9 per 1,000 inhabitants, while the crude death rate is 12.4 per 1,000. Life expectancy at birth is estimated at 60.4 years, slightly above the West African average of 58.3 years but below the Sub-Saharan African average of 62.1 years (UN, 2023).

In the health sector, Mali has 0.19 physicians per 1,000 inhabitants compared to 0.26 for Africa as a whole (WHO, 2014–2022). The estimated incidence of malaria is 354 cases per 1,000 inhabitants, significantly higher than the continental average of 223 (WHO, 2022). The prevalence

of undernourishment is 9.6%, compared to 19.9% across Africa (FAO, 2023).

With respect to development and inequality, Mali's GDP per capita is USD 866, compared to USD 1,680 in Sub-Saharan Africa (IMF, 2023). The Gini coefficient is 35.7 (WB, 2021). Approximately 20.8% of the population lives on less than USD 2.15 per day, compared to 36.7% in Sub-Saharan Africa in 2019 (WB, 2021). The adult literacy rate is 31%, well below the Sub-Saharan African average of 68% (WB, 2020). The mean years of schooling is 1.6 years (UN, 2021), compared to 6 years in Sub-Saharan Africa in 2022. Vulnerable employment accounts for 85% of the labor force, compared to 75% in Sub-Saharan Africa. Net official development assistance (ODA) per capita is USD 53, slightly above the regional average of USD 49 (WB, 2022). The financial inclusion rate is 43.5%, compared to 55.1% in Sub-Saharan Africa.

Regarding infrastructure, WB data (2022) indicate that access to electricity in Mali stands at 53%. Access to safe drinking water reaches 84%, compared to 65% for Africa as a whole, while access to basic sanitation services is 50%, against a continental average of 35%. Mobile phone penetration is particularly high, with subscription rates at 114% compared to 89% in Africa. Internet usage, however, remains relatively modest, with 33% of the population connected compared to 37% in Africa in 2023. Mali's logistics performance index is 2.6, slightly above the African average of 2.5. According to the African Development Bank (AfDB, 2022), Mali ranks 36th out of 54 African countries in the African Infrastructure Development Index and 45th in the Transport Index.

At the regional level, among the 16 West African countries, Mali ranks 15th in life expectancy and in the Human Development Index (HDI), 13th in GDP per capita (2023), 8th in poverty rate, and 10th in the Infrastructure Development Index for Africa (AfDB).

Institutionally, Article 30 of the Constitution of July 22, 2023, defines Mali as an independent, sovereign, unitary, indivisible, democratic, secular, and social republic. Its institutions include the President of the Republic, the Government, Parliament, the Supreme Court, the Constitutional Court, the Court of Auditors, and the Economic, Social, Environmental, and Cultural Council. Mali's territorial and administrative organization combine deconcentrated and decentralized state services. Until 2022, the country comprised ten operational regions (Kayes, Koulikoro, Sikasso, Ségou, Mopti, Timbuktu, Gao, Kidal, Ménaka, and Taoudéni) and one district (Bamako, the capital). These regions encompassed 56 districts, subdivided into 703 communes, including 666 rural communes. Following the promulgation of Law No. 2023-007 of March 13, 2023, Mali now consists of 19 regions, one district (Bamako), 159 circles, 475 arrondissements, and 825 communes. These territorial units are administered by elected assemblies or councils, thereby institutionalizing the transfer of powers, responsibilities, and resources from the State to local authorities. This reform represents a significant step forward in the decentralization of public services—including education—and is intended to consolidate local governance capacities to ensure full management and accountability of public action at the local level. Each level of local government remains under the supervision of the corresponding decentralized service of the Ministry of Territorial Administration and Decentralization.

The presentation of Mali underscores several critical dimensions for social science inquiry. First, demographic and territorial dynamics constitute a major field of study. With a predominantly youthful population and a rapid annual growth rate of 3.3%, the challenges related to education, employment, and social service provision are particularly acute. The analysis of urban structures and the unequal distribution of population between the northern and southern regions provides a pertinent framework for research in human geography and the sociology of development. Moreover, Mali's ethnic and linguistic diversity raises significant questions regarding intercultural relations and governance. The recognition of national languages as official languages marks a profound transformation in language policy and national identity.

This evolution necessitates studies on the implications of such reforms for social inclusion and equitable access to education. In addition, socio-economic indicators—such as low human development levels, declining literacy rates, and persistent poverty—call for in-depth analyses of public policies and their impact on human development outcomes. The ongoing decentralization process, characterized by the expansion of regions and local authorities, further raises questions about the effectiveness of local governance and the persistence of territorial inequalities. Finally, the health and environmental context, particularly the prevalence of malaria and the strategic importance of Niger River water resources, constitutes a vital domain for social science research applied to public health and sustainable development. Taken together, these factors position Mali as a fertile ground for social science research, where structural challenges intersect with profound societal transformations.

2.2. The research system in Mali

Mali is historically recognized as a longstanding center of knowledge production. The University of Sankoré in

Timbuktu was among the most renowned institutions of its era (15th–16th centuries), attracting scholars from diverse backgrounds who came to refine and deepen their intellectual training. Following the period of great geographical discoveries (15th–16th centuries) and the subsequent rise of European imperialism in the 19th century, the European powers—meeting at the Berlin Conference (1884–1885)—proceeded to partition sub-Saharan Africa, legitimizing colonization under the pretexts of civilization, commerce, and Christianization (Jean Suret-Canale, 1964; Joseph Ki-Zerbo, 1972). The colonial quest for knowledge about African territories led to the publication of numerous documents by European administrators and scholars. To institutionalize colonial knowledge on African societies and cultures, the French Institute of Black Africa (IFAN) was established in August 1936 (Aggarwal, 2008).

After independence in 1960, the local IFAN centers, including the one in Bamako, became autonomous. In 1962, the Bamako center was replaced by the Institute of Human Sciences (ISH), created under Law No. 062-75/AN PGRM of February 17, 1962. Its principal objective was to contribute to the consolidation of national unity, counter separatist tendencies, and foster the formation of a new type of citizen. Decree No. 02-057P-RM of June 5, 2002, subsequently established the ISH as a Public Scientific and Cultural Institution (EPSC). Its primary mission is the advancement of research in the humanities and social sciences (Institute of Human Sciences, n.d.).

The emergence of postcolonial higher education in Mali forms part of a complex historical trajectory shaped by the legacy of precolonial scholarly institutions, the rupture imposed by colonial domination, and subsequent efforts at national reconfiguration following independence. Despite the significance of this historical continuity, scholarship on the intersections between these phases remains only partially developed.

The University of Sankoré in Timbuktu stands as a major locus of intellectual tradition and one of the foremost centers of learning in precolonial West Africa. As Hunwick (1999) notes, Sankoré, together with the other scholarly institutions of Timbuktu (Sidi Yahya and Djingareyber), sustained a vibrant academic life between the 13th and 16th centuries. Their pedagogical system was grounded in Islamic sciences, jurisprudence, logic, medicine, and astronomy. Instruction was conducted in Arabic, and the degrees (ijâza-license) conferred were widely recognized as authoritative scholarly credentials across the Muslim world. Yet, as Jeppie and Diagne (2008) argue, Sankoré's recognition as a university has often been obscured in modern narratives of African education, which remain dominated by Western and colonial epistemological paradigms. This epistemic marginalization has contributed to a symbolic discontinuity between ancient knowledge traditions and the institutional configurations of postcolonial higher education.

The colonial school, as an instrument of domination and selection, introduced an educational model deeply foreign to local traditions. As Jules Ferry analyzes Its aim was to "moralize" and "civilize" the colonized according to European standards. Higher education remained virtually nonexistent until the 1950s. According to Mbodj (2004), institutions like the William Ponty Normal School (in Senegal), while training an elite, primarily served to produce auxiliaries for the colonial administration. The colonial education system ignored or marginalized indigenous knowledge, creating a profound divide with intellectual traditions like those of Sankoré. The few institutions of higher learning, such as the Higher Education Center of Dakar (which became the University of Dakar in 1957), were under French control.

At independence (1960), the 1962 education reform marked a certain a break with the colonial system, thus reflecting the political will to develop mass, quality education, an education that decolonizes minds and can provide, with maximum savings in time and money, all the managers the country needs for its various development plans.

The foundation of higher education in Mali is situated at the intersection of heritage and rupture. The country established its first national higher education institutions within a context of pronounced politicization of education. With the exception of the Institute of Human Sciences (ISH), founded in 1962, priority was largely accorded to teaching through the creation of High Schools, often to the detriment of research. This orientation sought to respond to the urgent needs generated by the departure of the colonial administration. The School of Public Works, originally established in 1939, was transformed into the National School of Engineers (ENI) in 1962. The Higher Teacher Training College of Bamako (ENSup), inaugurated in 1963, was designed to address both initial and continuing training requirements for educational managers (teachers, administrators, and trainers), while simultaneously asserting intellectual independence through scientific inquiry. The Institute of Rural Polytechnic of Katibougou (IPR-Katibougou), created in 1965, concentrated on the rural sector, including agriculture, fisheries, and livestock. The National School of Medicine and Pharmacy (ENMP), established in 1968, provided advanced training for senior health professionals. Finally, the Higher Pedagogical Center (CPS), founded in 1970, was tasked with training trainers of trainers and offering postgraduate education.

Niane (1984) observes that Malian higher education institutions largely adopted French pedagogical structures and epistemological frameworks, often to the detriment of indigenous traditions. In parallel, Konaré (1992)—historian and former president of Mali—emphasizes the necessity of reintegrating Malian higher education into a historical continuum that includes the legacy of Sankoré, thereby reconciling endogenous knowledge systems with contemporary academic requirements.

The existing literature underscores a persistent tension between indigenous intellectual legacies, epitomized by the University of Sankoré, and the educational models imposed under colonial rule. The emergence of postcolonial higher education in Mali unfolded within a context in which pre-existing educational structures were partially neglected or marginalized, contributing to a symbolic rupture between ancestral scholarly traditions and modern institutional configurations. It therefore remains necessary to further document the continuities and the breaks between these different periods to build a more complete and decolonized vision of Malian educational history.

The strong demand for training and the rapid increase in student enrollment, driven by rising school attendance rates, led to the establishment of the University of Mali (UM/U-Mali) in 1993. This institution was later restructured and renamed the University of Bamako (U-Bamako) in 2006, with the strategic objective of expanding higher education provision through the creation of additional universities in the regions. In 2010, the University of Ségou (U-Ségou) was inaugurated. Given the excessive concentration of students at the University of Bamako, the institution was reorganized in 2011 into four thematic universities: the University of Letters and Human Sciences of Bamako (ULSHB), the University of Sciences, Techniques, and Technologies of Bamako (ULSHB), the University of Social Sciences and Management of Bamako (USSGB), and the University of Law and Political Sciences of Bamako (USJPB). In the same year, the Higher Normal School for Technical and Professional Education was also established to strengthen specialized teacher training.

In 2022, three new universities were established in Mali: The University of Sikasso (U-Sikasso), the University of Gao (U-Gao), and the University of Timbuktu (U-Timbuktu). Although the legislative texts founding these institutions do not explicitly specify their disciplinary orientations, it is reasonable to expect that they will incorporate programs in the social sciences, either partially or comprehensively. According to data from the Directorate General of Higher Education and Scientific Research (DGESRS), by the end of 2022 Mali counted 206 functional higher education institutions, including six public universities, eleven public institutes and High Schools, and 189 private institutions. The same figures are confirmed by the General Directorate of Higher Education and Scientific Research (DGESRS).

The complete list of private higher education institutions, along with their geographical locations and dates of establishment, is available on the DGESRS website (dg-enseignementsup.ml) under the section “Private Higher Education Institutions.” The oldest of these institutions dates back to 1996, namely the SMART IP-SMART Private Institute.

It is important to emphasize that social science research has consistently been a priority for national authorities, as evidenced by the establishment of the Institute of Human Sciences (ISH) immediately after the country attained sovereignty. The historical trajectory of research centers and institutions is therefore closely intertwined with that of the Higher Schools (elite higher education institutions). Although the state’s primary focus since independence has been on the expansion of higher education, the creation of the Institute of Human Sciences (ISH) illustrates that research—particularly in the social sciences—was simultaneously conceived as a fundamental pillar of national development. The evolution of research centers thus unfolded in parallel, and often in complementarity, with that of the elite schools.

Following independence in 1960, the Malian state undertook the construction of a national educational and scientific system. Prestigious institutions such as the École Normale Supérieure, the National School of Engineering, and the School of Medicine were established with the explicit objective of training national leaders, while research centers such as the ISH were designed as complementary structures to generate knowledge tailored to the country’s socio-political and cultural realities. Both types of institutions pursued a common goal: the consolidation of intellectual sovereignty and the advancement of national development. The Higher Schools frequently served as foundational sites for research, insofar as their teaching and research staff engaged in scholarly activities either independently or in collaboration with specialized centers. Some schools developed research departments and laboratories, thereby bridging the gap between pedagogy and scientific production. This dynamic created a structural interdependence between higher education and research. Given the scarcity of resources, human capital, libraries, equipment, and funding were often shared between the Higher Schools and research centers. For instance, researchers affiliated with institutes such as the ISH regularly taught in elite schools, while students

trained in these institutions actively participated in research projects.

The historical trajectory of research centers in Mali is closely intertwined with that of the Grandes Écoles, as both were conceived, developed, and at times jointly administered within the broader framework of postcolonial nation-building. Their complementary missions—training national cadres and producing knowledge tailored to the socio-economic and cultural needs of Malian society—reflect a shared orientation toward intellectual sovereignty and developmental imperatives.

At present, the Ministry of Higher Education and Scientific Research (MESRS), the principal governing body for research in Mali, operates through a dedicated department whose core mandate is the formulation and implementation of national policy in higher education and scientific research. Within this framework, the National Policy for Higher Education and Scientific Research, adopted in 2009, and the National Policy for Science and Innovation (PNSTI), adopted in 2015 to cover the period 2017–2025, were elaborated. The evaluation of the PNSTI is expected to identify its strengths and weaknesses and to generate relevant recommendations for future policy development, although no information is currently available regarding its assessment. It is noteworthy that neither of these national policies is devoted exclusively to the social sciences; rather, they encompass all disciplinary fields and serve as instruments for guiding state action in higher education, scientific research, technological advancement, and innovation. They function as reference frameworks for the planning, implementation, monitoring, and evaluation of programs, projects, and activities undertaken in the domains of higher education, research, science, technology, and innovation (STI) in Mali.

To prepare and ensure the effective implementation of these policies, the Ministry of Higher Education and Scientific Research (MESRS) relies on its central services, affiliated services, and specialized agencies. The central services include: (i) the General Directorate of Higher Education and Scientific Research (DGESRS), (ii) the Directorate of Human Resources for the education sector, and (iii) the Finance and Equipment Directorate (FED).

Among the specialized agencies, the National Center for Scientific and Technological Research (CNRST) plays a pivotal role. The orientation and organization of the national research system—structured by sector of activity—along with the coordination of research centers and their effective collaboration with institutions engaged in the production, dissemination, and valorization of research outputs and technological innovation, are mandated under the authority of the CNRST. In addition, other relevant structures under different ministerial departments contribute to research activities, particularly in the fields of health, agriculture, and environmental management.

Within the health sector, Mali has, for more than three decades, accorded particular importance to health research and social development, beginning with the establishment of the National Institute of Public Health Research (INRSP) in 1981. This commitment has been further consolidated in recent years through the creation of additional institutions dedicated to advancing health research and promoting social well-being. Among these are the National Center for Support in the Fight Against Disease (CNAM), the Research and Studies Documentation Center for Child Survival (CREDOS), the Malaria Research and Training Center (MRTC), the Institute for Studies and Research in Geronto-Geriatrics (IERGG), the National Agency for Hospital Evaluation (ANEH), and the Laboratory of National Health (LNS). In addition, a National Ethics Committee for Health and Life Sciences (CNESS) has been established to ensure ethical oversight and integrity in biomedical and social science research.

In the agricultural sector, the Institute of Rural Economy (IER), established in 1960, stands as Mali's principal agricultural research institution. It is a public scientific and technological body with autonomous management. Its mandate is to enhance agricultural productivity, strengthen food security, raise farmers' incomes, and promote sustainable rural development, thereby positioning the rural sector as a central driver of national economic growth. The stakeholders of the National Agricultural Research System (CRRVA)—including users of research results organized into Regional Research Councils for Agricultural Extension (CNRA), local authorities, technical services, and professional organizations—constitute an additional hub of agricultural research in Mali. In 1993, the National Committee of Agricultural Research (NCAR) was established following a restructuring of Mali's agricultural research system, thereby institutionalizing a genuine SNRA. The CNRA serves as the coordinating body for agricultural research across the ministries responsible for rural development. The priority domains of agricultural research are explicitly articulated in Mali's Strategic Plan for Agricultural Research, which provides the framework for sectoral orientation and policy implementation.

It should be underscored that in Mali, virtually all research institutions—particularly those operating in the health, agriculture, and environmental sectors—include a department, division, or section dedicated to social science research. These units typically conduct studies to

address the immediate needs of their respective sectors, though not on a permanent or systematic basis. At times, they collaborate with other research teams in the context of large-scale, multidisciplinary projects.

Beyond these two principal poles of research, which mobilize stakeholders in health and agriculture, the Malian research system encompasses a wider constellation of stakeholders. These include higher education institutions (universities, high schools, institutes, centers, laboratories, and academic chairs), specialized research institutions such as the Institute of Human Sciences (ISH), learned societies, private-sector research stakeholders, independent scholars, and knowledge holders from grassroots communities.

Currently, Mali's higher education and research system comprises five public universities, eleven high schools and institutes, and 173 state-accredited private higher education institutions. Public institutions collectively enroll more than 100,000 students, of whom 92.63% attend public universities. Female students account for slightly more than one-third of the public higher education population, representing 36.49%. Data from the DGESRS's 2023 Higher Education Statistics Bulletin highlight the rapid annual growth of student enrollment in Mali's public higher education sector.

Enrollment growth in Mali's higher education sector was recorded at 4.75% during the 2019–2020 academic year, with a total of 88,368 students, of whom 31,186 were female (35.29%). In 2020–2021, growth reached 20.53%, with 106,512 students enrolled, including 38,560 women (36.20%). By 2021–2022, enrollment had expanded by 38.82%, reaching 147,855 students, of whom 56,157 were female (37.98%). Within these figures, students enrolled in disciplines classified as social sciences in this study represented more than three-quarters of the total: 75.75% in 2019–2020, 78.37% in 2020–2021, and 81.42% in 2021–2022.

Data from the DGESRS (2023) indicate that between the 2018–2019 and 2021–2022 academic years, 39,785 students graduated. Of these, 66.79% were men, 29.99% were women, and 3.22% were of unspecified sex due to incomplete reporting from two institutions that did not differentiate by gender. An analysis of graduates by discipline reveals that the social sciences, as defined in this study, accounted for 67.87% of the total, representing more than two-thirds of all graduates.

With respect to teaching and research personnel, the 2021–2022 academic year recorded a total of 2,031 staff members, of whom 261 were women (12.85%) (DGESRS, 2023). Within this cohort, 127 were full professors or research directors, including 7 women (5.51%); 423 were associate professors or research associates, of whom 44 were women (10.40%); and 633 were senior lecturers or equivalent. In addition, there were 633 research assistants or fellows, including 77 women (12.16%), and 848 research assistants or associates, of whom 133 were women (15.68%). These figures indicate that research assistants and associates constitute the largest category of academic staff in Mali (41.75%), followed by senior lecturers and equivalent positions (31.17%). By contrast, master's-level lecturers/professors and research staff account for 20.83%, while professors and research directors represent only 6.25%, making them the least numerous.

According to DGESRS (2023), 306 staff members were unavailable during this period due to secondment (32), training leave (254), or leave of absence (20). A comparison between the number of teaching and research staff and the student population for the 2021–2022 academic year reveals a pronounced shortage of permanent academic personnel in Mali's public higher education institutions. The student-to-faculty ratio stood at 73 students per teacher, a figure nearly three times higher than the UNESCO benchmark of 25 students per teacher, underscoring the structural challenges facing the system.

While the statistical bulletin on higher education published by the DGESRS (2023) provides disaggregated data on student enrollment in the social sciences, the figures for teaching staff remain aggregated, encompassing all disciplinary fields. This methodological limitation prevents a precise calculation of the student-to-teacher ratio specific to the social sciences. Nevertheless, it is reasonable to infer that the ratio in the social sciences is higher than the overall average for Mali's public higher education institutions, which currently stands at 73 students per teacher. Despite sustained governmental efforts, investment in knowledge production remains insufficient and continues to fall short of the African Union (AU) benchmark of at least 1% of GDP. A national survey conducted in 2007 within the framework of the African Initiative on Science, Technology, and Innovation Indicators (ASTII) revealed that only 0.28% of GDP was allocated to research and development (R&D) activities. Data from 2010, limited to the public sector, further confirmed the restricted financial resources devoted to R&D. UNESCO statistics from 2016 indicate that total R&D expenditure across all sectors—business, universities, and government—amounted to 0.7% of GDP.

The financing of scientific research and technological development in Mali is predominantly external, with foreign sources accounting for 50.2% of funding, while modest annual government allocations represent 44.7%, primarily channeled through the Competitive Fund for Research and Technological Innovation (FCRIT) and related mechanisms. In its inaugural edition in 2017, the

FCRIT supported 47 projects, of which only five were situated within the social sciences, underscoring the marginalization of this domain in national research priorities. The private sector's financial contribution to R&D remains negligible, reflecting structural weaknesses in the diversification of funding sources and the integration of research into broader economic development strategies.

The research system in Mali, though institutionally structured and progressively expanding, continues to face substantial challenges, particularly within the domain of the social sciences. Historically, social science research has benefited from institutional attention, most notably with the establishment of the Institute of Human Sciences (ISH) in 1962. Yet, despite the proliferation of higher education institutions and research centers, the social sciences remain marginal in both funding allocation and organizational prioritization. While social science students constitute the majority of enrollments (81.42% in 2021–2022), the number of faculty specializing in these disciplines remains limited, and disaggregated data on their distribution is largely unavailable. Moreover, the elevated student-to-faculty ratio (73:1) significantly constrains the quality of pedagogical supervision and the production of scientific knowledge.

Research financing, heavily reliant on external sources (50.2%), remains inadequate, representing only 0.7% of GDP in 2016, with minimal participation from the private sector. Furthermore, the social sciences are underrepresented in competitive funding mechanisms, as evidenced by their limited share in the Competitive Fund for Research and Technological Innovation (FCRIT). Consequently, despite the existence of a relatively developed institutional framework, social science research in Mali suffers from persistent deficits in resources, organizational capacity, and scholarly recognition. Addressing these limitations requires the formulation of targeted support policies designed to strengthen the growth of social science research and enhance its contribution to national development.

2.3. Sociopolitical context

The history of Mali is among the oldest and most extensively documented in sub-Saharan Africa, notably through Arabic manuscripts, some of which date back to the 9th century. Mali served as the cradle of successive empires and kingdoms from the 4th century until the colonial conquest. The most prominent were the empires of Ghana, Mali, and Songhai, which projected their influence far beyond Africa, largely owing to their reputation for intellectual and cultural advancement.

These empires were characterized by centralized political systems, dynamic economic structures sustained by trans-Saharan trade in gold and salt, and profound cultural influence, particularly in Timbuktu, which emerged as a major hub of Islamic scholarship and manuscript production (Ki-Zerbo, 1972; Niane, 1989). The University of Sankoré in Timbuktu epitomized this intellectual effervescence, attracting scholars from diverse regions of the Muslim world (Hunwick, 1999). The legacy of these empires continues to shape the historical consciousness and cultural identity of contemporary Mali.

Subsequent to these imperial formations, Mali witnessed the rise of the Bambara kingdoms of Ségou and Kaarta, the Fulani empire of Macina, the Toucouleur empire under El-Hadj Omar Tall, as well as the kingdoms of Kénédougou and Wassoulou, among others. Mali was later incorporated into French colonial rule from 1895 until 1960, when it achieved independence on September 22, following the dissolution of the Mali Federation, which had briefly united French Sudan and Senegal.

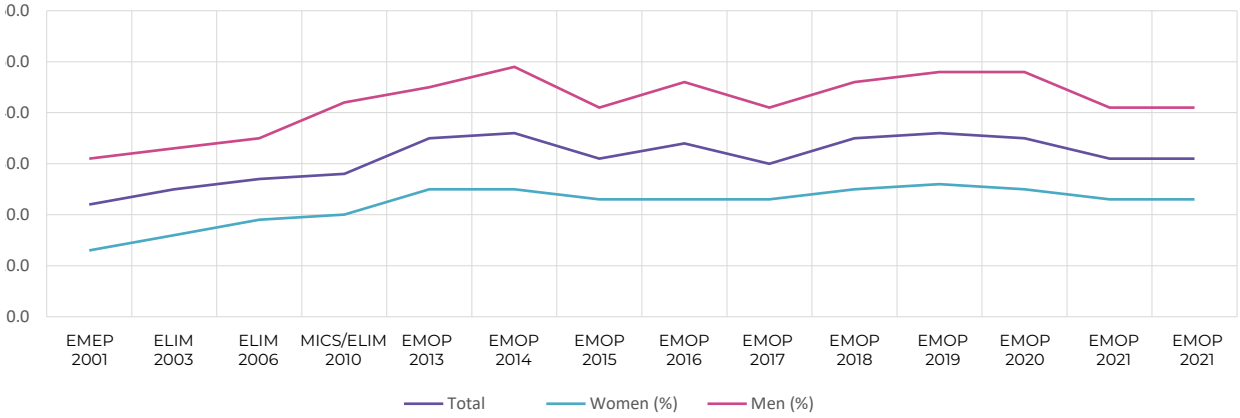
The expansion of large settlements has fostered extensive cultural intermixing among Malian populations, leading to the emergence of highly heterogeneous social formations whose diversity of customs and traditions constitutes one of the country's most valued assets within the sub-region. Mali is home to a multiplicity of ethnic and linguistic communities, each serving as a distinct reservoir of cultural capital and simultaneously as a subject of sustained inquiry in the social sciences. The principal groups include the Bambara (or Bamanan), the Malinke (Maninka), the Sarakolé (Soninke or Marka), the Fulani (Fula), the Senufo/Minianka, the Dogon (Dogonon or Kado), the Bobo (Bomu), the Bozo, the Songhai (Songhai and Djarma), the Tuareg, the Moors, and the Arabs (INSTAT, 2011).

Yet, despite this rich cultural and linguistic heritage, the majority of Mali's population remains illiterate, even though literacy rates registered an increase between 2011 and 2021 (see graph below). In 2021, less than one-third (30.80%) of the adult population aged 15 and above possessed the ability to read and write in any language. Gender disparities remain pronounced, with literacy rates of 40.40% among men compared to only 22.10% among women (EMOP/INSTAT, January–March 2021).

Since 2002, Mali has pursued a commitment to reducing social and economic inequalities through the adoption of successive growth and poverty reduction strategies (CSLP, CSCRP, CREDD). Yet, despite this political will and the notable economic expansion observed in the years preceding the crisis, poverty continues to affect a substantial proportion of the population. In 2021, 44,60% of Malians—equivalent to 9.8 million individuals—lived

below the national poverty threshold, estimated at 186,221 FCFA [1] (EMOP, 2021). Mali remains among the world's poorest countries, ranking 186th out of 191 on the Human Development Index (HDI) (UNDP, Human Development Report (HDR) 2021/2022, 2022).

Chart 1: Evolution of literacy rates above 15 years of age in Mali



Source: (EMOP/INSTAT, January-March 2021

Although progress has been made in expanding access to basic social services, outcomes remain uneven. In 2021, nearly one-third of the population (29.1%), and particularly rural residents (33.20%), lacked access to safe drinking water within a reasonable distance. Urban sanitation services remain inadequate, with national coverage at only 45%, while food security persists as a pressing concern for public authorities. Investments in the water sector are often poorly coordinated, undermining decades of collective effort. Similarly, electricity access remains limited: in 2020, 44% of Mali's population—equivalent to 83.5% of rural residents—lacked electricity, representing nearly half of the country's population. Health infrastructure is also insufficient, with 30% of the population residing more than 5 km from a health facility and another 30% living more than 15 km away (EDSM IV, 2006). In 2021, an estimated 1.76 million Malians required health assistance according to UN data, yet the existing health workforce remains inadequate to meet the needs of the entire population.

The employment landscape in Mali is marked by persistently high unemployment, particularly among youth. Within the 15–64 age cohort, unemployment affected 9.1% of the population in 2017, with 8% of men and 10.4% of women unemployed. The rate was 8.1% in rural areas compared to 12% in urban centers, including Bamako. Among individuals aged 15–35, unemployment reached 14.9% (14.2% for men and 15.7% for women). Youth unemployment is especially pronounced in certain administrative regions (CREDD 2019–2023, p. 34). Comparable figures for 2017 in other African countries reveal similar challenges among young people aged 15–24: 4.11% in Benin (Beautify Data), 6.38% in Cameroon (Beautify Data), 7.59% in Burkina Faso (Beautify Data), 20.97% in Mauritania (MacroTrends), 0.51% in Niger (StatInvestor), 10.61% in the Central African Republic (StatInvestor), and 1.52% in Chad (Beautify Data).

Rapid demographic growth has further intensified pressures on the education system, leading to a significant increase in the school-age population. Estimates indicate that 46% are enrolled in the first cycle of fundamental education, 59% in the second cycle of basic education, and 68% in secondary education (Sectoral Analysis—June 2017, Table 1.7). Nevertheless, educational attainment remains limited: in 2015, nearly two-thirds (61.5%) of Malians aged six and above had no formal instruction, compared to 79.4% in 2001. Adult illiteracy also persisted, with 33.1% of adults unable to read or write in 2015, compared to 21.3% in 2001 (Sectoral Analysis—June 2017, Table 1.2). These figures underscore the urgent need to expand and improve access to educational services in order to address structural inequalities and enhance human capital development.

Mali has experienced a profound security, political, humanitarian, and institutional crisis in recent years. Prior to this period, however, the country appeared to be consolidating its reputation as a democratic model on the African continent following the March 1991 Revolution. Beginning in the early 2010s, Malian democracy was severely tested by Tuareg insurgent movements demanding self-determination. The armed rebellion—Mali's fourth after those of 1963, 1990, and 2006—intensified in 2011 and was reinforced by Islamist groups who infiltrated the northern regions, exploiting the weakening of the central state. What initially destabilized

1 EMOP: Consumption, Poverty, and Household Well-being 2021

the north gradually extended to the central regions of the country (CREDD 2019–2023, p. 30). Despite the presence and support of international forces (Serval, later Barkhane, MINUSMA, G5 Sahel) and technical and financial partners, the Malian state struggled to restore stability (CREDD 2019–2023, p. 30).

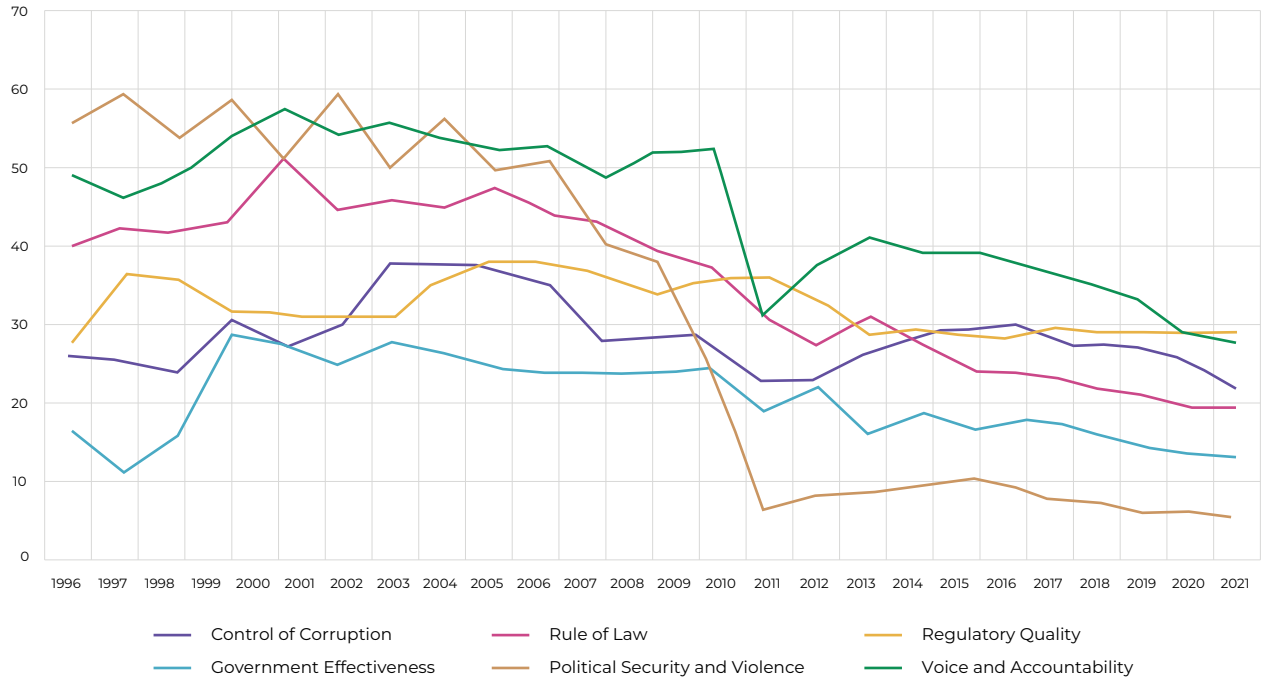
It was within this context that Mali witnessed its fourth military coup since independence, on August 18, 2020, followed by a reorientation of the transitional process on May 24, 2021. Since 2020, the Republic of Mali has been undergoing a transitional phase, with all the attendant opportunities and constraints such a period entail.

For social science research institutions to function effectively and generate objective, reliable, and credible knowledge, the existence of a stable political environment, sound governance, and adherence to the rule of law are indispensable. Given the absence of recent documentary analyses on governance during the current transitional period, this study will, for the time being, rely on evidence from previous political mandates and internationally recognized indicators.

The findings of the Governance, Peace, and Security survey conducted by INSTAT in 2015, within the framework of Africa Harmonization Statistics Strategy (SHaSA), reveal notable dynamics, with certain indicators reflecting progress while others show deterioration. Overall, the situation in democratic governance exhibits some improvement, particularly in service delivery within the police and justice systems, yet the aggregate assessment remains negative. In terms of peace and security, although objective indicators suggest modest gains, the population's subjective perceptions reveal a growing sense of fear and insecurity.

Public opinion, as captured in judgments and satisfaction levels, appears increasingly measured. Respondents express fewer extreme positions ("very positive"), though without a corresponding shift toward overtly negative assessments. This moderation in responses, consistent with the heightened perception of insecurity, reflects caution and circumspection in the face of persistent structural challenges—terrorist threats, armed conflict, and endemic corruption—that continue to undermine stability. Citizens are progressively recognizing the limited capacity of state authorities to address these systemic problems. Consequently, positive dynamics remain fragile, lacking a conducive environment for consolidation. The demobilization of citizens, coupled with declining trust in state institutions and the intensification of insecurity, constitutes a set of alarming trends that must be addressed to avert further instability—a trajectory that ultimately materialized with the military coup of August 2020.

Chart 2: Governance in Mali: evolution of key dimensions, 1996–2021



Source: Doing Research in Mali, 1st edition, 2026

At both the regional and global levels, Mali occupies a relatively low position in internationally recognized governance indices. Transparency International (2023) places Mali 136th out of 180 countries worldwide, while the Mo Ibrahim Index (2023) ranks it 37th among 54 African states (see Graph 2). Updated global governance

indicators further reveal that, with the sole exception of regulatory quality, none of the key dimensions—such as control of corruption, government effectiveness, rule of law, political stability and absence of violence, or voice and accountability—have registered positive developments in Mali since 1998.

With respect to the rule of law, Mali possesses a legal framework that formally guarantees all fundamental rights, with particular emphasis on the protection of freedom of expression. The country has ratified the principal sub-regional, regional, and international conventions relevant to this domain. In theory, freedom of expression is recognized and safeguarded through legislative and regulatory instruments. Moreover, the media in its diverse forms—journalists, activists, and citizens more broadly—are active users of the internet and social media, serving as prominent advocates for freedom of expression. Public authorities are cognizant of this reality, which has led to the adoption of a relatively dense technical, legislative, and regulatory framework, though one that remains primarily oriented toward repression.

According to the Malian Press House, in 2020 the national media landscape comprised 230 independent newspapers, of which approximately sixty appeared with some regularity, alongside the national daily newspaper and nearly 450 frequency-modulated radio stations distributed across the territory. To these must be added the public broadcaster, the Malian Broadcasting Television Office (ORTM) with its eight regional stations. The landscape also includes the United Nations radio station in Mali (Mikado FM) and the Tamani studio of the Hirondelle Foundation, which produces programming for a network of 80 partner radio stations. Furthermore, the media directory reported 60 online newspapers and news portals in 2019, while approximately thirty private television channels were broadcasting nationally.

The Republic of Mali continues to grapple with a profound socio-political and security crisis, marked by the occupation of its northern regions by irredentist movements and religious extremist groups, as well as the military coup of March 22, 2012, which plunged the nation into political and institutional disarray. This context has severely undermined fundamental rights in general, and freedom of expression in particular. Journalists have been subjected to disappearances, targeted assassinations, and kidnappings in the northern and central regions, and at times even in the capital. According to the House of Press (2020), although media professionals formally enjoy constitutional and legal guarantees of press freedom and freedom of expression, they do not feel secure in practice.

In summary, despite Mali's ratification of a wide array of international and regional instruments promoting access to information and freedom of expression—across traditional press, social media, and the internet—the trajectory remains regressive. Reports consistently highlight that Malian legislation constrains freedom of expression, in stark contrast to global trends encouraged by the United Nations and the African Union. Notably, Malian researchers have largely remained insulated from such repression and have rarely faced harassment by state authorities in the course of their work. This relative immunity may be explained by several factors: the limited public visibility of their research outputs, the strategic calculations of political elites, and the absence of a strong critical tradition within the social sciences.

Regarding the first factor, limited dissemination of research in the public sphere or through the media restricts its visibility and, consequently, its perceived potential for subversion in the eyes of political elites. Concerning the strategic choices of those in power, university research in Mali—similar to many contexts in the Global South—often remains confined within academic circles, exerting minimal influence on public opinion or policy-making arenas. In other words, as long as research outputs do not translate into overt or widely publicized critiques of government action, they are regarded as non-threatening. Public authorities may even perceive researchers as lacking direct political leverage, and permitting them to operate freely can serve to project an image of respect for academic freedom in international forums.

At the same time, some scholars, cognizant of the prevailing political environment, engage in self-censorship by avoiding highly sensitive subjects or adopting cautious positions, thereby ensuring relative security in their professional activities. More broadly, Malian—and West African—universities often suffer from a weak critical tradition, characterized by pedagogical training that is overly theoretical and insufficiently anchored in critical paradigms (e.g., Marxist, postcolonial, or decolonial approaches), alongside a dependence on external funding that channels research toward consensual or donor-imposed themes. Structural constraints such as restricted academic freedoms, heavy teaching loads, the absence of influential national journals, and the lack of vibrant intellectual debate further inhibit the development of a structured critical thought. In many instances, university research becomes primarily a vehicle for social mobility or administrative recognition, thereby diverting it from its critical and transformative functions.

The socio-political context of Mali, characterized by chronic instability, exerts a profound influence on the

institutional framework for scientific inquiry in the social sciences. The country's rich historical legacy—as the cradle of ancient empires—and its exceptional cultural diversity provide fertile ground for socio-anthropological research. Yet, recurrent political crises, armed conflicts, and persistent governance deficits constrain academic freedom and restrict access to empirical field data. The political transition initiated in 2020, with its attendant uncertainties, has further exacerbated the fragility of research institutions. Security volatility particularly impedes scholarly activity in the northern and central regions, where the presence of armed groups renders the collection of reliable data precarious.

In addition, widespread mistrust of state institutions and the erosion of public confidence complicate the engagement of local populations in research processes. Despite these constraints, social science research remains a relatively protected domain, with Malian scholars seldom subjected to direct harassment in the course of their work. Nevertheless, the production of objective and credible knowledge requires the consolidation of a stable political environment, the safeguarding of academic freedoms, and substantial improvements in infrastructure research.

2.4. Economic context

Mali's economy remains heavily constrained by a multidimensional crisis encompassing security challenges, socio-political instability, the COVID-19 pandemic, and the economic and financial sanctions imposed by ECOWAS. Economic growth, which contracted by –1.2% in 2020, rebounded to 3.1% in 2021, driven by the resumption of economic activity following the reopening of land and air borders after the acute phase of the COVID-19 health crisis, as well as by the remarkable recovery in cotton production, which reached 777,088 tons in 2021 compared to 156,399 tons in 2020. This rebound occurred despite persistent insecurity within the country. In 2022, growth was projected at 4.2%, lower than the 5.3% initially forecast for the second half of 2021, reflecting the adverse impact of ECOWAS sanctions (DNPD, 2022).

The primary sector registered significant improvement, shifting from a 4.3% decline in 2020 to a 3.0% increase in 2021. This recovery was largely attributable to the "agriculture export" subsector, particularly cotton, which rebounded dramatically from a 77.7% contraction in 2020 to a 37.08% expansion in 2021. This positive trajectory was expected to continue in 2022, supported by the government's explicit commitment to strengthening the sector through subsidies and the establishment of highly competitive purchase prices per kilogram of cotton.

Inflation, measured by the annual average of the consumer price index, rose to 3.9% in 2021 compared to 0.7% in 2020, and projections estimated it at approximately 4.5% in 2022. The escalation in consumer prices is largely attributable to disruptions in global markets, particularly the contraction in supply chains exacerbated by the war in Ukraine. These inflationary levels exceed the UEMOA community threshold, which stipulates a ceiling of 3%.

In the domain of public finance, aggregate "Revenue and Grants" amounted to 1,886.3 billion FCFA in 2021, compared to 1,761.8 billion FCFA in 2020, reflecting an increase of 124.5 billion FCFA. This improvement is primarily linked to enhanced tax revenue mobilization following the resumption of economic activities after the lifting of restrictive measures such as border closures and the suspension of leisure activities. The aggregate includes 1,819.4 billion FCFA in total revenue and 66.9 billion FCFA in grants. While this upward trend in revenue and grants was expected to continue in 2022, it remained vulnerable to the adverse effects of economic and financial sanctions imposed by ECOWAS. Nonetheless, revenues and grants were projected to reach 1,987.4 billion FCFA, supported by the easing of restrictive measures, the reopening of borders, and, above all, the effective implementation of fiscal reforms aimed at strengthening revenue mobilization.

The tax burden rate reached 15.5% in 2021, compared to 14.3% in 2020, reflecting an increase of 1.2 percentage points attributable to enhanced tax revenue mobilization and the implementation of government-led fiscal reforms. In 2022, the rate was projected to decline to approximately 14.5%, with the anticipated one-point decrease linked to the institutional crisis and the ECOWAS embargo, both of which were expected to slow economic activity and thereby reduce revenue collection. Nonetheless, this level remains below the UEMOA community benchmark of 20%.

Donations mobilized in 2021 amounted to 66.9 billion FCFA, compared to 113.4 billion FCFA in 2020, representing a decline of 41.0%. Project-related donations totaled 48.9 billion FCFA in 2021, down from 64.6 billion FCFA in 2020. Budgetary donations stood at 17.4 billion FCFA in 2021, compared to 35.6 billion FCFA in 2020, marking a reduction of 18.2 billion FCFA. This contraction is largely explained by the prevailing socio-political instability. For 2022, donations were projected to reach 95.2 billion FCFA, comprising 90.0 billion FCFA in project funding and 5.2 billion FCFA in budgetary support.

Total expenditures and net lending amounted to 2,389.6 billion FCFA in 2021, consisting of 2,312.0 billion FCFA in budgetary outlays and 5.1 billion FCFA in net loans.

These figures were projected to rise to 2,676.1 billion FCFA in 2022. The overall fiscal balance, inclusive of commitments and grants, registered –503.3 billion FCFA in 2021 compared to –553.1 billion FCFA in 2020. Expressed as a share of GDP, the deficit stood at –4.7% in 2021, an improvement from –5.5% in 2020. For 2022, the balance was expected to reach –543.7 billion FCFA, equivalent to –4.7% of GDP.

On a commitment basis excluding grants, the overall deficit amounted to –570.2 billion FCFA in 2021, representing –5.4% of GDP, compared to –666.5 billion FCFA in 2020, or –6.6% of GDP. Projections for 2022 indicated a deficit of –630.7 billion FCFA, corresponding to –4.8% of GDP. According to INSTAT, GDP per capita declined between 2019 and 2020, falling from 506,934 FCFA to 489,497 FCFA, before recovering in 2021 and 2022 to 507,186 FCFA and 541,248 FCFA, respectively (INSTAT C. n., February 2023).

Table 1: Mali's Gross Domestic Product (GDP) per capita [2]

GDP by Resident	2019	2020	2021	2022
GDP fluent in (millions FCFA)	10 124 689	10 052 836	10 707 690	11 743 634
Population	19 972 410	20 537 059	21 111 978	21 697 317
GDP by inhabitant (in Francs FCFA)	506,934	489 497	507 186	541,248

Source: INSTAT/ Nationals Accounts

In 2022, the Ministry of Higher Education and Scientific Research, responsible for the majority of teaching and research personnel, succeeded in mobilizing 56,456,669,000 FCFA out of an initial allocation of 75,588,663,000 FCFA for this sub-sector. The resources were distributed across staff support (46.61%), scholarships and national and international allocations (31.32%), operating expenditures (22%), and investments (0.07%).

The extremely low proportion allocated to investments (0.07%) in 2022 reflects the prioritization of recurrent expenditures—largely unavoidable commitments—and signals a limited political will to advance higher education development. In the long term, this pattern underscores a dependence on external assistance and highlights structural and institutional constraints in budgetary management. With respect to operating expenditures, payroll (46.61%) and grants/allowances (31.32%) together account for more than 77% of the budget.

These categories represent recurring and mandatory costs, often prioritized to mitigate risks of social unrest such as strikes or protests. Operational costs (22%) encompass administrative expenses, consumables, and maintenance, which remain essential to sustaining a minimum level of institutional functioning.

With regard to the weak political commitment to advancing higher education in the long term, investment in infrastructure, laboratory equipment, libraries, and digitalization requires decisive political choices, a forward-looking vision, and substantial financial resources—conditions often absent in contexts where immediate management of pressing concerns takes precedence. Governments, such as that of Mali, frequently neglect or postpone structural investments because their outcomes are not immediately visible and therefore yield limited short-term political returns.

Moreover, many states rely predominantly on international partnerships or donor-funded projects to finance the "investment" component (e.g., construction, scientific equipment), which often remains outside the scope of the national budget. This reliance fosters dependency and undermines national ownership of higher education and research development.

Finally, constraints on the overall national budget frequently led to prioritization of "essential" recurrent expenditures at the expense of investments deemed deferrable. In some cases, resources earmarked for investment are poorly executed or remain unused due to administrative delays, the absence of ready-to-fund projects, or complex procurement procedures. Additionally, ministerial departments and agencies often lack the technical expertise and qualified personnel necessary to design and defend strategic projects at the budgetary level. The absence of multi-year investment plans or coherent sectoral development strategies further limits predictability and ambition in this domain.

Personnel expenditures encompass salaries, allowances, and bonuses, with the latter two categories discontinued

2 WB data on national accounts and OECD statistics on national accounts.

upon retirement. In Mali, teacher-researchers are entitled to a supervisory allowance, a special supervisory allowance, and a residence allowance. In addition, they may receive bonuses such as a special function bonus, an academic bonus, a documentation bonus, and a research bonus. The latter remains a persistent source of contention for professional unions, not due to questions of legitimacy but because its effective implementation is obstructed by political, administrative, and budgetary constraints, despite its formal inclusion in legislative and regulatory provisions.

This situation reflects a broader structural issue: notwithstanding official pronouncements, research is not prioritized as a strategic domain, leading to its practical devaluation. Such devaluation manifests in the limited institutional interest in research-related bonuses and the predominance of symbolic rather than substantive recognition of scholarly work.

Table 2: Comparison of the amount of gross monthly salaries and bonuses/allowances of teaching and research staff in Mali by grade from 2013 and 2022.

Body	2013			2022		
	Gross monthly salary		Bonuses/ Allowances	Gross monthly salary		Bonuses/ Allowances
	Starting	Maximum		Starting	Maximum	
Assistant/Attaché of research	329 244	445 641	180 333	298 400	604 400	255 333
Assistant Professor/ Research Fellow	352 577	468 974	203 666	373 600	614 000	298 667
Master of Lectures/Research Master	355 911	472 308	207 000	394 800	624 000	317 000
Professor/Director of research	365 911	482 308	217 000	424 400	660 000	342 000

Source: Report of the diagnostic study of the teaching question in the Republic of Mali for the 2013 data and own calculation based on the index grid and the index value for the 2022 data.

As indicated in Table 2, the gross monthly wages (entry-level and maximum levels) as well as bonuses and allowances of Malian teacher-researchers have experienced significant increases over the past decade, with the exception of the entry-level salary for assistants/ attachés of research, which declined by 9.37%. This reduction, for which informants could not provide a clear explanation, may be attributable to a calculation error in 2013 or an oversight during successive revisions of the salary grid for teaching and research staff. Responding to union demands, between 2013 and 2022 the maximum salary for assistant professor/research fellow rose by 35.62%, while bonuses and allowances increased by 41.59%. For assistant professor/research fellow, the entry-level gross monthly salary increased by 5.96%, the maximum salary by 30.92%, and bonuses/allowances by 46.65%.

Similarly, the gross monthly salary of master of lectures/ research master increased by 10.93% at entry level, 32.12% at the career maximum salary, and 53.14% in terms of bonuses and allowances. Finally, for professors/directors of research, the entry-level gross monthly salary rose by 15.98%, the maximum salary by 36.84%, and bonuses and allowances by 57.60%.

Despite notable progress, the remuneration of teaching and research staff in Mali has not kept pace with the rising cost of living and remains among the lowest within the UEMOA zone, insufficient to fully meet their socioeconomic needs. Consequently, it is common for academic personnel to seek supplementary income through employment in private higher education institutions, consulting activities, or by maximizing overtime hours to offset monthly expenditures.

It is evident from the foregoing that the national economy remains heavily dominated by the primary sector, with family-based agriculture particularly vulnerable to the adverse effects of soil degradation and climate change. The economy is insufficiently diversified and highly exposed to fluctuations in international commodity prices. The prevailing economic structure does not generate adequate value-added, especially in agribusiness and manufacturing. Moreover, deficiencies in basic infrastructure, which fail to provide an enabling environment for research and innovation, significantly constrain the competitiveness of enterprises and the Malian economy as a whole.

The current configuration of the Malian economy, still predominantly reliant on low value-added activities, fails to generate sustainable growth or adequately

address pressing development challenges. Strategic sectors such as agribusiness and manufacturing remain underdeveloped, weakly industrialized, and insufficiently integrated into regional and global value chains. This structural vulnerability is largely attributable to deficits in essential infrastructure (transport, energy, telecommunications), compounded by limited investment in scientific research, technological innovation, and specialized human capital formation.

In the contemporary context of globalization and intensifying competition, a nation's economic performance is increasingly contingent upon its capacity to generate, adapt, and disseminate new knowledge. Scientific research thus constitutes a critical driver of structural transformation. It facilitates the optimization of production processes, the enhancement of product quality, the reduction of costs, and the contextual adaptation of technologies to local realities. Within the agri-food and manufacturing sectors, applied research oriented toward socio-economic priorities can foster value creation, strengthen business competitiveness, and thereby stimulate broader economic growth.

The absence of a conducive ecosystem for research and innovation is not merely a by-product of Mali's low level of economic development but also a structural determinant of stagnant productivity and limited diversification within the national economy. Enhancing research capacity, investing in highly qualified human resources, and fostering synergies between universities, research institutes, and the private sector are indispensable for initiating a virtuous cycle linking scientific inquiry, technological innovation, and sustainable economic transformation.

Mali's economic trajectory, characterized by recurrent crises and a heavy reliance on the primary sector, presents significant challenges for social science research. The lack of diversification and heightened vulnerability to fluctuations in global commodity prices constrain the financial resources available for research funding. Moreover, soil degradation and climate change—phenomena that directly undermine agricultural production—constitute critical domains of inquiry for the social sciences, particularly within the fields of development sociology and rural economics.

Malian teacher-researchers, despite benefiting from salary and allowance increases in recent years, continue to face remuneration levels that fail to keep pace with the rising cost of living. Nevertheless, comparative data from Livingcost.org, Expatistan, and Numbeo indicate that Mali remains the least expensive country among peers such as Benin, Burkina Faso, Cameroon, Senegal, and Chad. According to these sources, Senegal is by far the costliest (approximately twice the level of Mali), with relatively lower purchasing power. Burkina Faso and Cameroon occupy intermediate positions, though wage disparities render their purchasing power broadly similar. Chad stands out with a cost of living about 25% higher than Burkina Faso; without correspondingly higher salaries, the situation is particularly strained for academics. Benin, though less extensively documented, appears marginally more expensive than Mali (CPI ɔ 107), suggesting difficulties comparable to those faced in Mali.

Chronic underfunding of the Ministry of Higher Education undermines the quality of social science research, constraining the production of rigorous analyses of the country's economic and socio-political dynamics. While insufficient investment is a major factor, the problem is systemic, rooted in organizational, institutional, political, and cultural limitations.

Despite these constraints, social science research remains indispensable for examining the impacts of economic and social policies, assessing development programs, and proposing solutions tailored to Mali's realities. Greater investment in this domain would enhance the capacity to understand ongoing social transformations and generate more effective policy recommendations, thereby contributing to inclusive and sustainable growth.

2.5. International context

The institutional development and scholarly reputation of national research bodies are contingent not merely upon the volume of financial resources allocated to them but, more critically, upon the relational networks they establish with sub-regional, regional, and global research systems. The greater the permeability of national research systems to international epistemic communities, the more they facilitate opportunities for intellectual exchange, collaborative inquiry, and professional mobility for researchers, whether affiliated with universities or operating independently. The consolidation of transnational research linkages through networking infrastructures has become a pivotal dimension of contemporary knowledge production. Research systems in general, and those dedicated to the social sciences in particular, are fully embedded within this globalized academic reality.

With respect to research financing, UNESCO data from 2016 reveal that national expenditure on research and development (R&D) across all sectors—corporate, academic, and governmental—amounts to 0.7% of GDP, falling short of the African Union's (AU) benchmark of at least 1% of GDP. Moreover, resource allocation is disproportionately directed toward strategic priority

domains, often marginalizing the social sciences. These domains include agriculture (IER, IPR/IFRA), reflecting the country's agro-sylvo-pastoral orientation; the life sciences (health, pharmaceuticals, biotechnology); basic materials (civil engineering, construction); environmental studies and climate change; and information and communication technologies (TIC). The residual funding for research in Mali is derived largely from external donors and international institutions. Independent scholars, particularly within the social sciences, generally refrain from overt criticism of this arrangement, though it is evident that research agendas are frequently shaped by the normative frameworks and conditionalities imposed by funding agencies.

According to a report by the National Center for Scientific and Technological Research (CNRST), nearly 90% of Mali's research funding is derived from external sources. This structural dependence has profound implications for the epistemic orientation and autonomy of national research agendas. As socio-anthropologist Dr. Bréma Ely Dicko (CNRST, cnrst.edu.ml) observes: *"When the money comes from outside, they are the ones who sponsor it and who determine the research questions. The reports belong to outsiders. In some cases, they do not even allow our names to appear in them."* (CNRST, cnrst.edu.ml) +1WATHI+1). Such dynamics are particularly detrimental to the social sciences, which remain chronically underfunded at the national level. Sociologist Dr. Fodié Tandjigora underscores this marginalization, noting that the Competitive Fund for Research and Technological Innovation (FCRIT) has failed to select any projects in the humanities, despite the critical relevance of societal issues for Mali's development (Mali Actu+3 CNRST, cnrst.edu.ml, +3WATHI+3). In short, reliance on foreign financing exerts a decisive influence on research priorities in Mali, with the social sciences disproportionately disadvantaged.

With regard to partnerships and networking, Malian research institutions and scholars maintain a diverse constellation of collaborations that provide financial support, disseminate research outputs, and enhance institutional capacities. They are integrated into multiple transnational research networks. Among their partners are the African and Malagasy Council for Higher Education (CAMES), the Research Institute for Development (IRD), the Center for International Cooperation in Agricultural Research (CIRAD), the International Research Center of Cultures and Tropical Zones (ICRISAT), the International Center for Agroforestry Research (ICAFR), the National Institute for Sahel (INSAH), the Mérieux Institute, the Institute of Social Sciences (ICSS), the School for Advanced Studies in the Social Sciences (EHESS), the Laboratory of Committed Transnational Comparative Anthropology (LACET), the Council for the Development of Social Science Research in Africa (CODESRIA), and the Association for the Development of Education in Africa (ADEA), in addition to numerous universities and financial institutions worldwide. In terms of networks, Mali participates in, among others, the West and Central African Educational Research Network (ROCARE), the International Research Network (IRN), and the Research, Scientific Expertise, and Knowledge for the Sustainable Management of the Great Green Wall Lands (RESET GMV).

Panel 1: Circulars regulating the Status of the teacher-researchers in Mali

Decree No. 2017-036/P-RM of September 27, 2017, concerning the status of teacher-researchers in higher education and scientific research in Mali, amending Law No. 98-067 of December 30, 1998, stipulates that:

Chapter II – Provisions relating to registration on the lists of qualified candidates.

Article 18: Registration on the lists of qualified candidates is carried out:

- **either by the competent sections of the African and Malagasy Council for Higher Education (CAMES);**
- **or by the National Commission for Establishing Aptitude Lists (CNELA).**

Article 19: The National Commission for Establishing Aptitude Lists (CNELA) is the national body responsible for reviewing applications for registration on the lists of qualified candidates for the position of Teacher-Researcher.

Article 20: CAMES is the regional body responsible for reviewing applications for teaching and research positions. The conditions for inclusion on the CAMES list of qualified candidates apply to teaching and research staff before this body.

Specifically with regard to CAMES, Mali was among its early pioneers as a member of the Mali Federation in 1959 and subsequently one of the founding states in 1968 at Niamey, Niger. Mali continues to benefit from the full spectrum of CAMES programs, with the organization assuming a pivotal role in the institutional regulation of academic careers. In particular, CAMES oversees the accreditation and registration of teacher-researchers on official rosters of qualified candidates and administers competitive examinations for access to professorial ranks,

thereby structuring the professional trajectories of the national academic community.

CAMES is a pan-African intergovernmental organization comprising multiple Francophone countries across Africa and Madagascar. Its core mandate encompasses the harmonization of higher education governance frameworks and the advancement of academic personnel through specialized sectoral committees. The principal evaluative criteria for inclusion on the official rosters of candidates eligible for academic ranks—namely Assistant Professor, Associate Professor, and Full Professor—include administrative compliance, academic credentials, scholarly productivity, pedagogical engagement, institutional service, and adherence to research ethics.

With respect to administrative compliance, candidates are required to submit a comprehensive dossier, including a curriculum vitae, certified academic degrees, formal documentation of civil service appointment, and a verified record of professional service. All supporting materials must be demonstrably relevant and authenticated. Regarding academic qualifications, the minimum requirement is a doctoral degree (Ph.D. or equivalent) for Assistant Professorship, a Habilitation to Supervise Research, or its equivalent for Associate Professorship, and demonstrable experience accompanied by a robust portfolio of scholarly contributions for Full Professorship.

Scholarly productivity is assessed through peer-reviewed journal articles, monographs, edited volumes, conference presentations, and journal rankings as per the CAMES classification system (A, B, C, NC). Additional indicators include graduate supervision (Master's and Doctoral levels), citation metrics, and demonstrable impact of research outputs. Pedagogical engagement encompasses the volume and level of courses taught, as well as supervision of theses, dissertations, and academic internships. Institutional service includes administrative and academic leadership roles (e.g., department chair, laboratory director) and active participation in the academic community. Finally, research ethics are evaluated based on the originality of scholarly work, compliance with ethical standards (including avoidance of plagiarism, self-plagiarism, and fictitious authorship), and mandatory participation in colloquia or formal evaluation sessions.

At the national level, each country may establish an evaluation commission operating in parallel with, or complementary to, CAMES. In Mali, this role is assumed by the National Commission for Evaluation of Academic Lecturers (CNELA). The defining features of CNELA include its institutional framework, objectives, evaluative criteria, flexibility in recognizing professional experience, mechanisms of recognition, and the challenges it currently faces. With respect to its institutional framework, CNELA was created by ministerial decree and functions within a broader strategy of consolidating national academic autonomy while ensuring coherence with CAMES standards. Its objectives encompass the evaluation of teacher-researchers for national promotion, the compilation of rosters of qualified candidates for recruitment or advancement, and the recognition of competencies at the national level, even outside CAMES campaigns.

Although CNELA largely adopts CAMES's evaluative criteria, it adapts them to the local context: maintaining identical degree requirements, incorporating national and sub-regional scholarly output, applying greater flexibility in assessing publication quality, and emphasizing contributions to the development of Malian higher education (local projects, LMD reforms, educational initiatives). The commission may admit candidates who do not strictly satisfy CAMES requirements by foregrounding their professional experience or institutional impact. Registration on CNELA lists is nationally recognized but does not substitute for CAMES evaluation in competitive recruitment or international accreditation.

Current challenges include harmonization of standards, credibility of procedures, enumeration of qualified personnel, and related institutional issues. Mali seeks to align CNELA with CAMES benchmarks while simultaneously affirming its academic sovereignty. The rigor of CNELA's criteria ensures the quality of teaching and research staff and validates their competencies. Both institutions are advancing digitalization of evaluation processes through online submission platforms. Persistent challenges include combating predatory publishing, plagiarism, and the proliferation of scientific output disconnected from local socio-academic contexts.

Although CAMES has operated in Mali since 1968, the notion of establishing a national evaluation commission emerged in 1992, concomitant with the hierarchical classification of academic positions within the country's higher education sector. This initiative was formally institutionalized in 2003 through the creation of the National Commission for Evaluation of Academic Lecturers (CNELA), whose inaugural session was convened only between January 31 and February 2, 2008. Both CAMES and CNELA assess teacher-researchers and scholars through Technical Specialized Committees (TCS), which, with only rare exceptions, remain structurally and procedurally identical.

Table 3: Presentation of the CTS CAMES and CNELA

No.	CTS CAMES	CTS CNELA
01	Letters and Humans Sciences	Letters, Social and Humans Sciences
02	Mathematics- Physics and Chemistry	Mathematics- Physics and Chemistry
03	Agronomy and Natural Science	Sciences, Agronomy, Medicine Veterinarian and Animals Productions
04	Legal Sciences and Policies	Legal Sciences and Policies
05	Economical Sciences and Management	Economical Sciences and Management
06	Medicine-Pharmacy-Odontostomatology-Veterinarian Medicine	Medicine-Pharmacy-Odontostomatology
07	Sciences and Engineer's Techniques	Sciences and Engineer's Techniques
08	Sciences and Sports Activities Techniques, Youth, Sports and Leisure	

Source: CAMES and CNELA Mali

Between 2017 and 2024, across all disciplinary domains, 443 Malian teacher-researchers were registered on the CAMES aptitude lists, of whom 47 were women (10.61%). Within this cohort, 29 attained the rank of professor or research director, including 5 women (17.24%); 46 were classified as associate professors or research professors, including 5 women (10.87%); and 368 were designated assistant professors or research fellows, including 37 women (10.05%). During the same period, 103 teacher-researchers, of whom 12 were women (11.65%), successfully passed the competitive examination for professorship. Of the 443 Malian teacher-researchers listed as qualified candidates by CAMES, 171—including 14 women (8.19%)—were situated within the social sciences, as well as 8 of the 103 agrégés.

With respect to CNELA, until 2021 annual evaluation sessions were organized separately: one for teaching staff files by the DGESRS and another for researchers by the CNRST. Beginning in 2022, these sessions were juxtaposed, meaning they were convened simultaneously but remained institutionally distinct. According to DGESRS data, which does not disaggregate by gender or Technical Specialized Committee (CTS), between 2008 and 2021 fourteen ordinary sessions and one special session were held. In total, 646 of 1,143 candidates were registered, representing a success rate of 56.52%. Of those admitted, 123 were for the rank of professor, 319 for associate professor, and 204 for assistant professor.

It should be noted that since 2018, following the revision of statutes governing teaching and research personnel, holders of a doctorate or equivalent degree are formally eligible for immediate promotion to assistant professor. This provision reflects a partial regulatory truth, as Article 13 of Decree No. 2022-013/PT-RM of September 20, 2022, concerning the status of higher education and scientific research staff, stipulates that *"Assistant Professors and Research Fellows are recruited based on qualifications, from among non-civil servants holding a doctorate from a Malian university or an equivalent degree."* In practice, however, the process is neither automatic nor instantaneous, as it remains contingent upon administrative procedures, academic evaluations, and institutional staffing needs. It is therefore necessary to qualify this regulatory statement and underscore the importance of rigorous oversight of such promotions to safeguard the quality and integrity of higher education in Mali.

According to DGESRS data, disaggregated by Technical Specialized Committee (CTS), between 2022 and 2023 there were two regular sessions and one special session. Out of a total of 728 candidates, 561 were placed on the eligibility lists, representing a success rate of 77.06%. Of these, 66 were admitted to the rank of professor, 385 to associate professor, 12 to assistant professor, and 98 to assistant. Among the 561 eligible candidates, 240 (42.78%) were situated within fields classified by this study as social sciences, including 21 professors, 172 masters of lectures, 2 teaching assistants, and 45 assistants.

With regard to researchers, prior to 2017 there was no distinct recruitment pathway into the civil service in Mali. State employees applied for positions within the various research corps through the National Commission for

Establishing Aptitude Lists (CNELA). This arrangement was restructured following the adoption of a unified statute under Decree No. 2017-036/P-RM of September 27, 2017. Articles 12 and 13 of this decree stipulate that researchers are recruited under the same conditions as teachers. Based on data collected from the National Center for Scientific and Technical Research (CNRST)—which does not disaggregate by gender—between 2014 and 2023, 1,190 researchers were registered on the lists of qualified candidates across all fields. Of these, 154 (12.94%) were in domains categorized by this study as social sciences. Within this subgroup, 7 were registered as research directors, 13 as research professors, 11 as research fellows, and 123 as research associates. For reference, the broader distribution included 314 research directors, 205 research fellows, and 637 research assistants.

It should be emphasized that the majority of teacher-researchers and researchers in Mali increasingly undergo evaluation through two distinct bodies: the national mechanism (CNELA) and the regional mechanism (CAMES). The choice between evaluation by CAMES (African and Malagasy Council for Higher Education) and by CNELA (National Commission for Establishing Aptitude Lists) constitutes a pivotal issue for Malian academics, both in terms of career trajectory and access to employment or professional advancement.

CAMES is an intergovernmental organization encompassing 19 Francophone African countries. Its mandate is to foster regional and international academic integration. It administers competitive examinations for professorial appointments and tenure, as well as degree recognition committees within the LMD framework. By establishing harmonized regional evaluation standards, CAMES enables cross-national recognition of academic qualifications. For Malian teacher-researchers, this entails regional accreditation of academic rank (Assistant Professor, Associate Professor, or Full Professor); enhanced professional mobility within the CAMES space; eligibility to participate in regional and international calls for proposals and collaborative projects; and facilitated access to positions within regional and international institutions. In several member states—and increasingly in Mali—CAMES is acknowledged as an official pathway for career progression. Its classifications are often regarded as more prestigious in recruitment processes and in appointments to senior academic or administrative offices (e.g., vice-deans, rectors). Nevertheless, the procedures remain highly centralized, bureaucratically cumbersome, and at times insufficiently responsive to local institutional realities.

The National Commission for Establishing Aptitude Lists (CNELA) constitutes Mali's principal national authority for the evaluation of teacher-researchers and researchers, and is institutionally embedded within strong local academic and administrative structures. Functioning under the jurisdiction of the Ministry of Higher Education and Scientific Research (MESRS), its mandate is to decentralize evaluative processes and incorporate Malian specificities into academic assessment. For Malian teacher-researchers, its implications include enhanced accessibility (applications processed domestically with comparatively shorter timelines); contextual flexibility that acknowledges local realities (scientific output in national languages, research aligned with domestic priorities); and recognition confined to the national sphere, with limited portability or legitimacy beyond Mali. Increasingly, CNELA is acknowledged as the formal pathway for internal promotion within public universities, granting access to ranks and positions within the Malian civil service, particularly in higher education institutions. Nevertheless, reliance exclusively on CNELA evaluation may place academics at a disadvantage with respect to international mobility and participation in inter-university collaborations at the regional level.

In the domain of employment relations, for academic appointments in Mali, evaluation by CNELA is generally sufficient for internal promotion (e.g., advancement from assistant professor to associate professor). For higher-level positions, international mobility, or career internationalization, CAMES accreditation remains a decisive asset. In practice, teacher-researchers initially evaluated by CNELA often submit their dossiers to CAMES to secure broader recognition. International recruitment and promotion competitions (e.g., UNESCO, AUF) typically privilege CAMES-certified qualifications. CNELA thus serves as a relevant mechanism for structuring academic careers at the national level, particularly for early-career scholars or those firmly embedded in the Malian context. By contrast, CAMES functions as a strategic instrument for visibility, mobility, and academic influence across the continent. A dual trajectory—beginning with CNELA and subsequently pursuing CAMES—emerges as a prudent strategy for maximizing career opportunities.

This dynamic illustrates that Malian research institutions and scholars cultivate a culture of partnership and networking that facilitates productive and mutually beneficial collaborations. Such openness to global research communities enables them to secure funding for their activities, to situate their social and professional realities in comparative perspective, and to strengthen their scholarly capacities. Nevertheless, reliance on external funding as the principal resource for research may constrain the autonomy of national research agendas, as donor priorities and objectives often diverge from the political orientations and developmental strategies of the country.

Social science research, though indispensable for analyzing societal dynamics and informing public policy, remains chronically underfunded by states, particularly across Africa, where governmental priorities are typically oriented toward applied sciences and strategic sectors such as agriculture, health, and information and communication technologies (ICT). Mali exemplifies this pattern, with minimal national investment and a pronounced reliance on external funding.

While such dependence facilitates development projects and enhances researcher mobility, it simultaneously raises concerns regarding the epistemic orientation of research. International donors frequently impose agendas that do not align with local socio-political realities, thereby constraining the autonomy of scholars in defining their research objects.

At the same time, the integration of Malian researchers into transnational networks—most notably through CAMES and other cooperative organizations—constitutes a significant asset for the visibility and recognition of social science scholarship. Nevertheless, the persistently low registration rate of social science researchers on aptitude lists and in competitive examinations for professorships underscores the absence of robust institutional structures and targeted support for this field. The recent convergence of CNELA sessions for teacher-researchers and researchers may represent an opportunity to reinforce the coherence of academic and research trajectories.

Ultimately, the international environment provides social science researchers with valuable opportunities in terms of funding, training, and publication, yet simultaneously raises critical questions about scientific autonomy vis-à-vis donor-driven priorities. A more assertive national policy in support of the social sciences would enhance their relevance and strengthen their impact on local realities.

It is significant to underscore that the issue at stake does not pertain directly to the existence or absence of infrastructure, but rather to the paradox between the international opportunities available and the constraints imposed by local conditions. While international opportunities in funding, training, and publication are present, social science researchers in Mali lack a sufficiently structured national framework to safeguard their scientific autonomy vis-à-vis donor agendas and to ensure research that is both relevant and impactful for local realities. This observation neither denies the existence of infrastructure in Mali, however limited, nor implies that it is unused. It does not constitute an accusation against researchers or the government but instead highlights the inadequacy of a robust national policy in support of the social sciences. Although the international provision of resources is valuable, the local impact of social science research remains circumscribed due to insufficient national commitment. A more proactive public policy would serve to better institutionalize, promote, and align this research with the developmental priorities of the country.

III - STAKEHOLDERS MAPPING AND SAMPLING

3.1. Introduction

Stakeholders mapping constituted a foundational component of this study. It sought to address, among other issues, the following questions: Which institutions, organizations, collectives, and state stakeholders are positioned to exert a decisive influence on the social science research system in Mali? What must be understood about their political and social positioning, their relative power, their historical trajectories, and their relationship to, or interest in, the social science research system in Mali? To respond to these questions, the research team undertook systematic document analysis, enumerated relevant stakeholders, conducted interviews with selected key stakeholders and informants, and organized structured brainstorming sessions. These activities facilitated the identification of all stakeholders embedded in the broader research system, and more specifically within the domain of social science research in Mali.

The objective was to apprehend the ecosystem, to analyze the interactions among diverse stakeholders, and to determine the appropriate type of relationship to cultivate with each stakeholder. Furthermore, the process aimed to classify and assess their respective levels of influence and interest in order to ensure effective engagement at critical junctures and thereby maximize the likelihood of success. A consolidated list of key stakeholders was produced, alongside a roster of faculty members and researchers. Sampling was subsequently conducted on the basis of these two lists.

The challenges encountered during the stakeholder-mapping process pertained primarily to access to information, the representation of inter-stakeholder relationships, the political and institutional context, and the temporality/evolution of the mapping exercise. With respect to access to information, certain stakeholders—particularly private higher education and research institutions—exhibited reluctance to disclose data, for reasons that remained unspecified. In terms of representing relationships among stakeholders, the research team confronted the inherent complexity of interactions, encompassing both formal and informal ties as well as hierarchical and transversal linkages. Regarding the political and institutional context, constraints embedded within institutional structures limited access to specific categories of information. Finally, in relation to temporality and the evolution of mapping, the instability of stakeholders and their relationships over time—manifested in positional changes, institutional reorganizations, and the emergence of new stakeholders—delayed access to relevant data.

In response to these challenges, the research team mobilized its interpersonal networks and negotiation capacities, while adopting a rigorous methodological approach that triangulated multiple sources of information and employed appropriate analytical tools. This strategy ultimately enabled the production of a stakeholder map that was both relevant and operational for the study of the research system.

3.2. The Stakeholders

In Mali, the stakeholders shaping the social science research system correspond broadly to those identified in the DRA methodology (p.31). They can be categorized into four principal stakeholder groups: higher education and research institutions; governmental agencies and funding bodies; the private sector; and civil society organizations.

Table 4 presents the distribution of institutions across these groups as identified by the GDN Mali team at this stage of the investigation.

Table 4: Stakeholders groups in the social science research system of Mali

No./ group	Stakeholders Groups	Number
01	Institutions teaching superior and/or of research	230
02	Government and Funding organizations of	51
03	Private Sector	5
04	Civil Company	15
TOTAL		301

Source: Doing Research in Mali, 1st edition, 2026

The first stakeholder group encompasses public and private higher education and research institutions, including universities, high schools, institutes, and specialized centers, as well as public and private research establishments. The research team identified a total of two hundred and thirty (230) institutions within this category.

The second group, comprising fifty-one (51) institutions, consists of the principal organs of the Republic of Mali: the Presidency of the Transition, the Prime Minister's Office, the various ministerial departments, the National Transition Council, the Economic, Social, Cultural, and Environmental Council, the High Council of Territorial Authorities, the Higher Council of Education and Culture, and associated funding agencies. It should be noted that each ministry is composed of central, affiliated, decentralized, and specialized structures.

The third group, numbering five (05) institutions, includes employers' associations, the Chamber of Commerce and Industry of Mali, policy-oriented think tanks, and consulting firms operating as research or advisory entities.

The fourth group comprises non-governmental organizations (NGOs), opinion leaders, non-profit think tanks, and media organizations, with fifteen (15) institutions identified by the research team.

Although all stakeholder groups employ teacher-researchers and/or researchers either to conduct research or to assume administrative responsibilities, the extent of such employment varies considerably. Institutions within the first group—excluding private higher education and research establishments that currently focus exclusively on teaching—are recognized as the primary employers of researchers on a permanent basis for the implementation of research projects. By contrast, the employment of researchers within the remaining three groups is generally temporary, responding to specific and urgent needs. For this reason, the GDN Mali team introduced a qualification system: "Yes+" designates institutions that permanently employ researchers, whereas "Yes-" identifies those that engage researchers only on an occasional basis.

The research landscape in Mali is sustained by a dense and heterogeneous constellation of stakeholders spanning multiple sectors. Higher education and research institutions constitute the principal foundation of this system. Among them are major public universities such as the University of Letters and Human Sciences of Bamako (ULSHB), the University of Social Sciences and Management of Bamako (USSGB), the University of Sciences, Techniques and Technologies of Bamako (USTTB), and the University of Ségou (U-Ségou), all of which employ researchers on a permanent basis. These universities are complemented by specialized institutes—including ENI-ABT, INFSS, IHERI-ABT or IPU,—as well as sectoral research centers such as CERFITEX, IER and MRTC, which play a pivotal role in generating national scientific output. Alongside these public structures, private higher education institutions also contribute to research, though to a lesser extent, with limited engagement in the permanent employment of researchers.

The governmental sector and funding agencies represent another critical pillar. This group includes institutions such as the Presidency, the Prime Minister's Office, ministerial departments, the National Transitional Council, and the Higher Education Council. Certain institutions, such as the Malian Academy of Languages (AMALAN), IMRAP and IRD, distinguish themselves through direct involvement in research projects, while others—such as CNIES, the WB, UNDP, and WHO—function primarily as funders, providing grants but employing few or no researchers on a permanent basis.

The private sector has also begun to engage in research through entities such as Cabinet GAAYA, ARGA, and the Malian Society of Applied Sciences (MSAS), which mobilize scientific expertise to address development and innovation needs. Civil society further contributes through non-governmental organizations, associations, and networks. Among the most active are Point Sud, ROCARE, Association N'KO, GREAT Mali, and GRAD, which conduct applied research often oriented toward development, governance, education, and cultural issues.

In sum, Mali's research system is underpinned by a rich ecosystem of multidimensional academic institutions, supported by public authorities, technical and financial partners, the private sector, and civil society organizations. Yet, the degree of involvement varies across stakeholders, with some employing full-time researchers and others serving primarily as facilitators or funders of research. Table 25 provides the detailed list of stakeholders in the social science research system in Mali.

3.3. Relationships among the stakeholders' research system in Mali

To analyze the relationships among stakeholders within Mali's research system, it is essential to delineate the roles and responsibilities of each stakeholder, as these functions constitute the basis upon which their interactions become visible. Beyond their teaching mandate, higher education and research institutions are tasked with training future researchers; cultivating national and international expertise in scientific inquiry; and producing, developing, disseminating, and sharing research outputs. It should be underscored that private higher education institutions in Mali, while employing teacher-researchers, do not currently engage in research aligned with the objectives of this evaluation. Their activities remain confined to academic research at the level of degree attainment.

The Malian state, through the government and the National Transitional Council (CNT), occupies a central position in defining and implementing national policy for scientific and technological research. It formulates the Strategic Association for Research Development (CSDR), ensures intersectoral coordination via the Ministry of Higher Education and Scientific Research (MESRS), and establishes the regulatory framework governing research institutions through laws, decrees, and ministerial orders. The state also bears responsibility for public financing of research, primarily through the Competitive Fund for Research and Technological Innovation (FCRIT), and retains the capacity to commission targeted studies designed to inform public decision-making on priority issues such as education, health, and food security.

Funding bodies—including the National Center for Scientific and Technological Research (CNRST), international donors (EU, BAD, UNESCO, AUF), and bilateral agencies (FDA, USAID, among others)—provide essential technical, financial, and logistical support. They play a pivotal role in the implementation of applied research projects, the strengthening of researcher capacities, and the institutional structuring of laboratories.

The private sector, though still marginally engaged in direct scientific production, contributes primarily through the financing of applied research in domains such as agricultural innovation, industrial development, renewable energy, and telecommunications. Its involvement is manifested through Public-Private Partnership (PPP) mechanisms, the commissioning of feasibility studies, and the co-financing of technological innovation programs. Large enterprises and chambers of commerce also participate in advisory bodies that shape the national research agenda.

Civil society—comprising associations, NGOs, community networks, and foundations—functions as an intermediary between researchers and societal needs. It contributes to the co-construction of research priorities (e.g., community health, inclusive education, local governance), commissions evaluative and exploratory studies, and, in certain cases, finances action research, particularly in areas such as sustainable development, environmental protection, and human rights. Organizations such as the Malian Association for Sahel Survival (AMSS) and the Gender and Research Network in Mali exemplify this engagement. It is also noteworthy that specific civil society organizations, including Point Sud and ROCARE, are especially active in advancing social science research in Mali.

In summary, relations among stakeholders in social science research in Mali are marked by patterns of dependency, misalignment of expectations, and occasional shirking of responsibilities on both sides, compounded by weak communication channels and limited collaboration. These dynamics are further accentuated by the overwhelming reliance on foreign funding, which stands in contrast to the normative ideal whereby the state, the private sector, and civil society would assume leading roles. This ideal is grounded in fundamental principles linked to the relevance, sovereignty, sustainability, and social utility of research. Key dimensions include the social relevance and contextual embeddedness of research, scientific sovereignty and strategic autonomy, the sustainability and continuity of research activities, accountability and transparency, and the advancement of applied research and locally driven innovations.

With respect to social relevance and local grounding, social science research seeks to analyze human, social, cultural, economic, and political dynamics in ways that are both useful and contextually situated, thereby addressing the substantive needs of Malian society. This requires strong engagement from:

- the State, as guarantor of the public interest and custodian of national policy;
- civil society, as bearer of social and civic concerns; and
- the private sector, as a driver of economic dynamics and innovation.

As UNESCO (2017) emphasizes, *"social science research must reflect national priorities and the needs of citizens"* (UNESCO, *World Social Science Report*, 2016, p. 43).

With respect to scientific sovereignty and strategic autonomy, reliance on external funding and donor-driven priorities carries the risk of orienting research agendas toward external imperatives that may be misaligned with national realities. Strengthened local support—from the state, the private sector, and national NGOs—serves as a safeguard against the instrumentalization of researchers by external forces such as geopolitical interests or donor conditionalities. The active involvement of these domestic stakeholders ensures that research remains anchored in national development objectives. As the OECD (2012) underscores, *"national research policies should reflect local sustainable development objectives and promote the mastery of the knowledge produced" (OECD Science, Technology and Innovation Outlook 2012,* p. 77).

In terms of durability and continuity, excessive dependence on external aid renders research projects fragile and episodic. By contrast, stewardship by national stakeholders:

- guarantees the long-term continuity of research programs;
- facilitates the institutionalization of results through their integration into public policies, social practices, and educational frameworks; and
- fosters the training, retention, and professionalization of local researchers.

The United Nations Economic Commission for Africa (CEA, 2014) similarly observed that *"the mobilization of domestic resources is essential to the sustainability of the national research systems in Africa" (Innovation and Research for Africa's Transformation,* p. 51).

With regard to accountability and transparency, when the state, the private sector, and civil society finance and orient segments of research, they are entitled to expect tangible outcomes and measurable impacts. This reciprocal accountability reinforces:

- the governance of the research system;
- transparency in the allocation and utilization of funds; and
- the dissemination of results to the wider community.

As UNESCO (2021) affirms, *"inclusive research governance is essential to ensure the effective use of knowledge produced" (UNESCO Science Report: The Race Against Time for Smarter Development,* p. 215).

In relation to the development of applied research and local innovations, private sector engagement is instrumental in advancing research with direct societal relevance, particularly in domains such as local development, entrepreneurship, and economic transformation. Enterprises are able to identify specific needs in areas such as social analysis, marketing, governance, and labor relations, thereby facilitating the economic valorization of research outputs. The OECD (2015) emphasizes that *"collaboration with the private sector is essential for the valorization of scientific results and social innovation" (Frascati Manual 2015,* p. 213).

Taken together, these dynamics demonstrate that the ideal of national leadership in social science research is anchored in the principles of relevance, sovereignty, sustainability, accountability, and integrated development. The state, the private sector, and civil society assume complementary roles: the state provides strategic guidance and public funding in pursuit of the common good; civil society articulates social demands and contributes to legitimizing research outcomes; and the private sector mobilizes expertise and stimulates applied research and innovation.

3.4. Stakeholders classification

Depending on the degree of interest they demonstrate and the level of power they exercise, stakeholders in social science research in Mali can be classified as presented in Table 5.

Table 5: Classification of stakeholders' by influence/power over and interest in social science research

Power/influence and Interest	Description	Implications	Stakeholders
High power, high interest.	These stakeholders have a significant influence on the research in social science and a high level of interest.	The GDN Mali team must collaborate closely with them and actively manage their expectations	Government
Low interest	These stakeholders have a significant influence but an interest relatively weak for social science research	It is necessary to keep them informed and address their concerns	Organizations of funding
Weak power, high interest	These stakeholders have limited influence but a high level of interest in the social science research	It is important to keep them satisfied, to engage them if necessary and to respond their concerns proactively	Higher education institutions of scientific research
Weak power, low interest (minimal effort)	These stakeholders have a limited influence and low interest.	It must take their concerns into account in providing basic information	Privat sector and civil society

Source: Doing Research in Mali, 1st edition, 2026

Stakeholders in social science research are classified according to their relative power and degree of interest:

High power, high interest: Government, as the central stakeholder that must be actively engaged;

High power, low interest: Funding agencies, which require systematic monitoring and regular information-sharing;

Low power, high interest: Higher education institutions and research bodies, which should be involved and their needs satisfied;

Low power, low interest: Private sector and civil society organizations, which demand only minimal attention.

3.5. Sampling

In Mali, the status of teacher-researchers is regulated by Decree No. 2022-131/PT-RM of September 20, 2022, which amends Decree No. 2017-036/P-RM of September 27, 2017 concerning higher education and scientific research. Article 2 of Decree No. 2017-036/P-RM establishes a functional framework for teacher-researchers in higher education and scientific research, classifying them into four (04) categories: Professors/Research Directors; Associate Professors/Research Professors; Assistant Professors/Assistant Clinical Heads/Research Fellows; and Research Assistants/Associates.

For sampling purposes, ROCARE Mali requested and obtained from the Human Resources Directorate of the Education sector an official list of all teacher-researchers in higher education and scientific research remunerated by the Malian state. This list enumerates two thousand seven hundred and seventy-nine (2,779) teacher-researchers, distributed as follows:

- One hundred twenty-nine (129) Professors/Research Directors;
- Three hundred fifty-seven (357) Associate Professors/ Research Professors;
- Nine hundred eighty (980) Assistant Professors/ Assistant Clinical Heads/Research Fellows; and
- One thousand three hundred thirteen (1,313) Research Assistants/Associates.

The list provided by the Human Resources Directorate of the Education sector proved to be essentially administrative and budgetary in nature, containing only employee identification numbers, names, categories, levels, and salary indices. Nevertheless, this dataset offered the ROCARE Mali team an initial basis for reflection. Within this framework, ROCARE Mali addressed a formal request to all stakeholders listed in Table 25, seeking comprehensive rosters of their teacher-researchers, including variables such as gender, age, academic rank, and disciplinary specialization.

All public higher education and research institutions submitted their lists, though often with incomplete variables. Given the critical importance of disciplinary specialization, the team insisted on its mandatory inclusion. Certain stakeholders—namely government bodies and segments of the private sector—indicated that they rely on teacher-researchers already identified within public higher education and scientific research institutions. Others—such as funding agencies, parts of the private sector, and civil society organizations—acknowledged that they do not employ teacher-researchers as staff, but rather engage them on an ad hoc basis for specific research tasks. No private higher education institution responded to ROCARE Mali's request. This lack of response may be attributed, on the one hand, to the fact that the majority of instructors in these institutions are drawn from the public sector, and on the other, to apprehension about being found non-compliant with existing regulations governing the establishment and accreditation of private higher education and research institutions in Mali.

Moreover, it appears that these institutions, which operate predominantly in the domain of the social sciences, lack internal structures—such as research laboratories, scientific committees, or dedicated funding mechanisms—that would enable the development of genuine institutional research activity. Consequently, their contribution to research remains confined to "academic research," understood as work undertaken by faculty or students within the framework of university training (master's theses, doctoral dissertations, etc.), without strong institutional anchoring or prospects for valorization or large-scale dissemination.

3.5.1 Choice of the sampling method

Stratified random sampling was employed as the primary strategy to ensure representativeness. Institutions likely to employ faculty members were divided into homogeneous strata according to their defining characteristics. Within each stratum, faculty members listed by the institutions were randomly selected to constitute the final pool of respondents. It should be noted that researchers from private research institutions were excluded from this exercise due to their non-response to the formal request. Nevertheless, given the position they occupy within the social science research system in Mali, each was allocated a designated number of researchers to preserve balance in the sampling frame.

A proportional allocation method was applied to determine the share of each group in the overall sample, as well as the share of each institution within its respective stratum. This proportionality was further observed at the institutional level by incorporating variables such as gender, disciplinary specialization, and academic rank.

3.5.2 The population target definition and segmentation

The definition and segmentation of the target population were established on the basis of the lists of teacher-researchers obtained, complemented by quotas that the research team allocated to private research institutions. This delineation was guided by the categories, geographical location, and size of each institution's social science research community.

Private higher education and research institutions were excluded from this definition for the reasons previously outlined. Table 6 presents the target population disaggregated by category, location, institutional size, number of social science researchers, and the total number of researchers across all disciplines within each institution.

Table 6: Population targets by institution, category, region, and size

Institutions	Category (C1, C2...) C1: university public; C2: Large schools and/or Institutes; C3: Public Research Institutions; C4: Institutions of research private	Location (L1, L2...) L1: Bamako; L2: out Bamako	Size (S1, S2...) S2: 1 to 100; S1: More of 100	Number of researchers in SS	Total number of researchers
ULSHB	C1	L1	S1	221	223
USJPB	C1	L1	S1	259	272
USSGB	C1	L1	S1	280	328
USTTB	C1	L1	S2	11	579
University of Ségou	C1	L2	S2	41	90
ENETP	C2	L1	S2	16	53
ENSup	C2	L1	S2	78	107
ENI- ABT	C2	L1	S2	4	69
HSJCS	C2	L1	S2	7	7
INFTS	C2	L1	S2	17	17
UP	C2	L1	S2	8	9
IZSGJB	C2	L1	S2	6	8
ENETP	C2	L2	S2	1	18
l'IHERI- ABT	C2	L2	S2	19	20
IPR/ITAR	C2	L2	S2	24	138
IER	C3	L1	S2	51	254
INSTAT	C3	L1	S2	61	70
ISH	C3	L1	S2	27	28
CIRAD	C4	L1	S2	5	5
Institute of International Strategic Relations of Mali (IISRM)	C4	L1	S2	5	5
Institute of Security Studies (ISS Africa) of Mali	C4	L1	S2	5	5

International Institute of Tropical Agriculture (IITA)	C4	L1	S2	5	5
IRD	C4	L1	S2	5	5
Institute of Sahel	C4	L1	S2	5	5
South Point	C4	L1	S2	5	5
ROCARE	C4	L1	S2	5	5
TOTAL				**1171**	**2330**

Source: Doing Research in Mali, 1st edition, 2026

The total number of teaching and research staff recorded in the lists provided by higher education and scientific research institutions, together with those allocated by quota to private research institutions, amounts to two thousand three hundred and thirty (2,330) across all disciplines. Of this total, one thousand one hundred and seventy-one (1,171) are engaged in the social sciences, representing 50.26%. For analytical purposes, these institutions were subdivided into six (06) subgroups according to their specificities and shared characteristics, including category, geographical location, and institutional size. These subgroups are distinguished by color coding (see Table 6).

- **Subgroup one (1):** Public universities located in Bamako with more than 100 teacher-researchers in the social sciences.
- **Subgroup two (2):** Public universities situated in the interior regions of the country, with between 1 and 100 social science faculty members.
- **Subgroup three (3):** High Schools and/or Institutes based in Bamako, employing between 1 and 100 social science faculty members.
- **Subgroup four (4):** High Schools and/or public institutions located outside Bamako, with between 1 and 100 social science faculty members.
- **Subgroup five (5):** Public research institutions located in Bamako, employing between 1 and 100 social science faculty members.
- **Subgroup six (6):** Private research institutions located in Bamako, employing between 1 and 100 social science faculty members.

Although private research institutions in Bamako provided lists of their faculty members and were formally categorized within a subgroup, they were excluded from the composition of the subgroups and from the calculation of each subgroup's proportional share (%) of the total number of social science researchers.

Table 7: The proportion of each subgroup in the total number of social science researchers

Institutions	Category 1, C2...) C1: public university; C2: Grandes écoles and/or Institutes; C3: Institutions of public research; C4: Institutions of research private	Location (L1, L2...) L1: Bamako; L2: out Bamako	Size (S1, S2...) S2: 1 has 100; S1: More of 100	Researchers Number in Social science	Share of Researchers-Total Number in Social science
Subgroup 1	C1	L1	S1	760	67.86
Subgroup 2	C1	L2	S2	41	3.66
Subgroup 3	C2	L1	S2	116	10.36
Subgroup 4	C2	L2	S2	24	2.14
Subgroup 5	C3	L1	S2	139	12.41
Subgroup 6	C4	L1	S2	40	3.57
Target group of social science researchers				**1120**	**100**

Source: Doing Research in Mali, 1st edition, 2026

USTTB was excluded from the composition of the subgroups because it has only 1.89% social science faculty members and also because these are not in This institution only provides basic support courses such as English and psychology. ENI-ABT and ENETP were excluded from subgroup 3 for the same reasons. The reasons given by USTTB. CERFITex and l'IHERI-ABT were excluded from subgroup 4, the former for the reasons mentioned above and the latter due to inaccessibility (insecurity). These exclusions reduce the target population to one thousand one hundred and twenty (1,120) teacher-researchers.

3.5.3 Samples and subsamples definitions

The DRA toolkit (p. 37) underscores that *"...recent DRA applications indicate that 300 respondents (for smaller national contexts) and 400 respondents (for larger national contexts) may serve as a pragmatic, albeit somewhat ad hoc, minimum threshold for survey-based research."* In alignment with this guidance, the ROCARE Mali GDN research team adopted a sampling frame of 400 individuals drawn from a total population of 1,120 teacher-researchers, of whom 143 were women (12.78%), with the intention of expanding the sample contingent upon favorable conditions. The allocation of cases across subgroups was determined through proportional stratification, applying the formula: **Sample size for each subgroup = (sample size ÷ total population size) × subgroup population size.** For instance, in the present study, the calculated sample size for Subgroup 1 is (400 ÷ 1120) × 760 = 271 faculty members to be surveyed. Within the overall sample of 400, 51 participants are women (12.78%). Tables 8 and 9 provide the detailed distribution of subsamples and the institutional categories that constitute each subgroup within the stratified sampling design.

Table 8: Relative sample size by subgroup

Institutions	Category 1, C2...) C1: public university; C2: Grandes écoles and/or Institutes; C3: Institutions of public research; C4: Institutions of research private	Location (L1, L2...) L1: Bamako; L2: out Bamako	Size (S1, S2...) S2: 1 has 100; S1: More of 100	Researchers Number in Social science	Share of Researchers-Total Number in Social science	ample
Subgroup 1	C1	L1	S1	760	67.86	271
Subgroup 2	C1	L2	S2	41	3.66	15
Subgroup 3	C2	L1	S2	116	10.36	41
Subgroup 4	C2	L2	S2	24	2.14	9
Subgroup 5	C3	L1	S2	139	12.41	50
Subgroup 6	C4	L1	S2	40	3.57	14
Target group of social science researchers				**1120**	**100**	**40**

Source: Doing Research in Mali, 1st edition, 2026

Table 9: List of institutions included in the sample, by subgroup

Institutions	Number of researchers in SS	Sample
ULSHB	221	
USJPB	259	
USSGB	280	
Below group 1	**760**	**271**
University of Ségou	41	
Below group 2	**41**	**15**
ENSup	78	

HSJCS	7	
INFTS	17	
UP	8	
IZSGJB	6	
Below group 3	**116**	**41**
IPR/ITAR	24	
Below group 4	24	9
IER	51	
INSTAT	61	
ISH	27	
Below group 5	**139**	**50**
CIRAD	5	
Institute of International Strategic Relationships of Mali (IISRM)	5	
Institute of Security Studies of Mali (ISSM)	5	
Institute of International Tropical Agriculture (IITA)	5	
IRD	5	
Institute of Sahel	5	
South Point	5	
ROCARE	5	
Below group 6	**40**	**14**
TOTAL	1120	400

Source: Doing Research in Mali, 1st edition, 2026

3.5.4. Sampling within of each subgroup

The determination of institutional sample sizes was derived through the application of a proportional allocation formula: **Institutional sample size = (subgroup sample size ÷ subgroup target population size) × institution population size.** By way of illustration, the calculated sample size for ULSHB is (271 ÷ 750) × 221 = 79 faculty members designated for inclusion in the survey. Table 10 presents the distribution of faculty members to be surveyed across the respective institutions.

Table 10: Samples by subgroups and institutions

Subgroup	Institutions	Number of Researchers in Social Sciences	Sample
Subgroup 1	ULSHB	221	79
	USJPB	259	93
	USSGB	280	100
	Total	760	271
Subgroup 2	University of Ségou	41	15
	Total	**41**	**15**

Subgroup 3	ENSup	78	28
	HSJCS	7	3
	INFTS	17	6
	UP	8	3
	IZSGJB	6	2
	Total	**116**	**41**
Subgroup 4	IPR/IFRA	9	
	Total	**9**	
Subgroup 5	IER	51	18
	INSTAT	61	22
	ISH	27	10
	Total	**139**	**50**
	CIRAD	5	2
	Institute of International Strategic Relationships of Mali (IISRM)	5	2
Subgroup 6	Institute of Security Studies of Mali (ISSM)	5	2
	Institute of International Tropical Agriculture (IITA)	5	2
	IRD	5	2
	Institute of Sahel		2
	South Point	5	1
	ROCARE	5	1
	Total	40	14
	OVERALL TOTAL	1120	400

Source: Doing Research in Mali, 1st edition, 2026

IV – DRA METHODOLOGY

4.1. Respondents of general data information

The field surveys, originally scheduled for a duration of fifteen (15) days, extended beyond this timeframe due to several constraining factors, including respondent unavailability, institutional barriers limiting access to certain data, instability among key stakeholders (such as positional changes, organizational restructuring, and the emergence of new stakeholders), as well as delays in the transmission of completed questionnaires by some participants. Ultimately, the surveys were conducted between December 2023 and March 2024. In total, nine (09) investigators—four (04) of whom were women—alongside four (04) supervisors were mobilized. Consistent with the DRA methodological framework, three (03) categories of stakeholders were targeted: teacher-researchers, research administrators, and policy decision-makers.

With respect to teacher-researchers, stakeholder mapping identified two thousand three hundred and thirty (2,330) individuals across all disciplinary fields. Of these, one thousand one hundred and seventy-one (1,171) were situated within the social sciences, representing 50.26% of the overall population and constituting the study's target group. Following the exclusion of certain institutions due to insecurity and/or disciplinary orientation, one thousand one hundred and twenty (1,120) teacher-researchers were retained as the effective sampling frame. These individuals were distributed across twenty-one (21) public and private teaching and/or research institutions. From this population of 1,120 teacher-researchers, the Mali GDN team selected a sample of 400, representing 35.52% of the target group, of which 12.61% were women.

The investigations were ultimately conducted in fifteen (15) institutions out of the twenty-one (21) initially planned, as six (06) private research institutions were excluded due to their closure following the withdrawal of certain technical and financial partners from Mali for security and political reasons. The reduction or cessation of activities by these partners stemmed from a confluence of structural factors, including persistent insecurity and terrorist threats, regime change and political instability, the imposition of international sanctions and diplomatic tensions, as well as the reorientation of Mali's strategic alliances toward new partners at the expense of traditional donors. These dynamics had direct repercussions on the viability and accessibility of several research institutions—particularly private ones—and consequently diminished the effective scope of the originally envisaged fieldwork. The fifteen (15) institutions surveyed included ENSup, ESJSC, IER, INFTS, INSTAT, IPR/IFRA, IPU, ISH, IZSGJB, Point Sud, ROCARE, ULSHB, US, ULJPB, and USSGB.

From the initial sample of four hundred (400) teaching and research staff, three hundred and one (301) respondents were successfully surveyed, representing 75.25% of the planned sample. This comprised two hundred and fifty (250) men (83.06%) and fifty-one (51) women (16.94%). The data suggest that women were comparatively more accessible and available during the survey process, despite their smaller proportion within the overall sample. This differential accessibility can be attributed to a range of sociological, professional, institutional, and methodological factors, including comparatively lower institutional workloads, reduced professional mobility or external commitments, greater receptiveness to participation, proximity and availability at survey sites, and other elements linked to the data collection strategy.

In many higher education institutions, men disproportionately occupy positions of authority (e.g., department chairs, deans, committee members), which often entail significant administrative responsibilities. These additional governance burdens tend to reduce their availability for participation in survey-based research. Women, conversely, remain underrepresented in such decision-making roles and therefore frequently experience comparatively less demanding institutional schedules, rendering them more accessible to survey participation. Moreover, male faculty and research staff are typically more likely to engage in multiple professional commitments, including teaching across several institutions (public, private, or hybrid), undertaking missions, seminars, or externally funded research projects, and assuming union or political responsibilities. Such patterns of professional mobility contribute to their reduced availability for on-site data collection. Additionally, empirical evidence from social science scholarship suggests that women often demonstrate greater receptivity and cooperation in survey contexts. This tendency has been linked to heightened sensitivity to collective concerns, such as the improvement of educational systems (Gilligan, 1982; Tronto, 1993); stronger adherence to scientific and institutional requests (Bourdieu, 1993; Oakley, 1981); and a more deeply internalized sense of academic duty within research settings (West & Zimmerman, 1987; Acker, 1990).

Women, often underrepresented in research samples, may have perceived the survey as a strategic opportunity to articulate their perspectives, thereby reinforcing their motivation for active participation. In certain instances, women were more consistently present in their offices during regular working hours, particularly when external professional commitments were limited. This facilitated their identification and immediate inclusion in the survey process, in contrast to some male faculty members who proved more difficult to reach. It is also plausible that the survey was administered during temporal or spatial contexts characterized by a stronger female presence, and that specific methodological features—such as the deployment of female interviewers or the use of participatory interviewing techniques—further enhanced women's engagement. The proportion of survey coverage per institution relative to the initial sample was as follows: ENSup 12/28 (42.85%), ESJSC 4/3 (133.33%), IER 12/18 (66.66%), INFTS 12/6 (200%), INSTAT 9/22 (40.90%), IPR/IFRA 9/9 (100%), IPU 5/3 (166.66%), ISH 11/10 (110%), IZSGJB 5/2 (250%), Point Sud 4/1 (400%), ROCARE 3/1 (300%), ULSHB 35/79 (44.30%), US 13/15 (86.66%), USJPB 95/93 (102,.15%), and USSGB 72/100 (72%). With the exception of USJPB, faculty members affiliated with smaller institutions were observed to be the most accessible and available for providing information. The comparatively lower coverage rates in certain institutions can be attributed to the coincidence of survey administration with collective protests demanding overtime compensation. Table 11 provides the findings of the disciplinary breakdown of survey coverage.

Table 11: Comparison between planned and effective sample size for researchers, by discipline

Discipline	Foreseen (%)	Accomplished (%)	Gap (%)
Law	24.29	21.26	-3.03
Economy	17.95	14.29	-3.66
Geography	6.43	13.62	7.19
Linguistic	14.19	9.97	-4.22
Education	7.05	9.30	2.25
Management	4.55	6.64	2.09
Other (Statistical, communication, art, etc.)	8.48	4.98	-3.50
Studies on Gender and Sexuality	0.00	3.33	3.33
Sociology	3.57	3.32	-0.25
Demography	0.62	2.33	1.71
Political Science	0.18	2.33	2.15
Psychology	1.52	1.99	0.47
Development and/or Sustainable Development	1.78	1.78	0.00
Anthropology	1.70	1.70	0.00
Philosophy	1.70	1.70	0.00
International Business	0.00	1.66	1.66
History	4.11	1.33	-2.78
Social Work	0.36	0.36	0.00
Public Administration	1.52	0.33	-1.19
Ethnography	0.00	0.00	0.00

Source: Doing Research in Mali, 1st edition, 2026

Law and Economics remain the dominant fields despite a slight underrepresentation relative to expectations, whereas Geography significantly surpasses its initial projections. Disciplines initially considered peripheral in the planning process (e.g., Political Science, International Affairs, Gender Studies) exhibit noteworthy levels of participation, suggesting either an underestimated scholarly interest or an emergent dynamic of engagement. Conversely, disciplines that were initially well represented, such as Linguistics and History, display marked under-implementation.

It is important to note that certain specialties—such as Ethnography, International Affairs, and Gender and Sexuality Studies—were absent from the institutional lists provided by public and private higher education and

research establishments, which explains their exclusion from the initial sampling frame. Regarding the latter two, the investigations revealed possible confusion among respondents, particularly between International Law and International Affairs in the first case, and between initial training and capacity-building activities in the second. Through capacity-building initiatives, some teacher-researchers have received training in gender and sexuality and subsequently assumed responsibility for teaching courses on these themes at the university level. However, this does not necessarily imply that they are recognized specialists in these fields.

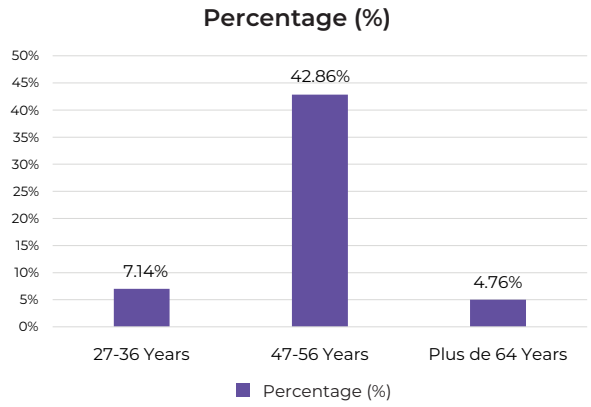
The results indicate that participation rates in disciplines such as Economics, Sociology, History, Law, Linguistics, Public Administration, and related fields were lower than initially anticipated, whereas areas such as Demography, Education, Geography, Management, and Psychology recorded higher-than-expected respondent engagement. Specialties including Anthropology, Development Studies and/or Sustainable Development, Philosophy, and Social Work accounted for 0.36% of the responses, a proportion consistent with the projected expectations. Variations—whether declines or increases—in the percentage of surveyed respondents relative to the initial sample may be attributable to the overtime pay protests that coincided with the period of investigation. Given the constraints of time and resources, investigators sought to mitigate information gaps by approaching voluntary participants and by mobilizing institutional authorities, such as deans and directors general, to facilitate access to informants as they appeared on the institutional master lists serving as the sampling frame.

The age distribution of teacher-researchers surveyed ranged from 27–36 years (7.14%) upward. The largest cohort was aged 47–56 years (42.86%), while respondents aged 64 represented 4.76% of the sample. Of the 301 teacher-researchers surveyed, 24 held postdoctoral qualifications, 175 held doctorates, 94 held master's degrees, and 8 held bachelor's degrees. Geographically, 279 respondents (92.69%) were located in the Bamako district, with the remaining 22 (7.31%) situated in other regions of the country.

Charts 3, 4, and 5 illustrate the distribution of surveyed teacher-researchers by age group, academic qualification, and geographical area of employment.

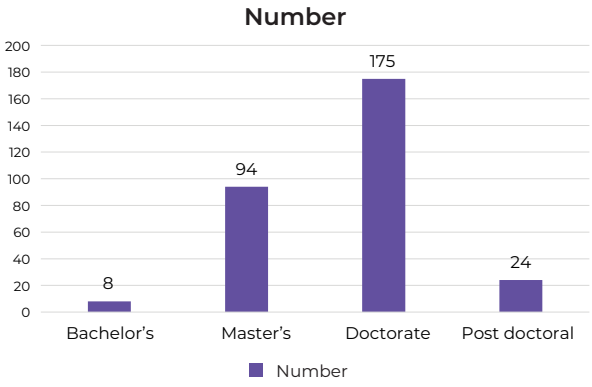
The largest proportion of surveyed teaching and research staff (42.86%) falls within the 47–56 age cohort, representing a population in the peak stage of their professional trajectories and likely firmly established in their academic careers. By contrast, both younger respondents (27–36 years) and those in the senior category (above 64 years) are comparatively underrepresented within the sample.

Chart 3: Distribution of the teacher-researchers surveyed, by age group



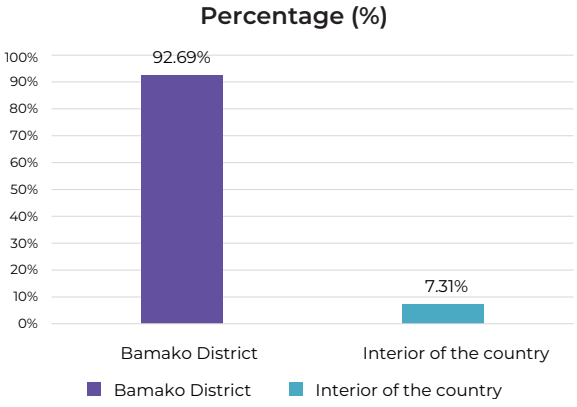
Source: Doing Research in Mali, 1st edition, 2026

Chart 4: Level of education of the teacher-researchers surveyed



Source: Doing Research in Mali, 1st edition, 2026

Chart 5: Geographical distribution of teacher-researchers surveyed



Source: Doing Research in Mali, 1st edition, 2026

The overwhelming majority of surveyed faculty members possess advanced academic qualifications. Specifically, 58.14% hold doctoral degrees, while an additional 7.97% have attained postdoctoral credentials, yielding a combined total of 66.11% with a doctorate or higher. In contrast, master's degrees (31.23%) and bachelor's degrees (2.66%) constitute a minority, thereby underscoring the elevated level of academic attainment within the surveyed faculty cohort.

University professors and researchers are overwhelmingly concentrated in Bamako (92.69%), underscoring the pronounced centralization of the national higher education and research system. By contrast, only 7.31% are located in other regions of the country, revealing a marked territorial imbalance in the distribution of academic personnel.

With respect to research administrators, surveys were conducted across the fifteen (15) institutions previously identified. In total, forty-nine (49) administrators were surveyed, comprising forty-two (42) men and seven (7) women. Their ages ranged from 27–36 years to above 64 years, with the largest proportion (59.52%) falling within the 47–56 age cohort. Four (4) administrators reported holding postdoctoral qualifications, while the remaining forty-five (45) possessed doctoral degrees. Geographically, 87.78% of these administrators were affiliated with institutions in the capital, compared to 12.25% in the country's interior, further reflecting the spatial concentration of research governance.

Finally, the investigations at the level of the political community encompassed a broad range of national institutions, including the National Transition Council (CNT), the Higher Council for Education and Culture (CSEC), the High Council of Territorial Authorities (HCCT), the Economic, Social, Cultural and Environmental Council (CESCE), the Ministry of Territorial Administration and Decentralization (MATD), the Ministry of National Education (MEN), the Ministry of Higher Education and Scientific Research (MESRS), the Ministry for the Promotion of Women, Children and Families (MPFEF), the Ministry of National Entrepreneurship, Employment and Vocational Training (MEEFP), and the Ministry of Reconciliation, Peace and National Cohesion for the Agreement of Peace and National Reconciliation (MRPNC-APNR), as well as the head of a network of technical and financial partners in the education sector.

In Mali, the technical and financial partners engaged in the education sector (PTF-SE) comprise multilateral donors, bilateral partners, United Nations agencies, and the coordinating body of the international NGO consortium. Together, these stakeholders form a structured partnership framework with the Government of the Republic of Mali. The overarching objective of this framework is to foster the development of a harmonized approach to educational support, ensuring coherence in interventions and convergence across the diverse procedures employed.

At the level of community policy, eleven (11) individuals were interviewed, including ten (10) men and one (01) woman, all based in the capital. Among them, one (01) held a postdoctoral fellowship, seven (07) possessed doctoral degrees, three (03) held master's degrees, and one (01) held a bachelor's degree. Their ages ranged from 27–36 years to above 64 years, with the largest proportion (63.63%) falling within the 47–56 age cohort.

A preliminary analysis highlights the relatively small number of respondents within the political community. However, this limited sample size should not detract from the substantive quality of the information collected. The reduced number of interviews reflects the fact that institutions deliberately directed investigators to the most relevant and knowledgeable individuals within their organizational structures to provide the requested data.

The evidence base for the DRA framework was informed by triangulated sources, including survey data, literature reviews, and international databases. This framework delineates the principal determinants underpinning the three core functions of Mali's research system, namely: the production of knowledge, the dissemination of research outputs, and the policy application of research findings.

4.2. Research production

Research production refers to the systematic process through which scholarly inquiry is undertaken by researchers and research institutions, encompassing the essential inputs and activities that directly underpin the function of knowledge generation. The data pertaining to production encompass dimensions such as research contributions, the prevailing research culture and institutional support services, the outputs of scholarly work and training, as well as opportunities for advancement and the sustainability of research practices.

4.2.1. Research contributions

Research contributions in this context pertain to the human and material resources essential for the production of robust social science scholarship in Mali. These encompass the availability of qualified personnel (researchers), financial support, institutional infrastructure and data systems, as well as the allocation of time dedicated to research activities.

For the purposes of this analysis, a social science researcher is defined as a professional engaged in the generation and management of social science knowledge within universities (public and private), public institutions, ministerial research centers, think tanks, and non-profit organizations, including international agencies. In Mali, reliable data on teacher-researchers remain scarce. The limited information available derives from public and private higher education and research institutions, international organizations, and field surveys. These data are largely aggregated, grouping together diverse categories of researchers. Consequently, the results presented here are based on the triangulation of these multiple sources.

With respect to funding, R&D (DIRD) expenditures are understood as the total investment in research and development (R&D) in the social sciences undertaken within the national territory during a specified period. In Mali, the majority of research financing originates externally. Scientific research and technological development activities are primarily supported through foreign funding (50.2%), supplemented by modest annual allocations from the State (44.7%) via the Competitive Fund for Research and Technological Innovation (FCRIT) and other related mechanisms.

Although available data suggest a relatively balanced distribution of research funding between external sources (50.2%) and national allocations (44.7%), this apparent equilibrium conceals a deeper structural dependency whose manifestations and implications warrant critical examination. External funding is typically project-based, initiated and defined by international donors (cooperation agencies, NGOs, multilateral organizations, etc.). This arrangement entails that research agendas are frequently shaped by donor priorities rather than domestic needs; funding streams are temporary, conditional, and rarely embedded within long-term structural support strategies; and certain disciplines—particularly local humanities, social sciences, or critical research—may be excluded when deemed non-priority by external stakeholders. Consequently, even when external funding levels approximate those of the State, the autonomy of national researchers in defining their research problems remains constrained under this exogenous regime.

Conversely, while public funding accounts for 44.7% of total resources, it is characterized by several structural limitations: it is often insufficient to meet the basic requirements of research institutions (infrastructure, salaries, equipment, operational costs); it is irregular and unpredictable, subject to fluctuations in the national budget; mechanisms such as the Competitive Fund for Research and Technical Innovation (CFRIT) remain underfunded, poorly understood, or inaccessible to many researchers due to complex procedures and misaligned eligibility criteria; and there is a lack of multi-year planning or coherent policy frameworks to sustain national research priorities.

Thus, despite its relatively significant share, the qualitative limitations of public funding diminish its effective impact and reinforce the reliance of researchers on external sources of support.

Ultimately, the interplay between externally driven aid and insufficient domestic support produces several systemic consequences: **cognitive dependence,** whereby research agendas are aligned with donor-defined priorities (e.g., HIV/AIDS, food security, governance) at the expense of locally critical but less “marketable” issues; **fragmentation of efforts,** as research activities remain dispersed and tied to short-term project calls, lacking integration into a coherent national strategic vision; and **structural vulnerability,** in which the suspension or redirection of external funding risks paralyzing entire segments of the research system due to the absence of adequate local financial backing.

In other words, although foreign funding (50.2%) surpasses state contributions (44.7%) by only 5.5 percentage points, Mali’s scientific research remains structurally dependent on external resources. This dependency is reinforced by the predominance of exogenous agendas, the fragility of national endowments, and the limited sovereignty in defining scientific priorities. The imbalance is not merely reflected in numerical proportions but in the substantive capacity to guide, plan, and sustain an autonomous and contextually relevant national research system.

UNESCO data from 2016 reveal that research and development (R&D) expenditures across all sectors (business, universities, government) account for 0.7% of GDP, falling short of the African Union’s (AU) benchmark of at least 1% of GDP. For the present study, the research team relied on data from Mali’s 2021 National Survey of Science, Technology, and Innovation (STI).

Infrastructure constitutes a foundational element of the research system in general, and of social science inquiry in particular. It represents a critical pillar of research strategy, underpinning reliability, effectiveness, efficiency, and long-term sustainability. Key dimensions include the quality of data accessibility, the proportion of outputs disseminated through open-access platforms, and the robustness of the physical and digital infrastructure itself.

Equally, one of the central objectives of research is the generation of knowledge that is socially relevant and development-oriented. For such knowledge to contribute

meaningfully, it must be disseminated, interpreted, and debated, thereby facilitating its integration into broader epistemic systems and its subsequent utilization in policy formulation and decision-making by authorities. This process presupposes adequate time allocation for researchers, situating the issue of time devoted to research as a critical determinant of knowledge production.

For researchers, the triad of funding, infrastructure, and time constitutes indispensable resources, directly shaping both the practice and the quality of scholarly work. Table 12 presents the survey findings from Mali concerning these three dimensions, alongside their implications for research performance.

Table 12: Indicators related to people, funding, infrastructure, data and the research time dedicated to research (research production inputs) in Mali

FACTOR	INDICATORS	VALUE	SOURCES
1.1.a People	Number of researchers in social science, by millions of active people	117	RGPH5-2022, mapping of the stakeholders
	Percentage of researchers in social science	12.13%	mapping of the stakeholders
	Percentage of researchers in social science holders of a PhD	42.95%	survey
	Percentage of women holders a PhD	10.33%	Investigation STI 2021
1.1.b Funding	Public Expenditures on Research and Development (DIRD) in social sciences, by social science researcher	$7262.06	Study documentary
1.1.c Infrastructure and data	Data Access Quality	2.80	Investigation with of the researchers
	Free access Production Percentage	18.87%	Scopus (SCImago)/ Researcher Survey
	Research Infrastructure Quality (satisfaction, scale 1-6)	2.62	Investigation with researchers
1.1.d Time allocated to research	Time allocated to research by researchers (average)	30.00%	Survey with researchers + Interviews

Source: Doing Research in Mali, 1st edition, 2026

The individual-level indicators encompass the density of social science researchers per million active inhabitants, the proportion of female researchers in the social sciences, the percentage of social science researchers holding doctoral degrees, the proportion of women among doctorate holders, and the overall share of women researchers.

Data presented in Table 12 indicate that Mali counts one hundred and seventeen (117) social science researchers per million inhabitants. By comparison, UNESCO (2021) reported thirty-nine (39) researchers across all disciplines per million inhabitants in 2017. The discrepancy between these figures is primarily attributable to differences in temporal coverage, methodological approaches, and disciplinary scope: the earlier estimate (39) represents a global, dated, and likely conservative approximation, whereas the more recent figure (117) reflects a targeted, updated, and potentially more comprehensive assessment of social science research. Nevertheless, Mali's ratio of 117 researchers per million inhabitants remains below the continental average of 198 (UNESCO, 2023) and far beneath the international benchmark of 3,500–4,500 researchers per million inhabitants observed in OECD countries.

Women constitute 12.13% of social science researchers in Mali, a proportion significantly lower than the African average of 31% (UNESCO, 2023) and the international target of 50% for higher education and research (UN, UNESCO). Across all disciplines, the percentage of women researchers in Mali was 15.10% according to UNESCO (2021). The results further reveal that 42.95% of social science researchers in Mali hold doctoral degrees, a

figure considerably higher than the regional average in Central Africa (25–30%) but lower than the international average of 60% (OECD). Among doctoral holders, women represent 10.33%. According to Mali's 2021 Science, Technology, and Innovation (STI) Survey, women account for 11.90% of researchers across all categories, a proportion substantially below the global average of 33.3% reported by the UNESCO Institute for Statistics, based on data from 107 countries between 2015 and 2018.

With respect to financing, the results indicate that public expenditure on research and development (R&D) in the social sciences, calculated per researcher, amounts to $7,262.06, or 4,406,290 FCFA, according to data from the 2022 Malian Finance Law. Comparative benchmarks highlight the gap: the *African Innovation Outlook* (2014) reports that in industrialized countries, R&D expenditure can reach 2% of GDP, while the ASTII initiative sets a target of at least 1% of GDP for African states. Over the three years covered by the survey, Mali has remained far below this threshold, with R&D spending declining from 0.31% of GDP in 2015 to 0.18% in 2021. This figure is not only critically low but becomes particularly concerning when considering its utilization by beneficiary institutions. In 2021, R&D expenditures were estimated at 18.615 billion FCFA, of which government sector R&D centers and institutions absorbed nearly half (46.4%), private enterprises accounted for 30.9%, and higher education institutions utilized only 18.3%. NGOs contributed even less than in previous years. As in earlier periods, applied research continued to dominate, representing nearly two-thirds (63.0%) of total expenditure, followed by experimental research at 31.9%.

Regarding infrastructure and data, the quality of access to research data received a low evaluation score of 2.80 out of a maximum of 6, based on responses from surveyed teacher-researchers. Specifically, in relation to access to primary sources of information and data, 63.12% of respondents expressed dissatisfaction, 29.24% reported satisfaction, 3.65% indicated uncertainty, and 3.99% provided no response.

The relatively low score for data access—measured in terms of perceived ease, diversity, and volume of available resources—may be attributed to the absence, insufficiency, or inaccessibility of information, as well as to limited engagement with existing materials. Nevertheless, this score is not particularly alarming when situated within a global comparative perspective provided by the *Global Data Access Barometer*. According to the 2022 data, no country achieved a score exceeding 70 out of 100, while the global average stood at 34.38 out of 100.

Effective management and availability of scientific data are critical for enabling the emergence of new analytical approaches and innovative outcomes, primarily due to the magnitude, heterogeneity, and interoperability of such data. Put differently, the modalities through which scientific data are organized, stored, and disseminated—whether generated by governments or derived from large international repositories—can significantly expand the potential for discovery and methodological innovation. This is facilitated by three complementary dimensions: the sheer **volume** of data, the **variety** of data sources, and the **interoperability** of systems that allow diverse datasets to function cohesively.

The vast proliferation of data in contemporary society—commonly referred to as *Big Data*—enables the identification of correlations that remain imperceptible in smaller datasets and facilitates the application of advanced statistical methodologies and artificial intelligence techniques, such as machine learning, to uncover emerging trends. As Raghupathi and Raghupathi (2014) demonstrate in the field of public health, access to large-scale datasets (e.g., anonymized health records of millions of patients) allows for the early detection of adverse drug effects and the monitoring of epidemiological patterns.

Moreover, data may assume diverse forms—quantitative, qualitative, textual, geospatial, audiovisual, among others—and their cross-referencing permits multidimensional analyses. For instance, in education, the integration of academic performance indicators, socio-economic data, and pedagogical practices generates richer insights, while interdisciplinary studies (e.g., linking economics, climate science, and human mobility) illustrate the added value of such combinations. According to FAO (2021), the integration of satellite imagery, agricultural statistics, and climate data enhances crop forecasting and strengthens food security.

Interoperability, in this context, refers to the capacity to merge data from heterogeneous sources (governmental, academic, NGO, and international databases) through standardized formats, metadata, and open protocols. This process enables seamless integration, producing richer datasets and facilitating reuse by other researchers, thereby advancing the principles of *Open Science*. As noted by the European Commission (2018), platforms such as OpenAIRE, DataCite, and WB Open Data provide researchers with standardized datasets, thereby supporting reproducibility and the extension of scientific studies.

In summary, the greater the scale, diversity, and interoperability of scientific data, the more it facilitates novel forms of analysis and the production of

innovative results. Such data infrastructures enable the identification of unexpected correlations, the development of more robust predictive models, and a deeper comprehension of complex phenomena. For governments, the public dissemination of data (e.g., census, health, and education statistics) in open formats fosters transparency, strengthens evidence-based policymaking, and stimulates research and innovation. For the scientific community, shared data reduce duplication, enhance methodological rigor through reproducibility, and accelerate cumulative progress.

The evidence presented in Table 12 indicates that only 18.87% of researchers' outputs are openly accessible. According to SCImago-Scopus, merely 20.23% of publications produced by Malian faculty and researchers are available in open access, a figure below the African average (30–40%) and far from the international objective of universal open access (UNESCO, Plan S, Open Science). In 2017, Mali ranked 111th globally with only 2% of its data classified as open (Open Data Barometer, 2017). Open data holds significant importance for diverse stakeholders—including researchers, funders, civil society, NGOs, and governments.

As Berkowitz and Delacour (2022) argue, open data enhances discoverability, increases efficiency, and facilitates new collaborations and funding opportunities. It also renders donor activities and their impacts more visible, promotes greater reuse of funded research, and improves return on investment.

Furthermore, they contend that open data ensures empowerment, strengthens transparency, and fosters broader public engagement in science. For organizations and NGOs, it provides improved access to knowledge, facilitates information sharing, and enhances advocacy capacities. For governments, open data constitutes a critical instrument of data-driven governance, reducing costs while enabling more effective and efficient public service delivery.

The quality of research infrastructure records a relatively low mean score of 2.62 out of 6, according to survey results. Infrastructure constitutes a fundamental pillar of any research system, and is particularly critical for the social sciences, which have historically been perceived as disciplines requiring fewer material resources. Out of a maximum score of 6, the ratings obtained for specific items were as follows: satisfaction with allocated workspace (3.39), availability of computers (2.95), availability of printers (2.78), availability of IT support (2.73), availability of quantitative and qualitative research software (2.06), and availability of anti-plagiarism software (1.80). With the exception of workspace allocation, the scores remain consistently low. Workspace satisfaction received the highest rating (3.39), whereas the availability of anti-plagiarism software registered the lowest (1.80).

Regarding time allocation for research, survey findings reveal that teacher-researchers devote, on average, 30% of their working time (median score), or less than one-third, to research activities. Only 34.32% of respondents considered this proportion sufficient. In Mali, Decree No. 2017-0850/P-RM of 09 October 2017, which regulates the status of teaching and research staff in higher education and scientific research, stipulates mandatory semester teaching loads of eighty-four (84) hours for Professors, one hundred and twelve (112) hours for Associate Professors, one hundred and forty (140) hours for Assistant Professors, and one hundred and sixty-eight (168) hours for Assistants. Research Directors and Masters are required to provide two (02) hours of instruction per week in higher education and research institutions. Research Fellows and Associates are obligated to teach two (02) courses weekly under the supervision of Research Directors and Masters. Each of these categories must devote the remainder of their official working time to research, provided they do not hold administrative responsibilities.

The differentiation among the various ranks of teaching and research staff in Mali, as stipulated by Decree No. 2017-0850/P-RM of October 9, 2017, reflects the institutional logic of academic career trajectories, the specific mandates assigned to each grade, and the escalating professional demands associated with hierarchical advancement. Research and supervisory responsibilities evolve progressively within this structure. At the entry level, Assistants carry a substantial teaching burden, designed to initiate them into pedagogical practice while affording only limited opportunities for research development. With career progression, Assistant Professors and Associate Professors experience a reduction in teaching obligations, enabling greater engagement in research activities, student supervision, and scholarly publication.

At the apex of the hierarchy, Professors and Research Directors function primarily as producers and leaders of scientific knowledge: their responsibilities encompass the formulation of research agendas, the coordination of projects, the supervision of doctoral theses, and the valorization of scientific outputs. Hence, academic career progression entails a gradual reallocation of responsibilities, shifting from predominantly pedagogical duties toward increasingly research-intensive and managerial functions.

The disparity between teaching time and research time derives from the functional allocation of academic duties. Official working hours are structured such that teaching

obligations account for approximately 30–40% of annual workload, while the remaining 60–70% is theoretically reserved for research, except in cases where faculty members hold administrative responsibilities. Teaching constitutes a statutory service obligation: it organizes the academic calendar and ensures the transmission of knowledge. Research, although less institutionally "visible," remains central to career advancement through publications, acquisition of funding, and supervision of students. The decree thus establishes a theoretical equilibrium intended to enable teacher-researchers to sustain scientific productivity while fulfilling pedagogical responsibilities.

Additional factors—including the nature of the appointment, academic qualifications, research incentives, and practical constraints—further shape this distribution. Researchers at entry levels (assistants, fellows) are primarily oriented toward scientific production, with teaching duties largely symbolic or formative. Advancement within the hierarchy entails a progressive reduction in teaching loads, as higher-ranking academics are expected to demonstrate competencies in leading research, publishing, and supervising doctoral candidates. This reallocation of responsibilities reflects an institutional strategy to promote research as a catalyst for national scientific development. In practice, however, persistent imbalances remain in Mali: excessive teaching workloads, insufficient time for research, and the absence of a coherent incentive policy continue to constrain the effective realization of this balance.

In the finding's summary on the research contribution to overall production, Mali records 117 social science researchers per million inhabitants, compared to 39 researchers across all disciplines in 2017. Women constitute 12.13% of social science researchers, a decline from 15.10% across all disciplines in 2017. Among social science researchers, 42.95% hold doctoral degrees, of which 10.33% are women—a proportion significantly lower than the global average of 33.3% of researchers across all fields. Public expenditure on research and development (R&D) in the social sciences per researcher is estimated at $7,262.06 (4,406,290 FCFA). Despite the African Union target of allocating 1% of GDP to R&D, Mali reached only 0.18% in 2021, distributed primarily across government institutions (46.4%), private enterprises (30.9%), and higher education (18.3%). This level (0.18%) remains below the current African average of 0.5% and far beneath the international benchmark of 2–3.5% of GDP, with countries such as South Korea exceeding 4% (OECD, developed economies).

Data accessibility registers a low score of 2.80/6, with only 18.87% of researchers' scientific output available in open access. This proportion falls below the African average (30–40%) and remains distant from the international objective of universal open access (UNESCO, Plan S, Open Science). Research infrastructure quality averages 2.62/6, with workspace allocation receiving the highest score (3.39) and anti-plagiarism software the lowest (1.80). Teacher-researchers devote, on average, 30% of their time to research, though only 34.32% consider this allocation sufficient. Teaching obligations mandated by decree further constrain the effective time available for research activities.

Qualitative illustration data on the research contribution

The interviews underscore that inadequate institutional resources—particularly infrastructural capacity and financial allocations—constitute a significant impediment to research productivity. *"Research suffers from a chronic deficit of funding and equipment. We lack both adequately equipped laboratories and the means to undertake fieldwork."* (Research Administrator, IER). *"Our institutions do not possess high-performance computing facilities, nor even basic anti-plagiarism software. Most scholarly work is conducted in isolation."* (Lecturer-Researcher, FSHSE/ULSHB). *"The research budget is insufficient to sustain substantive projects. We remain almost entirely reliant on external partners, both technical and financial."* (Policymaker, Higher Education Council). These observations highlight the structural disjuncture between researchers' aspirations and the material conditions of knowledge production, particularly in a context where the proportion of GDP allocated to R&D (0.18%) remains far below the continental benchmark of 1%.

The evidence further suggests that sectoral imbalances and dependence on extramural funding diminish the efficacy of available resources. Testimonies from research administrators reveal that this dependency undermines long-term strategic planning and constrains fundamental inquiry. *"Research funding is both insufficient and irregular. Projects are frequently discontinued due to resource scarcity."* (Research Administrator, INFTS). *"Funds are disproportionately directed toward applied research, to the detriment of the social sciences, which are nonetheless indispensable for informing public policy."* (Research Administrator, IER). *"We operate within a paradigm of scientific survival, where researchers themselves pursue international calls for proposals to secure minimal support."* (Lecturer-Researcher, FHG). Collectively, these accounts confirm that chronic underfunding and the absence of competitive national funding mechanisms represent a critical barrier to Mali's capacity for meaningful scientific contribution.

With respect to the limited access to scientific resources and data, the interviews reveal entrenched structural barriers to the dissemination and circulation of research outputs, particularly the absence of institutional repositories, national platforms, and a coherent open science policy framework. *"We lack a national database in which to deposit our work. Each researcher stores publications on personal devices such as USB drives or individual computers."* (Lecturer-Researcher, FHG). *"Universities do not operate open-access platforms. Publications remain largely invisible, even within the national academic community."* (Lecturer-Researcher, FSHSE/ULSHB). *"The notion of open science remains insufficiently internalized here. A national strategy is required to institutionalize open access."* (Research Administrator, INFTS). These testimonies underscore how restricted knowledge infrastructures constrain the international visibility of Malian scholarship and attenuate its societal relevance.

Concerning the temporal allocation for research, the interviews highlight that statutory teaching obligations, as defined by decree, severely curtail opportunities for sustained scientific production. *"Given the current teaching load, it is nearly impossible to undertake rigorous research."* (Lecturer-Researcher, FSHSE/ULSHB). *"We are burdened with excessive courses and lack sufficient time to write or participate in scholarly conferences."* (Lecturer-Researcher, FHG). *"The decree regulating teaching obligations requires revision to enable a more equitable balance between pedagogical responsibilities and research activities."* (Policymaker, Higher Education Council). Collectively, these observations confirm the structural tension between instructional mandates and research imperatives, a misalignment that undermines academic productivity and weakens the institutional capacity for knowledge generation.

With regard to infrastructure, the composite index (2.62/6) presents a heterogeneous picture: relatively adequate scores for physical workspaces (3.39), contrasted with markedly deficient ratings for anti-plagiarism software (1.80) and digital research tools. This overall low mean score for infrastructural quality across institutional levels is corroborated by multiple interview testimonies. Although the provision of workspaces appears moderately standardized, respondents consistently introduce critical nuances to this assessment. *"We occupy offices that are entirely unequipped [...] a single chair, a large table shared by three or even twenty-five colleagues [...] I conduct most of my research at home in Sanankoroba, where I have uninterrupted solar power."* (Lecturer-Researcher, FSHSE/ULSHB). *"The infrastructural quality here is profoundly inadequate, as is evident. The premises are extremely old and unsanitary [...] many colleagues prefer to remain at home to secure even minimal working conditions."* (Lecturer-Researcher, FDPU). *"The facilities fail to meet basic hygiene standards. Maintenance is virtually absent. Since the premises opened, I doubt the paint has ever been renewed. The toilets are dilapidated and neglected."* (Lecturer-Researcher, FDPri). *"The research environment is structurally unfavorable. Infrastructure is obsolete, and libraries remain devoid of digital resources."* (Lecturer-Researcher, FSHSE/ULSHB).

On the administrative dimension, several officials attest to the obsolescence and inadequacy of institutional infrastructure. *"The physical infrastructure appears impeccable, but this impression dissipates once one looks beyond the façade. As for other aspects, I was born here, and I will not go into further detail."* (Research Administrator, FLSL). *"[...] in terms of infrastructure, we occupy a building dating back to 1960. That is simply structural attrition."* (Research Administrator, IER). *"Our institution possesses only a limited number of administrative offices and designated spaces for faculty."* (Research Administrator, IPU). *"Inconvenient, outdated, dilapidated—the physical environment is aesthetically and functionally unappealing."* (Research Administrator, ENSup).

The absence of adequate IT and software support emerges as a recurrent concern. *"There is no institutional support whatsoever... even chalk, when needed, requires physical effort to obtain."* (Research Administrator, FLSL). In this regard, the lack or obsolescence of data-processing systems and anti-plagiarism software is consistently criticized. *"Our institutions lack research centers and have no access to data-processing applications."* (Research Administrator, IER). *"Even anti-plagiarism software is absent. We rely on free and unreliable tools."* (Research Administrator, INFTS).

Finally, multiple faculty members and administrative staff underscore the chronic neglect of equipment maintenance, the progressive deterioration of workplace infrastructures, and the persistent deficit in funding for technological renewal. *"Our institution lacks a central library that fulfills its academic function [...] the documentation center remains severely under-resourced."* (Lecturer-Researcher, FSAP)

To conclude, with respect to the systemic underrepresentation of women in research, the interviews corroborate the existence of gendered structural barriers, including inequitable access to research funding, mentorship networks, and career advancement trajectories. *"I am not aware of a national framework that explicitly addresses this issue [...] despite gender equality being declared a priority by our highest*

authorities." (Policymaker, MSDS). *"Women remain marginalized in research, particularly within leadership hierarchies."* (Policymaker, MSDS). *"A considerable number of women disengage from research due to insufficient institutional support and symbolic recognition."* (Lecturer-Researcher, FHG). *"Targeted mentoring initiatives and gender-sensitive scholarship schemes must be institutionalized to foster women's participation."* (Research Administrator, IER). Collectively, these narratives illuminate the urgent necessity of a coherent national policy architecture to advance gender parity in the research domain.

In summary, the interviews underscore the substantive scientific capital of Malian researchers, yet one significantly circumscribed by persistent resource scarcity, fragile institutional infrastructures, gendered asymmetries, and the structural disequilibrium between pedagogical obligations and research activity. Quantitative indicators concerning infrastructural quality are robustly substantiated by ethnographic accounts. These narratives delineate a constraining organizational ecology, adverse to the production of rigorous scholarship—particularly within the social sciences—and marked by a pronounced reliance on exogenous provision of scientific apparatus.

4.2.2. Research culture and support services

Research culture and support services denote the ensemble of normative frameworks, institutionalized practices, and interactive processes that underpin the production of scholarly knowledge. Key dimensions addressed here include institutional governance and policy regimes, peer review ethos, capacity-building mechanisms, and both research-specific and administrative infrastructures. The existence of a centralized state-led institution mandated to coordinate and regulate public research in the social sciences constitutes a critical indicator. This measure seeks to ascertain whether such a body is formally established and to evaluate its effectiveness in discharging its institutional mandate.

Research capacity refers to the collective capability of the research system to generate social science outputs of academically robust quality. Interventions to strengthen research capacity may encompass structured training programs, international exchange schemes, mentorship arrangements, and other initiatives designed to enhance researchers' competencies, visibility, and scholarly productivity. This indicator aims to assess the scope and efficacy of capacity-development opportunities available beyond the doctoral level.

Administrative support—including clerical services, office management, and facilitation of grant application processes—remains indispensable to the operational sustainability of research institutions. It reflects the institution's organizational competence in delivering logistical and procedural assistance to academic professionals.

Table 13 below presents the empirical findings on indicators of research culture and support services.

The indicators of institutional arrangements and policy frameworks pertain to the organizational quality of existing social science research structures, the proportion of female administrators, the robustness of the national research policy, and the representation of women in political leadership. The organizational quality registers a score of 3.61 out of a maximum of 6. At this level, aggregated findings reveal that 64.24% of surveyed teacher-researchers and research administrators perceive the existence of a body in Mali responsible for social science research. This perception rises to 70.98% among teacher-researchers and 57.50% among administrators.

Table 13: Indicators related to institutions and policies, peer review culture, capacity building and support for research and administration (research the production) in Mali

FACTOR	INDICATORS	VALUE	SOURCES
1.2.a Institutions and politics	Quality of social science research body (satisfaction, 1-6 scale)	3.61	Literature review + (researchers survey + administrators researchers survey)
	Percentage of administrators	14.29%	Literature review + (researchers survey + administrators researchers survey)
	Quality of the national research policy	55.56%	Literature review + (researchers survey + administrators researchers survey)

1.2.b Evaluation culture by peers	Quality of mentoring (satisfaction, 1-6 scale)	3.98	Researchers survey + Interviews
	Number of peers evaluated publications by a social science researcher	0.14	Scopus (SCImago) + Researchers survey
1.2.c Capacity building	Development of research capabilities (satisfaction, 1-6 scale)	2.72	Researchers survey + Interviews + Literature review
	Percentage of women benefiting from capacity building (e.g., post-doctoral positions)	12.5%	Literature review
	Reinforcement funding of research capabilities, by a social science researcher	26731.49 XOF	Literature review
1.2.d Support to the research and administration	Quality administrative support (satisfaction, 1-6 scale)	2.43	(Investigation with the researchers + Survey of research administrators) + Interviews

Source: Doing Research in Mali, 1st edition, 2026

In practice, however, no institution exists exclusively dedicated to social science research. The National Center for Science and Technological Research (CNRST) remains the sole official entity mandated to oversee research across all disciplines, including the social sciences.

The assessment of CNRST's effectiveness yields combined average scores from the surveyed researchers and administrators in several domains: provision of standards and regulatory frameworks for social science research (3.46), development of methodological guidelines (3.55), elaboration of instruments such as models, protocols, and data collection tools (3.51), dissemination of information to enhance research quality (3.58), facilitation of a national forum for discussing social science objectives (3.67), implementation of the national research policy (3.84), and adequate ethical evaluation of research outputs (3.66). Overall, the scores are moderately satisfactory. The implementation of the national research policy achieved the highest rating (3.84), while the establishment of standards and rules for conducting social science research received the lowest (3.46).

Regarding positions of responsibility within higher education and research institutions, the findings indicate that women administrators constitute 14.28%. This proportion falls significantly short of the 30% threshold mandated by Law No. 2015-052 of December 18, 2015, which establishes affirmative measures to promote gender parity in access to appointed and elected offices. Article 1 of the law stipulates that *"On the occasion of appointments to institutions of the Republic or to the various categories of public services in Mali, by decree, order, or decision, the proportion of persons of either sex must not be less than 30%."* While this benchmark is more attainable in certain public sector domains, its realization remains improbable in higher education and research institutions due to the markedly limited pool of qualified women and the stringent eligibility criteria governing such appointments. These criteria include holding the rank of Professor or Senior Lecturer, Director or Research Fellow, and being at least five years from retirement.

With respect to the national social science research policy, 11.30% of surveyed teacher-researchers affirm its existence, 16.94% deny it, 64.45% report uncertainty, and 7.31% abstain from responding. Among those acknowledging its existence, the perceived quality of the policy registers a score of 3.79 out of a maximum of 6, equivalent to 55.56%. In practice, Mali has adopted two overarching national policies relevant to this domain: the *National Policy on Higher Education and Scientific Research* and the *National Policy on Science, Technology, and Innovation*. Both frameworks reference the national research system, which encompasses all disciplinary fields, including the social sciences. Nevertheless, Mali has not yet instituted a dedicated national policy exclusively oriented toward the social sciences.

According to INSTAT (2023), women accounted for 33.42% of political leadership positions across both appointed and elected categories, surpassing the 30% quota mandated by Law No. 2015-052 of December 18, 2015, which instituted affirmative measures to promote gender equality in access to public office. However, this figure was subsequently revised downward in 2024 by the second edition of *Africa Barometer*, which reported women's representation at 29%, thereby falling below the statutory threshold. It is noteworthy that women's participation in positions of responsibility has nonetheless expanded since the adoption of the law, rising from 10%

to 33.42% in 2023 and 29% in 2024. According to *Africa Barometer* (2024), Mali ranks 72nd continent-wide with 29% female parliamentarians and 17th with 25% women in local government. At present, women constitute 16% of the Council of Ministers, as reported by the same source.

With respect to the culture of peer review, this dimension encompasses indicators such as the quality of mentoring, the proportion of female mentors, the average number of peer-reviewed publications per social science researcher, and the share of publications authored by women. Survey data reveal that 38.87% of faculty members reported access to mentorship, while 44.52% indicated the absence of such support, 7.97% expressed uncertainty, and 8.64% abstained from responding. Among those with access, the quality of mentorship received an average score of 3.98 out of 6. Importantly, mentorship structures are not formally institutionalized within Mali's higher education and research establishments; rather, mentoring practices remain largely informal. Within this context, it is difficult to ascertain the proportion of female mentors with precision.

In Mali, the average number of peers reviewed publications per social science researcher is 0.14, with women contributing 18.49% of the total output. Survey data from faculty members yield the following mean scores: publication of peer reviewed articles in international journals (1.31), regional journals (0.89), national journals (1.10), and conference proceedings (0.57). Overall, 45.51% of respondents expressed satisfaction with access to peer review and collegial feedback, while 37.87% reported dissatisfaction.

This turnover rate of 0.14 reflects markedly low scholarly productivity in peer evaluated outlets. Put differently, each researcher publishes approximately one article every seven years in a refereed journal. Such a rate falls well below comparative benchmarks in other academic systems and suggests a fragile culture of scientific publication, insufficient training and support in academic writing, and structural impediments such as restricted journal access, inadequate funding, and weak supervisory frameworks.

For instance, in 2014, U.S. researchers published approximately 7.2% of their articles in the social sciences, compared to a global average of 5.1%. Scopus data (2017) indicate that the share of social science articles within total S&E output was 7.56% in South Africa, between 1–2% in Brazil, but lower than USA/EU and around 0.8–1.1% in China and India. Comparative figures show Ghana producing 0.3–0.5 articles per social science researcher, Senegal 0.2–0.4, and Burkina Faso approximately 0.2, positioning Benin at the lower end of regional productivity (link.springer.com). Cross referenced estimates from UNESCO, SCImago, Web of Science, African Journals Online, and institutional reports (e.g., CAMES, ROCARE) confirm that Ghana demonstrates greater dynamism than Mali through active universities and regional institutes, Senegal benefits from integration into Francophone research networks, and Burkina Faso exhibits similar patterns to Mali, albeit with incremental progress in publication output.

On the other hand, the proportion of publications authored by women (18.49%) underscores their marginal presence in the corpus of social science scholarship. This underrepresentation can be attributed to several interrelated factors: gendered disparities in access to research resources (including time, funding, and professional networks); limited advancement of women into senior academic ranks or research teams; and the disproportionate burden of domestic and social responsibilities that constrain their sustained engagement in scholarly production.

With respect to average publication scores by journal type, the data reveal a pronounced concentration of output at the national level, accompanied by limited internationalization of research. Such a pattern restricts the visibility, recognition, and transnational dissemination of findings. Although the majority of publications are produced domestically, the overall scores remain low, signaling weak local publication activity and insufficient integration into global scholarly circuits.

Finally, the relatively balanced distribution of satisfaction with peer review access (45.51% satisfied versus 37.87% dissatisfied) reflects a state of ambivalence. On one side, nearly half of the researchers' value collegial feedback and evaluative mechanisms, which constitute a positive marker of research professionalization. On the other, more than a third express dissatisfaction, potentially linked to the limited quality or scarcity of feedback, frustrations arising from manuscript rejections or protracted publication timelines, and the absence of a consolidated culture of constructive critique within the local and regional academic community.

This dataset underscores the persistently low level of peer reviewed scientific output in Mali across both the natural and social sciences, attributable to excessive centralization at the national level, the structural marginalization of women, and inequitable or inadequate access to rigorous evaluative mechanisms. These dynamics highlight the urgent need for systematic capacity building in research and scholarly publication, the implementation of targeted incentive policies—particularly those designed to advance women's participation—and enhanced institutional support

for accessing international journals and transnational research networks.

With respect to capacity building, the analysis centers on indicators such as opportunities for research training and professional development, the proportion of women benefiting from advanced programs (e.g., postdoctoral fellowships), funding allocations per social science researcher, and the percentage of women awarded research grants. Capacity building registers an average score of 2.72 out of 6. Levels of satisfaction with institutional provision in specific domains, measured on a scale of 1 to 6, are as follows: preliminary needs assessment for targeted training (2.44), research design (2.69), research management (2.47), research methodology (3.13), research tools (2.86), and scientific writing (3.11). Among the 24 teacher researchers who reported benefiting from capacity building initiatives such as postdoctoral fellowships, only 12.5% were women. Survey results further indicate that funding dedicated to strengthening research capacities in Mali amounts to 26,731.49 FCFA per social science researcher.

In conclusion, research and administrative support is assessed in terms of the quality of logistical and procedural assistance provided to scholars. The average score for administrative support is 2.43 out of 6, based on the combined responses of faculty members and research administrators, reflecting significant institutional weaknesses in this domain.

For faculty members surveyed, the average scores reported were as follows: access to institutional support for research planning and implementation (3.03), support for proposal writing and development (2.69), and support for recruiting research staff (2.74). For research administrators, the corresponding scores were slightly higher: support for research planning and implementation (3.24), proposal writing and development (3.34), and recruitment of research staff (2.70).

In summary of the discussion on **research culture and support services** within the production framework, it is observed that the National Center for Science and Technological Research (CNRST)—the sole research organization in Mali mandated to oversee all disciplinary fields—achieves a quality score of 3.61/6. Female administrators constitute 14.28% of managerial positions, falling below the statutory quota of 30%. The national research policy, which encompasses all disciplines including the social sciences, records an average score of 3.79/6. Women in political leadership positions represent 29% of posts according to the Africa Barometer 2024, a decline relative to the legal threshold. Mentorship registers an average score of 3.98/6, though it remains informal and the proportion of female mentors is indeterminate. Each social science researcher produces an average of 0.14 peer reviewed publications, with women contributing 18.49% of the total. Access to constructive peer feedback satisfies 45.51% of respondents.

Research capacity development records an average score of 2.72/6, with the highest ratings assigned to research methodology (3.13) and scholarly writing (3.11). Among postdoctoral fellows, only 12.5% are women. Funding allocated to capacity building initiatives amounts to 26,731.49 FCFA per social science researcher. Administrative support registers an average score of 2.43/6. Access to support for research planning and implementation (3.03) and proposal writing (2.69) remains inadequate, although administrators report slightly higher scores, with a maximum of 3.34 for proposal writing support.

Qualitative illustration data on research culture and support services:

Regarding governance, the interviews reaffirm the highly centralized management of research in Mali and the persistent challenges of integrating women into decision making structures. *"The CNRST plays a crucial role, but everything is overly concentrated in Bamako. Women remain underrepresented in scientific leadership."* (Research Administrator, IER). *"Decentralization of the research system is necessary, with greater involvement of women and early career scholars."* (Research Administrator, INFTS). *"Women must be more visible in governing bodies. Their contribution is still marginal."* (Policymaker, MSDS). Collectively, these perspectives underscore that, despite incremental progress in scientific governance, the inclusive and territorial dimensions of research remain constrained, particularly with respect to women's participation.

Respondents acknowledge the existence of a national research policy document but emphasize the absence of effective implementation and monitoring mechanisms. *"We have a national research policy, but it is not sufficiently operationalized on the ground."* (Lecturer Researcher, FHG/ULSHB). *"Research priorities are misaligned with the country's actual needs. There is no funding framework or systematic evaluation."* (Research Administrator, IER). *"The national policy exists, but it requires stronger enforcement and adequate resourcing."* (Policymaker, Higher Education Council). These accounts highlight the disjuncture between policy orientations and institutional realities, with research struggling to function as a lever for sustainable development.

Although mentoring received a score of 3.98/6, it remains informal and weakly institutionalized within research organizations. The interviews reveal the prevalence of ad hoc mentoring relationships, often reliant on individual initiative, without formal recognition or structured frameworks. *"Mentoring exists, but it is purely informal, often limited to collegial initiatives."* (Lecturer Researcher, FSHSE/ULSHB). *"Young researchers learn experientially, without systematic support."* (Lecturer Researcher, FSHSE/ULSHB). *"There is no official mentoring program, particularly for women."* (Policymaker, MSDS). These testimonies confirm that mentoring—critical for cultivating the next generation of scholars—remains non institutionalized in Mali, thereby limiting its effectiveness and equity, especially for women.

The development of research capabilities registers an average score of 2.72/6, with the highest evaluations attributed to research methodology (3.13) and scientific writing (3.11). Financial allocations for this reinforcement remain extremely limited (26,731.49 FCFA per researcher), a point consistently emphasized by practitioners in the field. *"Research training is insufficient, due to a lack of resources. We learn more through experience than through structured guidance."* (Lecturer Researcher, FHG/ULSHB). *"There are few continuing education courses on scientific writing or methodology."* (Lecturer Researcher, FHG/ULSHB). *"The budgets allocated to capacity building are symbolic. We are talking about only a few tens of thousands of francs per researcher."* (Research Administrator, INFTS). These testimonies reveal that capacity building remains heavily dependent on external funding and that internal scientific training is not systematically institutionalized.

The interviews further highlight weak institutional support for the design, writing, and management of research projects. *"Administrative support is very weak. Researchers must draft their own proposals and manage their own budgets."* (Research Administrator, IER). *"There is no support service dedicated to project planning or development."* (Lecturer Researcher, FSHSE/ULSHB). *"We need research units in each faculty to support teachers in their projects."* (Lecturer Researcher, FHG). These observations confirm the fragility of institutional support structures for the research process, compounded by the shortage of personnel trained in scientific management and funding procedures.

Each social science researcher in Mali produces an average of 0.14 peer reviewed publications, of which only 18.49% are authored by women. Interviews underscore that excessive teaching obligations, insufficient supervisory structures, and the lack of institutional recognition for scholarly output constitute major impediments. *"With the teaching load, we hardly have any time to publish. Publication is neither encouraged nor valued. Promotions are based primarily on seniority."* (Lecturer Researcher, FSHSE/ULSHB). *"Women publish less because they have less time and less support."* (Policymaker, MSDS). These testimonies illustrate that the culture of scientific publication remains fragile and that gendered constraints exacerbate inequalities in academic productivity.

In conclusion, the research culture in Mali rests upon an existing institutional foundation (CNRST, national policy) but is undermined by weak integration, chronic underfunding, and limited structural support. The interviews reveal that systemic centralization impedes the development of regional research hubs; informal mentoring practices and the absence of gender responsive policies restrict women's participation; research capacity advances slowly due to resource scarcity; and administrative as well as technical support remain highly deficient, if not virtually absent.

4.2.3. Research and training results

Here, research outputs and training denote the tangible products of scholarly inquiry—such as peer reviewed publications—and the integrative role of research in strengthening the higher education system, particularly through research oriented training.

Table 14: Indicators related to academic production and research training (research production) in Mali

FACTOR	INDICATORS	VALUE	SOURCES
1.3.a Academic production	Number of documents published in journals and other publications, per social science researcher (past 3 years)	0.15	Scopus (SCImago
	Number of quotes by document (average over 3 years)	16.49	Scopus (SCImago)

1.3.b Research Training	Percentage of university staff holding a PhD	38.50%	Researchers Survey + Research Administrators Survey
	Duration of the research continued training (weeks per year, median)	1.00	Researchers Survey + Research Administrators Survey
	Higher education graduates per year, as a percentage of 18–25-year-old	0.18%	Literature Review

Source: Doing Research in Mali, 1st edition, 2026

Academic production is measured by the volume of scholarly outputs—documents published in journals and other outlets per social science researcher—and by citation impact, expressed as the average number of citations per document. According to SCImago, the number of documents published per researcher is 0.15, whereas survey data from researchers indicate a substantially higher figure of 4.61. The mean scores reported for specific publication categories are as follows: peer reviewed scientific articles in international journals (1.31); regional journals (0.89); national journals (1.10); conference proceedings (0.57); non peer reviewed articles (0.18); publicly accessible working papers (0.49); books as sole author (0.18); books as editor (0.16); book chapters (0.16); technical, project, or consultancy reports (0.50); and policy notes addressing the implications of research (0.31).

With respect to metrics citation, the average number of citations per document is 16.49, according to SCImago (2007). Survey responses yield the following mean scores: total citations of a researcher's work (1.37), number of works with citations (0.10), and H Index (0.09).

Regarding research training, the indicators considered are the proportion of university staff holding a doctorate, the duration of continuing research training, and the annual number of higher education graduates as a percentage of the 18–25 age cohort. Survey results indicate that 38.50% of university staff possess a doctoral degree. The average duration of continuing research training over the past three years records a mean score of 4.06 and a median score of 1, based on responses from researchers and research administrators. Only 0.18% of students aged 18–25 graduate from higher education annually in Mali, according to calculations derived from the *Higher Education Statistical Bulletin* (DGESRS, 2023).

In summary of research and training outcomes within the framework of academic production, the analysis identifies two principal indicators. The average number of documents published per social science researcher is estimated at 0.15 according to SCImago, whereas surveys of researchers indicate an average higher than 4.61. With respect to citations, SCImago reports an average of 16.49 citations per document, while surveys reveal an average of 1.37 total citations, 0.10 cited works, and an H Index of 0.09.

The discrepancies observed between SCImago data (external bibliometric sources) and self reported survey results can be attributed to structural, methodological, and contextual factors. SCImago relies on international databases (Scopus), which include only peer reviewed publications in globally indexed journals. Outputs in local or non indexed journals, national conference proceedings, research reports, book chapters, and internal communications are excluded, thereby explaining the very low average (0.15) publications per researcher. By contrast, self reported surveys capture the full spectrum of scholarly output, often without distinguishing publication type or international visibility. Researchers may include all forms of dissemination—local journals, teaching materials, reports, blogs, and similar outputs—resulting in a substantially higher average (4.61 reported publications).

On the other hand, the publications indexed in SCImago are generally of high scholarly quality (peer reviewed journals adhering to rigorous editorial standards), which enhances their impact and explains the relatively high average of 16.49 citations per document. By contrast, local publications, although more numerous, tend to be less visible, less accessible, and under cited due to limited indexing and inadequate digital dissemination. This accounts for the very low averages reported in surveys: 1.37 total citations and 0.10 cited works. Moreover, the H Index, which integrates both productivity and impact (number of publications receiving at least H citations), remains extremely low at 0.09, indicating that the vast majority of outputs are not cited at all. This finding confirms that, even if researchers report having published, their work does not (yet) register measurable impact in international bibliometric databases. Contributing factors include the predominant language of publication (often French), the restricted visibility of local outlets, the absence of open access mechanisms, and the lack of systematic indexing in globally recognized databases such as Scopus or Web of Science.

Researchers may also develop an amplified perception of their scientific productivity, particularly when they

valorize all forms of publication within their professional practices. This often generates confusion between scientific activity (such as participation in conferences, preparation of reports, or teaching responsibilities) and formally evaluated scientific output. Moreover, the academic system in certain contexts, including Mali, accords limited recognition to publications in international journals due to insufficient institutional support, inadequate training, and the absence of editorial guidance. This dynamic reinforces the disjuncture between local realities—where scholarly activity may be intense yet poorly visible—and international indicators, which privilege global visibility and indexed outputs.

With respect to research training, 38.50% of university staff hold doctoral qualifications. The average duration of continuing research training over the past three years is 4.06 weeks per researcher. Finally, according to official data from 2023, only 0.18% of young people aged 18–25 obtain a higher education diploma annually in Mali.

Qualitative illustration data on research outcomes and training

The interviews confirm that Malian researchers predominantly publish in local or non indexed journals, which significantly constrains their international recognition. *"The majority of teacher researchers publish in national, non indexed journals, so their work is not visible internationally. They remain confined to internal journals or unindexed conference proceedings."* (Lecturer Researcher, FSHSE/ULSHB). *"Our publications are often local and not indexed in global databases. This gives the impression that we produce nothing."* (Lecturer Researcher, FSHSE/ULSHB). *"Indexed journals are rare, and publication fees are prohibitively high for most researchers."* (Research Administrator, IER). These testimonies illustrate a pronounced gap between actual scholarly output and its recognition, largely attributable to restricted access to international journals and the absence of a national framework for promoting publications.

Furthermore, interviewees emphasized persistent challenges in the dissemination and visibility of their work, stemming from the lack of national indexing systems and publication platforms. *"Our work is not cited because it is not accessible. There is no national platform for publications."* (Teacher Researcher, FHG). *"Very few of our articles are indexed, and even when they are, they are rarely read or cited."* (Lecturer Researcher, FSHSE/ULSHB). *"The problem is not the quality of the research, but its visibility. We need to establish an open national database."* (Research Administrator, INFTS). *"Databases such as Scopus or Web of Science do not index our national publications. This creates the impression that we do not publish, when in fact we do, but without visibility."* (Research Administrator, IER). These accounts demonstrate that the lack of international visibility is not necessarily a reflection of scientific quality, but rather the consequence of inadequate institutional mechanisms for dissemination and indexing.

Several researchers underscore the structural and administrative constraints that impede publication, including insufficient funding, limited training in scientific writing, and weak institutional recognition. The average score for editorial support in research proposal development (2.69/6), noted earlier, falls within this framework. *"Publishing requires time, resources, and support that we do not have."* (Lecturer Researcher, FHG). *"Universities do not provide training in scientific writing, and national journals lack editorial rigor."* (Lecturer Researcher, FSHSE/ULSHB). *"Most researchers work in isolation, without peer review or technical support for publication."* (Research Administrator, IER). *"There is no national mechanism for strengthening research or publication. Everything depends on external projects."* (Policymaker, MSDS). These observations highlight the weak institutional structuring of the publishing environment and the absence of incentive systems for scholarly dissemination within higher education and research institutions.

The findings reveal that the average H Index is 0.09, reflecting extremely low scientific impact. Interviewed researchers and administrators attribute this to limited international citations, reliance on local publication outlets, and the absence of indexing for Malian journals. *"Our work is rarely cited because it is not included in international databases."* (Lecturer Researcher, FHG). *"The H Index is low because Malian research remains invisible abroad."* (Research Administrator, IER).

"Databases such as Scopus or Web of Science exclude our local journals, leaving our researchers unindexed." (Research Administrator, INFTS). *"There is no national database or research portal. Each researcher stores their work privately, without dissemination."* (Research Administrator, FSHSE/ULSHB). *"Our articles are not accessible online, and therefore rarely cited."* (Lecturer Researcher, US). Thus, the low H Index does not signify an absence of scientific activity but rather reflects systemic problems of visibility and connectivity with global scholarly networks.

In short, the interviews confirm that social science research in Mali generates substantive outputs that remain largely invisible. The divergence between SCImago's bibliometric data and national survey results illustrates the low indexing of Malian publications,

the fragmentation of local journals, and the lack of institutional recognition of scientific production.

4.2.4. Opportunities and sustainability

The ultimate objective is to integrate qualified analysts into the labor market across all major sectors, while simultaneously creating opportunities and stimulating engagement in the production of new, locally generated research. This section pertains to the dynamics of the research labor market and the evaluation of scholarly performance.

The researchers' labor market is assessed through indicators such as career opportunities, the robustness of incentive structures for research production, and the proportion of social science researchers employed outside higher education per million active individuals. The perceived capacity of researchers to establish viable careers within a given national context depends on the availability of relevant incentives, including financial remuneration, professional recognition, and employment security, all of which contribute to making research a more attractive career pathway. Regarding perceptions of career opportunities, survey data recorded a score of 2.98 out of a maximum of 6 among faculty members.

Table 15: Indicators related to the researchers' job market and the research evaluation (research production) in Mali

FACTOR	INDICATORS	VALUE	SOURCES
1.4.a Researchers' job market	Perceptions of career opportunities (satisfaction, scale 1-6)	2.98	Researcher Survey
	Quality of the incentive system research production (satisfaction, scale 1-6)	3.26	Researcher Survey + Interviews
	Number of social science researchers working outside higher education, per million employed persons	17.90	Literature review

Source: Doing Research in Mali, 1st edition, 2026

This score reflects a somewhat negative outlook on the career prospects available to researchers. Indeed, only 35.3% of respondents reported that attractive career opportunities exist. Their evaluation of the incentive system associated with a research career is captured in the following average scores: financial rewards (2.52), social recognition/esteem (3.07), and job security (3.36). Job security received the highest satisfaction rating, which can be explained by the fact that in Mali, faculty members and researchers in the public sector benefit from a special employment status. Once appointed, they are guaranteed tenure in the profession, ensuring stability except in cases of serious misconduct.

Teacher researchers and researchers in the Malian public sector are governed by the *General Statute of Civil Servants* (Law No. 02 053 of December 16, 2002), and more specifically by Decree No. 2017 0850/P RM of October 9, 2017, which defines the modalities of application of the status of teacher researchers in higher education and scientific research. The statute implicitly and explicitly acknowledges the possibility of engaging in extracurricular professional activities. Occasional consultancy work is generally tolerated provided it does not interfere with teaching, research, or supervisory responsibilities, though hierarchical authorization (from the institutional director or the supervising ministry) may be required. Independent research activities are permissible insofar as they do not contravene obligations of loyalty and service, and provided that public resources are not inappropriately mobilized for private purposes.

Collaboration with NGOs, international organizations, or other universities is accepted, particularly within the framework of externally funded projects, where consultancy is often encouraged to enhance institutional visibility and reputation.

Faculty members, however, are obliged to submit a declaration or seek prior authorization if consultancy activities are recurrent, remunerated, or perceived as competitive with institutional mandates. They are strictly prohibited from establishing private enterprises or engaging in direct commercial activity without special authorization, in accordance with civil service regulations. Such activities must not compromise their availability or their teaching and research obligations. In practice, many faculty members participate in studies, evaluations, development projects, or ad hoc assignments, often in collaboration with technical and financial partners. This diversification of activities is tolerated and even encouraged, particularly when it facilitates the transfer of

expertise or the valorization of research. Nonetheless, the absence of clear and uniform regulatory frameworks can generate internal tensions, including income disparities, professional rivalries, and conflicts of interest.

With regard to the quality of the incentive system for research production, it obtained a score of 3.26 out of a maximum of 6, which is not unsatisfactory in itself, though it does not reflect strong levels of satisfaction. The evaluation of overall incentives associated with research production yielded the following average scores: financial remuneration (2.47), social recognition/esteem (3.10), job security (3.79), and professional competitiveness (3.69). Respondents expressed the highest levels of satisfaction with job security and professional competitiveness. While no concrete explanatory factors currently account for the relatively high satisfaction with professional competitiveness, the strong satisfaction with job security can plausibly be attributed to the guarantee of tenure within the civil service until retirement, provided that no serious misconduct is committed.

In conclusion, the data presented in Table 15 indicate that approximately 18 (17.90) social science researchers per million active individuals in Mali are employed outside the higher education sector.

With regard to research evaluation, the relevant indicator concerns the existence of national standards governing research quality and practice. Ideally, such standards should encompass the design, drafting, implementation, and analysis of social science research outputs. The presence and scope of these standards may vary across different domains of social science inquiry. According to the combined results of surveys conducted among faculty and research administrators, the existence of standards for research quality and practice received an overall average score of 3.46 out of 6, reflecting the adequacy of provisions for conducting social science research. As noted previously in section 4.2.2 on research culture and support services, 64.24% of surveyed teacher researchers and administrators affirmed the existence in Mali of an organization mandated to oversee social science research. Separately, the evaluation of this organization's effectiveness in establishing and supplying standards for the conduct of social science research yielded an average score of 3.90/6 among administrators and 3.01/6 among teacher researchers.

In Mali, there is no single institution exclusively mandated to evaluate research in the social sciences. The *Malian Agency for Quality Assurance in Higher Education and Scientific Research* (AMAQ-SUP), established under Law No. 2018 034 of June 27, 2018, constitutes the sole official authority responsible for the evaluation of higher education and research across all disciplinary fields, including the social sciences. It is noteworthy, however, that the research team has not yet identified any official documents articulating national standards for research quality and practice.

In summary of Opportunities and Sustainability dimension within the production framework, the research labor market is characterized by ambivalent perceptions. Career opportunities register an average score of 2.98/6, with only 35.3% of teaching and research staff considering them attractive, although job security receives a relatively high satisfaction rating (3.36/6) due to the guaranteed civil service status. The quality of the incentive system for research production records an average score of 3.26/6, with the strongest satisfactions relating to job security (3.79) and professional competitiveness (3.69), which stand among the highest scores. Furthermore, the number of social science researchers employed outside the higher education sector is 17.90 per million active individuals in Mali.

Research evaluation is anchored in the existence of national standards for research quality and practice, which obtained an average score of 3.46/6. While 64.24% of respondents affirmed the presence of an organization responsible for social science research, AMAQ SUP remains the sole official authority overseeing evaluation across all disciplinary fields. Nevertheless, no document specifying standards tailored to the social sciences was identified. The absence of such standards constitutes a structural weakness but simultaneously presents an opportunity for national stakeholders to engage in collective efforts toward the formalization, appropriation, and institutionalization of scientific practices in this domain. Advancing this process would enhance the quality, credibility, and societal impact of social science research in shaping public policy and contributing to national development.

Qualitative illustration data on opportunities and sustainability

The data indicate that career opportunities in research receive an average score of 2.98/6, with only 35.3% of faculty members perceiving these prospects as attractive. By contrast, job security registers a comparatively higher score (3.36/6), largely attributable to the civil service status of faculty members. Interviews corroborate this divergence: while administrative stability is acknowledged as an advantage, opportunities for career progression and scientific recognition remain markedly limited. *"We have job security, but no real prospects for advancement. Promotions depend more on years of service than on research performance."* (Faculty member, Faculty of History and Geography). *"Our status protects us, but incentives to conduct research are*

virtually nonexistent. We do research at our own expense, without recognition." (Faculty member, ULSHB). *"There is no specific career path for researchers. Research is considered a secondary activity within the public service."* (Research Administrator, INFTS).

Thus, statutory security partially offsets a professional environment widely perceived as unmotivating, where advancement is determined more by seniority than by scholarly performance.

The quality of the research incentive system is evaluated at 3.26/6, with the most notable satisfactions relating to job security (3.79) and professional competitiveness (3.69). Nevertheless, interviews reveal that these incentives remain largely symbolic rather than material, as no regular bonus schemes, internal funding mechanisms, or formal recognition of research achievements are implemented. "Research is not valued. Publications do not open up financial prospects. Only academic advancement counts." (Research Administrator, FSHSE, ULSHB). "We have no research funding, no national prizes, no internal evaluation. Everything relies on individual effort." (Research Administrator, IER). "Moral incentives exist, but without material or institutional support, it is difficult to motivate young researchers." (Policymaker, Higher Council for Education). This situation demonstrates that motivation to produce research remains essentially individual and symbolic, in the absence of institutionalized recognition mechanisms or performance based rewards.

The number of social science researchers employed outside higher education is estimated at 17.90 per million active workers, underscoring the extreme narrowness of the job market. Interviews further emphasize that professional career opportunities for researchers are highly restricted beyond the public university sector, with collaborations involving the private sector or NGOs remaining sporadic. *"Social science researchers have virtually no place in companies or public institutions. The private sector does not fund social science research."* (Research Administrator, IER). *"After their doctorate, young people have no other prospects than university. The rest of the market does not recognize research as a useful skill."* (Lecturer Researcher, FSHSE). *"The pathways linking research, employment, and development are nonexistent. Researchers are not consulted in public policy."* (Policymaker, MSDS). Consequently, the sustainability of scientific careers is undermined by the absence of diversified career trajectories and mechanisms for the socio economic valorization of research.

The research evaluation is assessed through the existence of national standards, which received an average score of 3.46/6. While 64.24% of respondents acknowledged the presence of an official organization, interviews clarified that this was primarily AMAQ-SUP, a quality assurance body for higher education that is not specifically mandated to conduct disciplinary research evaluation. *"AMAQ-SUP is the only evaluation body, but it mainly addresses teaching and academic programs, not research per se."* (Research Administrator, INFTS). *"There is no evaluation framework tailored to the social sciences. Everything is aggregated, and the criteria remain overly general."* *"We need to establish a specific framework for social science research, with appropriate indicators."* (Professor Researcher, US). The absence of dedicated standards for the social sciences and of a national system for monitoring scientific performance constrains institutional recognition of scholarly output and undermines the development of a culture of qualitative evaluation.

Despite these constraints, multiple stakeholders articulate a strong commitment to sustaining research within Malian universities, particularly through individual initiatives, ad hoc collaborations, and long term engagement. *"Despite everything, we continue to produce, supervise, and seek partners. Research must not die."* (Lecturer Researcher, Faculty of Humanities and Social Sciences). *"The difficulties are numerous, but research remains essential for understanding our realities and improving public policies."* (Policymaker, Ministry of Social Development). This individual and collective resilience constitutes a critical lever for reinforcing the sustainability of the research system, contingent upon institutional consolidation, adequate financial support, and evaluation mechanisms adapted to local specificities.

In sum, the interviews reveal an ambivalent configuration: job security and stable civil service status are perceived as major advantages, yet career opportunities remain limited, tangible incentives are scarce, and scientific recognition is weak. The system further exhibits structural deficiencies—the absence of a dedicated evaluation framework, restricted diversification of career trajectories, and inadequate incentive structures—which collectively compromise the durability of the research profession and undermine the motivation of emerging generations.

4.3. Research broadcast

The dissemination of this research concerns the outputs produced and the channels through which they are communicated to diverse audience groups—including academia, policymakers, civil society, and the private sector—and subsequently debated within these spheres. It encompasses the stakeholders and networks engaged, the modalities of dissemination, the forms of research

communication products, and the broader practices of science communication.

4.3.1. Stakeholders and networks

This concerns the diversity of stakeholders, collaborative practices, and the implementation of networking mechanisms necessary to foster informed debate grounded in scientific evidence. The issues addressed here include the national geography of research, the heterogeneity of stakeholders and forms of collaboration, and the development of research communication competencies.

The indicator of national geography research pertains to the proportion of scholarly concentration within the social sciences. Within this framework, the estimated representation of social science researchers among the top decile of institutions constitutes 47.80% of the total research body, while 52.62% of researchers across institutions situated in the capital city, Bamako, are affiliated with the social sciences. Of the social science researchers enumerated by the Mali research team, 92.74% are concentrated in Bamako, with the remainder dispersed across peripheral regions.

Table 16: Indicators related to national geography of research, stakeholders and collaboration diversity, and research communication skills (research dissemination) in Mali

FACTOR	INDICATORS	VALUE	SOURCES
2.1.a National Geography of Research	Concentration of social sciences researchers in the capital city, Bamako	52.62%	Mapping DRA (based on a literature review) researchers survey
2.1.b Stakeholders and collaboration diversity	Level of diversity in the research system (satisfaction, scale of 1-6)	3.68	Community survey policy + interviews
	Inclusivity of policy on social issues (satisfaction, scale of 1-6)	3.38	Researchers survey + interviews
	Average number of co-authors per researcher in the last 3 years	12	Researchers survey + interviews
2.1.c Research communication skills	Number of communication training courses completed in the last 3 years	1.5	Researchers survey + interviews
	Quality of Research communication capacity building opportunities (satisfaction, scale1-6)	4.31	Researchers survey

Source: Doing Research in Mali, 1st edition, 2026

Regarding the dimension of stakeholder participation and collaborative heterogeneity, this indicator encompasses the diversity of research stakeholders, the inclusivity of political discourse on societal issues, and the extent of cross-sectoral collaboration. The aggregate diversity index of research stakeholders yields an average score of 3.68 on a six-point scale. Disaggregated findings on stakeholder involvement in research processes reveal the following mean scores (maximum = 6): university-based scholars across all ranks 3.85, non-university researchers 3.60, women 3.90, minority groups 3.51, political decision-makers 3.28, community organizations and associations 3.71, and individual community members 3.89. These results indicate that stakeholder engagement is moderately satisfactory, with women, individual community members, academic researchers at all levels, and community-based associations demonstrating comparatively higher levels of participation, whereas policymakers, minority groups, and non-academic researchers exhibit relatively lower involvement.

The relatively elevated score for women (3.90) can be attributed to researchers' responsiveness to national and international gender policy frameworks, as well as to women's comparatively greater accessibility and availability within research networks. Conversely, the lower score (3.28) for policymakers' participation in research dialogues—particularly within social science domains addressing collective stakeholders—may be explained by a constellation of structural and institutional factors limiting their engagement.

Within the scope of the survey, among the three hundred and one (301) teacher-researchers consulted, 103 (34.22%) reported collaboration with national organizations and institutions, 116 (38.54%) with governmental bodies, 108 (35.88%) with national universities, 75 (24.92%) with international universities, 72 (23.92%) with international

agencies, and 52 (17.28%) with international non-profit organizations and institutions.

Concerning the frequency of collaboration with stakeholders external to their primary research institution, 8.31% of respondents indicated "never," 21.93% "rarely," 33.89% "sometimes," 16.61% "regularly," 6.31% "frequently," 3.99% "always," while 8.97% provided no response. The inclusiveness of political dialogue on social issues is defined as the degree to which deliberations on research-related topics are open to diverse stakeholders (including researchers, NGOs, international agencies, policymakers, and others), particularly with respect to access to policy forums. This dimension registers an overall mean score of 3.38 on a six-point scale. Disaggregated assessments of the perceived utility of engaging specific groups in social policy discussions yield the following scores (maximum = 6): academic researchers across all ranks 4.00, non-academic researchers 3.73, women 3.45, minority groups 2.91, policymakers 3.64, community organizations and associations 3.18, and individual community members 2.73.

The level of intersectoral collaboration is assessed through the extent to which researchers engage with professionals, including fellow scholars, in the co-production of academic knowledge. The mean number of co-authors reported by faculty members over the past three years is 12. Among the 301 faculty members surveyed, the distribution of reported co-authorship is as follows: 49.03% within their own institution, 41.53% with doctoral candidates, 39.53% with colleagues from other national research institutions, 32.23% with representatives of governmental bodies at central or local levels, 31.89% with civil society organizations (including NGOs), 31.23% with foreign donor agencies or private foundations, 31.56% with foreign research institutions within the region, 32.89% with foreign research institutions outside the region, and 35.55% with scholars from other disciplinary fields.

Research communication competencies are evaluated through the number of training courses undertaken within a three-year period and the overall quality of communication skills acquired in the research domain. The average number of communication training courses completed during this timeframe is 1.5 out of a maximum of 5. In this regard, 40.53% of surveyed faculty members reported never having participated in any communication training, 28.57% indicated participation in 1 or 2 courses, 10.30% in 3 to 4 courses, and 9.30% in 5 or more courses. Additionally, 4.98% stated they were uncertain, while 6.31% did not provide a response.

In contrast to the relatively low score for the number of training sessions undertaken, the overall quality of communication competencies and training in the research domain registers an average of 4.31/6, indicating that such training activities have been substantively beneficial to participants. Disaggregated scores for specific dimensions are as follows: scholarly writing skills 4.36, oral presentation skills 4.49, skills in research popularization 4.23, and competencies in event organization 4.18. Taken together, these results are broadly satisfactory, though it is noteworthy that presentation skills achieved the highest rating (4.49), whereas event organization skills received the lowest (4.18).

Synthesizing the findings on stakeholders and networks engaged in dissemination, the national research geography reveals a pronounced concentration of social science researchers in the capital, Bamako, where 92.74% are located. Among these, 47.80% are affiliated with the top decile of institutions, and 52.62% are employed in institutions based in Bamako.

With respect to stakeholder diversity and collaborative engagement, the diversity index records an average score of 3.68/6, with women, academic researchers, and community-based groups demonstrating the highest levels of involvement. The inclusiveness of policy dialogue on social issues yields an average score of 3.38/6, reflecting moderate participation from academic and non-academic researchers but limited engagement from minority groups and political decision-makers. Intersectoral collaboration is assessed as satisfactory, with faculty members reporting an average of 12 co-authors over a three-year period, 49.03% of whom are drawn from their own institution and 32.89% from foreign institutions outside the region. Research communication training reveals a low frequency of participation (average score of 1.5/5, with 40.53% reporting no training over three years). Nevertheless, the overall quality of communication skills and training is relatively strong, with high scores for oral presentations (4.49) and academic writing (4.36), though event organization (4.18) remains the weakest dimension.

Qualitative illustration Data on the stakeholders and networks

The data highlights a pronounced centralization of research activity in Bamako, where 92.74% of social science researchers are concentrated, with more than 47% employed in major public institutions. Qualitative interviews corroborate that this spatial concentration reflects structural asymmetries in the distribution of resources, infrastructure, and scientific opportunities. As one research administrator at IER observed: *"The majority of researchers are in Bamako because that's where the universities, libraries, laboratories, and international partners are located."* Similarly, a lecturer-researcher at

US noted: *"Outside of Bamako, there are practically no research facilities: no internet, no library, no laboratory."* A policymaker at MSDS further emphasized: *"Regional structures lack human and technical resources. Researchers are often isolated there."* This centralization reinforces the polarization of the research system around the capital, marginalizing regional universities and constraining both the territorial dissemination of knowledge and the participation of local stakeholders.

The diversity of stakeholders registers an average score of 3.68/6, suggesting a gradual opening toward academic researchers, women, and selected community groups, while the participation of non-academic stakeholders remains limited. Interview data reveal that research continues to be predominantly embedded within university and governmental structures, with minimal integration of NGOs, associations, communities, or private-sector stakeholders. As a research administrator at INFTS explained: *"Research in Mali is primarily academic. NGOs and the private sector are not involved, except in commissioned studies."* A lecturer-researcher from the Faculty of Humanities and Social Sciences added: *"Collaborations do exist, but they are often punctual and dependent on external funding."* A policymaker from the Council of Higher Education stressed: *"We need to institutionalize research networks that integrate community stakeholders and local authorities."* This limited diversity underscores the persistence of an academic and compartmentalized model of research, insufficiently aligned with the socio-economic and territorial needs of the country.

The inclusiveness of political dialogue on social issues registers an average score of 3.38/6, indicating moderate participation of researchers in public debates but limited engagement of policymakers and minority groups. Policymakers themselves acknowledge the absence of formalized mechanisms for integrating research expertise into public decision-making processes: *"Researchers are not systematically consulted in the development of social policies." "They are approached on an ad hoc basis, often through projects."* (Policymaker, MSDS). Another policymaker from the Council of Higher Education emphasized: *"Permanent frameworks for consultation between researchers and policymakers must be created, because scientific data remains underutilized."* Similarly, a lecturer-researcher from FHG observed: *"We produce studies that are useful, but they are not disseminated or exploited by the authorities."* These testimonies underscore that communication between science and politics remains weakly institutionalized, thereby constraining the social and political valorization of research.

Quantitative data reveal a satisfactory level of intersectoral collaboration, with faculty members reporting an average of 12 co-authors over a three-year period, 49.03% of whom collaborated within their own institution and 32.89% with foreign institutions outside the region. Qualitative evidence confirms that these collaborations are largely driven by individual initiatives or external funding rather than by a coherent national policy for scientific cooperation. As one research administrator at IER explained: *"Collaborative research projects almost always originate from external partners. There is no national coordination mechanism."* A lecturer-researcher at FSHSE added: *"We work with European universities through our former supervisors or NGOs, but nothing is structured."* A policymaker at MSDS further noted: *"Regional collaborations are weak. It is paradoxical: we collaborate more with Europe than with our African neighbors."* These observations highlight that scientific cooperation remains a strategic lever insufficiently mobilized, primarily due to the absence of national mechanisms supporting researcher mobility and inter-institutional partnerships.

Scientific communication competencies yield mixed outcomes: an average score of 1.5/5 for the number of training courses completed (with 40.53% of researchers reporting no participation), contrasted with a stronger score of 4.31/6 for the perceived quality of skills, particularly in oral presentation (4.49) and academic writing (4.36). Interview data underscore that these competencies are largely acquired through individual practice and ad hoc training opportunities, seldom embedded within formal institutional programs. As one lecturer-researcher from FHG observed: *"We don't have structured training in scientific communication. Those who present well learned it on the job."* Similarly, a research administrator at INFTS noted: *"Training mainly comes from partner projects or international organizations, not from universities."* A policymaker from the Council of Higher Education emphasized: *"We must strengthen researchers' capacity to popularize their findings for the general public and policymakers."* Despite relatively strong technical skills, the absence of institutionalized training structures in scientific communication constrains the societal and policy impact of research.

In synthesis, the interviews confirm that research dissemination in Mali continues to be characterized by: pronounced geographical centralization in Bamako; limited diversity of stakeholders; collaboration heavily dependent on external funding; and scientific communication that remains weakly institutionalized, despite the existence of individual competencies.

4.3.2. Research of the broadcast methods

Research dissemination approaches encompass the mechanisms and institutional arrangements that facilitate the wide circulation of scholarly outputs. In this context, they comprise two primary channels: local academic journals and international exposure.

The indicators pertaining to local journals include the ratio of social science journals in the region per social science researcher and the ratio of national journals published in local languages per social science researcher. At this level, the research findings indicate that the number of social science journals in the African region per researcher is 0.05, while the number of national journals in Mali published in local languages per researcher is 0.01.

With respect to international exposure, the indicators comprise the proportion of international collaboration in social science research and the number of international research projects per institution. In Mali, the percentage of international collaboration in social science research stands at 0.89. Among the 301 teacher-researchers surveyed, the distribution of those reporting international co-authorship is as follows: co-authorship with a foreign donor agency or private foundation 0.05, co-authorship with a foreign research institution within the region 0.10, and co-authorship with a foreign research institution outside the region 0.16.

Table 17: Indicators related to local journals and international exposure (research dissemination) in Mali

FACTOR	INDICATORS	VALUE	SOURCES
2.2.a Local journals	Number of national journals in the local language(s), per social science researcher	0.05	Scopus (SCImago) / Literature review
	Number of national journals in the local language(s), per social science researcher	0.01	Literature review
2.2.b International exposure	Percentage of international collaboration in social science research	0.89%	Scopus (SCImago) + Researchers survey
	Number of international research projects, per institution (per last 3 years)	13.22	Research administrators Survey + Researchers survey
	Membership in thematic research networks and professional affiliations	34.22%	Researchers survey

Source: Doing Research in Mali, 1st edition, 2026

The number of research projects involving formal collaboration with foreign research centers per institution is reported at 13.22, according to survey data collected from research administrators. Among faculty members, 55.81% indicated that they had not participated in the implementation of an international research project during the past three years. In contrast, 21.26% reported collaboration on 1 or 2 international projects, 8.64% on 3 or 4 projects, 2.33% on 5 or 6 projects, and 0.66% on 7 or more projects, while 11.30% did not provide a response.

Among the 301 teacher-researchers surveyed, 34.21% reported membership in a professional research network. Of this proportion, 80.58% indicated affiliation with a national research network, 11.96% with a regional network (defined according to WB regional classifications: Africa, East Asia and Pacific, Europe and Central Asia, Latin America and the Caribbean, Middle East and North Africa, South Asia), and 8.74% with an international network.

In synthesis of the findings on research dissemination modalities, the availability of local journals remains limited. The ratio of social science journals in the African region per researcher is 0.05, while in Mali this figure declines further to 0.01 for national journals published in local languages. Regarding international exhibitions, international collaboration in social science research is constrained, with only 0.89% of researchers reporting such collaborations. Among faculty members, partnerships with foreign organizations remain marginal, with ratios of 0.05 for foreign donors, 0.10 for regional institutions, and 0.16 for institutions outside the region. In terms of international research projects, institutions report an average of 13.22 collaborative projects with foreign research centers; however, 55.81% of faculty members stated they had not participated in any international projects during the past three years. Finally, only 34.21% of teacher-researchers are members of professional research networks, of which 80.58% are national, 11.96% regional, and 8.74% international.

Qualitative illustration data on the research of the broadcast methods

The data reveal an extremely low ratio of scientific journals in the social sciences: 0.05 per researcher across Africa, and only 0.01 in Mali for national journals published in local languages. Interviews confirm that this structural

deficit in national scientific publishing is attributable to chronic underfunding, limited editorial capacity, and the absence of a coherent public policy supporting scholarly publication. As one research administrator at IER noted: *"There are almost no national journals. Those that existed did not survive due to lack of funding and irregularity."* A lecturer-researcher at FSHSE added: *"We publish in foreign journals, often at our own expense, because there is no recognized or indexed national journal."* Similarly, a policymaker at MSDS observed: *"Local publications are not supported by the state. They depend on individual efforts and often disappear after one or two issues."* This lack of publishing infrastructure directly undermines the international visibility of Malian research and hinders the valorization of scholarship produced in local languages or addressing national themes.

Statistical evidence further indicates that only 0.89% of Malian researchers participate in international collaborations in the social sciences, with partnerships remaining weak: 0.05 with foreign donor agencies, 0.10 with regional institutions, and 0.16 with institutions outside the region.

The interviews demonstrate that the low level of internationalization is primarily attributable to dependence on external funding, limited institutional capacity, and the absence of structured collaborative networks.

As one research administrator at INFTS observed: *"International collaborations originate from projects funded by foreign partners, not from a national strategy."* A lecturer-researcher at FHG added: *"We work with foreign partners on an ad hoc basis, often through former supervisors or NGOs."* Similarly, a policymaker from the Council of Higher Education noted: *"Participation in international projects is rare because our universities lack units for developing or monitoring proposals."* Researchers further emphasized that the high cost of international publications and the language barrier significantly constrain their participation in leading English-language journals and conferences.

Survey data indicate that Malian institutions engage in an average of 13.22 international projects; however, more than 55.81% of teaching and research staff reported no involvement in such projects during the past three years. Interviews reveal that international collaborations are concentrated within a few key institutions, predominantly in Bamako, while others lack the human and technical resources necessary to apply. As a research administrator at IER explained: *"Projects often stem from targeted partnerships between major universities in Bamako and foreign institutions. Other structures are excluded."* A lecturer-researcher at US added: *"The majority of teacher-researchers have no access to project calls, nor the skills to respond to them."* A policymaker at MSDS confirmed: *"The ministry has no mechanism for coordinating or disseminating project opportunities."* This imbalance reinforces the concentration of research opportunities within a limited number of hubs, leaving the majority of researchers marginalized from international academic dynamics.

The data indicate that only 34.21% of teaching and research staff hold membership in professional research networks, with 80.58% affiliated to national networks, 11.96% to regional networks, and merely 8.74% to international networks. Interview evidence corroborates this low level of integration, highlighting that research networks are constrained by institutional isolation, insufficient administrative support, and a weak culture of scientific cooperation. As one research administrator at FSHSE/ULSHB explained: *"There is no national research network policy. Membership occurs individually, based on personal connections."* A lecturer-researcher at FHG added: *"We are not members of international networks due to limited resources to attend meetings."* Similarly, a policymaker from the Council of Higher Education observed: *"Scientific associations exist, but without funding, they remain largely inactive."* This fragile organizational structure restricts the circulation of knowledge, diminishes the visibility of Malian researchers, and hinders the integration of national scholarship into broader African and international research networks.

The interviews converge on the observation that research dissemination relies predominantly on the individual initiative of scholars, owing to the absence of dedicated institutional structures for the promotion and communication of science. As one lecturer-researcher at MB explained: *"There is no scientific communication department in the universities. We disseminate our work ourselves, through social media or conferences."* A research administrator at INFTS similarly noted: *"Researchers operate in silos; there is no national platform for publishing or sharing results."* A policymaker at MSDS added: *"Communicating results remains internal. Very little of this work reaches the general public or policymakers."* This reliance on autonomy places the burden on researchers, often without institutional support or recognition, and reflects the lack of a national dissemination ecosystem and an open science strategy.

In sum, the interviews reveal that scientific dissemination in Mali is embedded within a fragile and weakly institutionalized system, characterized by: the near absence of local social science journals; marginal internationalization dependent on foreign donors; limited integration of researchers into national and regional networks; and the absence of a coherent national

strategy for the dissemination and promotion of scientific knowledge. This situation constrains the visibility of locally produced scholarship, undermines inter-university cooperation, and restricts the international recognition of Malian researchers.

4.3.3. Research of the communication products

This pertains to research outputs designed for a wider audience, disseminated through conferences and public debates, enhanced online visibility, and promotion via media channels.

Indicators pertaining to conferences and debates encompass, among others, the number of conferences organized per institution or per social science researcher, as well as the number of public debates convened at these levels. Survey data collected from research administrators and teacher-researchers indicate that, on average, 13.50 conferences were organized per social science institution over the past three years.

Table 18: Indicators related to conferences and discussions, online study and media visibility, and promotion (research dissemination) in Mali

FACTOR	INDICATORS	VALUE	SOURCES
2.3.a Conferences and debates	Number of conferences organized, by institution or by social science researcher over past 3 years)	13.50	Research administrators Survey + Researchers survey
	Number of public debates organized, by institution or by social science researcher over past 3 years)	4.50	Research administrators Survey
2.3.b Online research visibility	Percentage of researchers with a professional web pages	13%	Researchers survey + Research administrators survey
2.3.c Media and Promotion	Number of social media posts per researcher over the last three years	5.00	Researchers survey

Source: Doing Research in Mali, 1st edition, 2026

At the level of research administrators, the average scores by category of conference organization are as follows: scientific conferences with a national audience 4.50, scientific conferences with a regional audience 5.00, and scientific conferences with an international audience outside the region 4.00. The higher score attributed to conferences organized for regional audiences (5.00) may appear counterintuitive to a discerning reader, as one might expect national conferences to score higher given their comparatively lower logistical and financial demands, as well as the presumed accessibility of national audiences. However, the elevated score for regional conferences is largely explained by the multinational character of research projects conducted within the region. As highlighted in the Context chapter of this study, the majority of social science and humanities research initiatives typically involve at least three countries in West Africa, and often more. This configuration is not incidental; rather, it derives primarily from the stipulations of international donors, who condition funding on a regional approach aimed at pooling resources, fostering comparative analysis across countries, and generating knowledge with transnational relevance.

In this context, regional conferences function not only as privileged arenas for the dissemination of research findings but also as strategic platforms for enhancing the visibility of research teams, valorizing South–South collaborations, and fostering dialogue with stakeholders beyond the national sphere. Such forums facilitate the exchange of results among researchers and policymakers from multiple countries, enable the identification of both convergences and local specificities in the issues under study, and support the formulation of recommendations at the regional level.

Moreover, these conferences frequently align with donor requirements regarding accountability, visibility, and demonstrable impact. They play a pivotal role in consolidating a regional scientific community by reinforcing network dynamics and promoting the circulation of ideas and practices. This context explains why researchers engaged in such projects attach significant importance to organizing and participating in regional scientific meetings, which in turn is reflected in the high scores recorded in the indicators of scientific activity assessed in this study.

A further explanatory factor lies in the increasing use of information and communication technologies. Online conferences have become commonplace, offering cost-effective and logistically simpler alternatives to traditional formats, thereby reducing financial and organizational constraints while expanding accessibility.

At the level of teaching and research staff, the average scores for participation in conferences by category are as follows: participation in a scientific conference or seminar within their own institution registers an average of 3.06; participation in a scientific conference or seminar at another institution within the country records 2.59; participation in a scientific conference or seminar at the regional level stands at 2.11; and participation in a scientific conference or seminar outside the region is 1.76. It is evident that participation scores are higher for conferences or seminars organized within one's own institution or another institution in Mali, compared to regional and international levels. The concerns raised by research administrators are not particularly relevant here, as these figures simply reflect the expected order of magnitude.

It is also important to distinguish between public debates and academic conferences. Conferences are specialized events intended primarily for scholarly audiences, whereas public debates are designed to engage a broader, predominantly non-academic public (including policymakers and civil society stakeholders). In this context, public debates in the social sciences refer to events organized by university institutions, researchers, or other knowledge-producing bodies during a given year, with the objective of disseminating academic knowledge to a wider public and political audience. According to survey results from research administrators, the average number of public debates (involving researchers, policymakers, and civil society organizations) organized per institution or per social science researcher is 4.50.

With regard to research online visibility, the relevant indicator is the number of professional web pages. Survey data reveal that 13% of teacher-researchers report maintaining a personal webpage, while 55.10% of research administrators affirm that their institution hosts a website presenting staff activities and disseminating research outputs. The media and promotion indicator pertains to the number of publications disseminated via social media. According to survey results from teaching and research staff, the average number of social media publications is 5. Disaggregated scores for other communication channels are comparatively low: articles in mainstream newspapers (0.39), online posts or blog entries (0.28), radio appearances (0.36), and television appearances (0.26).

In synthesis of research communication products within the dissemination framework, social science institutions or researchers organize an average of 13.50 conferences over a three-year period, distributed across national (4.50), regional (5.00), and international (4.00) audiences. Faculty members participate more frequently in conferences hosted within their own institution (average score 3.06) or at another national institution (2.59), compared to regional (2.11) or international (1.76) events. In parallel, an average of 4.50 public debates involving researchers, policymakers, and civil society stakeholders are organized per institution or researcher. Regarding online visibility, only 13% of faculty members maintain a personal webpage, whereas 55.10% of administrators report that their institution provides a website showcasing staff activities and research products. In terms of media and promotion, the average number of social media publications is 5, while other forms of communication remain marginal, with low scores for mainstream press articles (0.39), blog posts (0.28), radio appearances (0.36), and television appearances (0.26).

Qualitative illustration data on the research of communication products

The empirical evidence indicates that, on average, 13.50 conferences are convened over a three-year period per institution or researcher, predominantly at the national (4.50) and regional (5) levels, with only 4 events reaching the international sphere. Faculty engagement is concentrated in intra-institutional forums (mean score 3.06) and national conferences (2.59), whereas participation in regional (2.11) and international (1.76) gatherings remains comparatively limited. Qualitative interviews underscore that this pattern is largely attributable to structural constraints, including insufficient financial resources, inadequate logistical support, and restricted academic mobility, which collectively hinder international participation. As one lecturer-researcher from FSHSE observed: *"We mainly participate in conferences organized by our own institutions, as travel abroad is almost never covered."* Another faculty member from FHG emphasized: *"The cost of participating in an international conference often exceeds our personal means."* Similarly, a research administrator at INFTS noted: *"Institutions have very limited, or even non-existent, budgets for conferences. Faculty members attend at their own expense."* These financial impediments, compounded by the weak integration of scholars into transnational research networks, account for the marginal visibility of Malian academics within major African and global scientific arenas.

On average, institutions and researchers organize 4.5 public debates within a three-year cycle, engaging

scholars, policymakers, and civil society stakeholders. However, interviews reveal that such deliberative spaces remain infrequent, primarily due to the absence of sustained coordination between scientific communities, political institutions, and media outlets. A research administrator at IER remarked: *"Public debates are sporadic. They only happen when an external partner funds a project on a specific topic."* A lecturer-researcher from FSHSE added: *"Decision-makers don't often participate in scientific discussions, except when there's an immediate political issue at stake."* A political decision-maker from the Council of Higher Education further observed: *"There's no culture of scientific debate in the media, even less so on social issues."* Consequently, although the potential of research to inform public discourse is widely acknowledged, it remains underutilized, as scientific communication continues to be perceived as a peripheral and low-priority function within institutional agendas.

Empirical data reveal that only 13% of teaching and research personnel maintain a personal web page, whereas 55.10% of institutional administrators report that their organization hosts a website cataloguing staff activity. Qualitative interviews corroborate the limited digitization of the research system and highlight structural inequalities in access to digital infrastructures. As one research administrator at INFTS noted: *"Few institutions have an active website. Sometimes, the site is created but never updated."* A lecturer-researcher from US similarly observed: *"The majority of teachers do not have an online profile, due to a lack of training or technical resources."* A policymaker from MSDS emphasized: "The lack of a national digital strategy for research is a real handicap for international visibility." This weak digital presence constrains the visibility of Malian scholars in international bibliometric databases (e.g., Scopus, ResearchGate) and impedes the dissemination of research outputs to broader publics.

Statistical evidence further demonstrates the limited utilization of traditional and social media channels for research dissemination: an average of 5 social media posts; 0.39 articles in mainstream press outlets; 0.28 blog entries; 0.36 radio interventions; and 0.26 television appearances. Interview data reinforce this pattern, pointing to deficits in training for science communication, apprehensions about oversimplification, and the low institutional valorization of public engagement activities. A lecturer-researcher from the Faculty of Economics and Management remarked: *"We are not trained to talk about our research in the media. Journalists sometimes misrepresent our findings."* A research administrator at the Institute of Research added: *"Researchers are not encouraged to publish in the press because it doesn't count towards promotions."* A policymaker from the Council of Higher Education concluded: *"The culture of science communication is virtually nonexistent in universities."* As a result, research remains largely confined to academic circles, with minimal interaction with policymakers, media, or the general public.

Across all interviews, a consistent theme emerges: scientific communication in Mali is driven by individual initiatives rather than institutionalized strategies. The most visible scholars are those who voluntarily leverage social media platforms or conference venues to disseminate their work. A lecturer-researcher from the Faculty of Humanities and Social Sciences explained: *"Those who disseminate their research do so on a personal basis, often via Facebook or WhatsApp, without an institutional framework."* A research administrator at the National Institute for Training and Scientific Research observed: *"Research communication is not integrated into the official duties of lecturer-researchers."* A policymaker from the Ministry of Social Development stressed: *"Scientific dissemination must be included in academic evaluation criteria for researchers to engage in it."* The absence of incentives and coherent policy frameworks for promoting research communication significantly hinders the development of a national culture of open science and the public valorization of scholarly knowledge.

In summary, the interviews substantiate that scientific communication in Mali persists as a peripheral and weakly institutionalized practice, notwithstanding the growing output in the social sciences. This condition is primarily attributable to several structural deficits: insufficient financial resources and logistical support for participation in international conferences; the limited incorporation of public debate and media into dissemination strategies; the inadequacy of digital infrastructures for enhancing online visibility; and the absence of coherent national policies promoting science outreach and open science.

4.3.4. Science popularization

In this context, science popularization refers to the process through which research-based evidence is recognized and valued by the broader public, who actively engage with diverse forms of popular science outputs. The present study focuses specifically on one dimension of this phenomenon: the societal appreciation of research and its representation within media coverage.

Table 19: Indicators of social appreciation and research media coverage (research dissemination) in Mali

FACTOR	INDICATORS	VALUE	SOURCES
2.4.a Social appreciation and research media coverage	Frequency of contact with journalists (average number of contacts for the past 3 years)	1.58	Researchers survey
	Quality of communication with the media (satisfaction, scale 1-6)	2.99	Researchers survey

Source: Doing Research in Mali, 1st edition, 2026

Indicators of social recognition and research dissemination through media encompass both the frequency of interaction with journalists and the perceived quality of communication with media outlets. Survey data from teaching and research staff reveal that the frequency of contact with journalists averages 1.58 on a six-point scale. Among the 301 respondents, 51.82% reported never engaging with journalists or media following the publication of a research article or report, 18.60% indicated rare contact, 9.63% occasional contact, 1.66% regular contact, 1% frequent contact, 0.33% constant contact, while 16.94% provided no response.

Regarding the quality of communication with the media, combined survey results from faculty and research administrators yield an average score of 2.99 out of 6. Within the teaching and research cohort, mean scores for media coverage of organized events and research outputs disseminated by non-academic outlets are as follows: journalistic coverage 2.56, television coverage 2.83, internet/website coverage 3.19, radio coverage 3.07, and social media coverage 3.29. Social media and internet platforms register the highest levels of satisfaction, followed by radio coverage (3.07). Television and journalistic coverage rank lowest, both falling below the overall satisfaction threshold.

At the level of research administrators, average scores for media coverage of organized events and research published by non-academic outlets are slightly higher: newspaper coverage 3.35, television coverage 3.33, internet/website coverage 3.46, radio coverage 3.03, and social media coverage 3.46. These findings suggest that media coverage of research activities is generally perceived as satisfactory across categories, with internet/website and social media coverage emerging as the most effective channels. Newspaper and television coverage occupy intermediate positions, while radio coverage consistently records the lowest score.

In summary, within the science popularization and the dissemination framework, social recognition and media coverage are marked by a limited frequency of interaction with journalists, reflected in an average score of 1.58/6.

More than half of the lecturer-researchers (51.82%) reported never engaging with the media following a publication, while only 1.66% indicated regular contact. Regarding the perceived quality of communication with media outlets, the average score reached 2.99/6. Lecturer-researchers highlight comparatively stronger coverage through social media (3.29) and internet platforms (3.19), whereas research administrators assess overall coverage as satisfactory, with the highest scores attributed to internet and social media channels (3.46 each), followed by journalistic and television coverage. Radio consistently registers the lowest scores across both groups.

Qualitative illustration data on the science popularization

The findings reveal a markedly low frequency of interaction between researchers and journalists, with an average score of 1.58/6, and more than half of faculty members (51.82%) reporting that they had never engaged with the media following a publication. Qualitative interviews corroborate these results, indicating that media communication is not perceived as an institutionalized practice but rather as an individual initiative, often undervalued within the academic system. As a research administrator at INFTS observed: *"Researchers don't communicate with the media because it has no impact on their careers. It's not an evaluation criterion."* A faculty member from FSHSE added: *"Most of us don't know who to contact to disseminate research results. There's no dedicated communications unit."* A policymaker from MSDS further noted: *"The link between science and the media is almost nonexistent. Journalists don't come to the laboratories, and researchers don't automatically think to approach them."* This lack of dialogue between the scientific community and the media is explained by a weak culture of popularization, insufficient training in public communication, and the absence of intermediary structures such as scientific press officers or valorization units.

Researchers also highlight the absence of a coherent national policy or strategy for science communication,

which confines popularization to individual or opportunistic initiatives, often tied to projects funded by international partners. A research administrator at IER remarked: *"Science popularization depends on one-off projects. When a funder finances a study, they sometimes plan for a public presentation, otherwise nothing."* A lecturer-researcher from FHG emphasized: *"Malian researchers are not trained to speak to the general public. They are afraid of being misunderstood or of oversimplifying their results."* A policymaker from the Council of Higher Education added: *"There is no budget for research communication in public institutions."* Consequently, the weak institutionalization of science communication restricts the dissemination of knowledge to the general public and policymakers, reinforcing the confinement of research within a closed academic sphere.

Survey data further indicate an average quality of communication with the media, with a score of 2.99/6. Faculty members perceive relatively greater visibility through social media (3.29) and internet platforms (3.19), while administrators report slightly higher scores for internet and social media coverage (3.46 each), though radio and television remain marginal. As a research administrator at INFTS explained: *"Local radio stations don't cover research; they prefer political or social debates."* A lecturer-researcher from ULSHB noted: "Social media allows a certain visibility, but it is mainly younger researchers who use it." A political decision-maker from MSDS added: *"Public television does not have a section dedicated to research or science popularization."* Thus, radio—traditionally the most accessible medium—remains underutilized for disseminating scientific results, while the internet is gradually emerging as an alternative communication space, albeit for a limited segment of researchers.

The use of social media has increasingly emerged as the primary channel of informal scientific communication. For many researchers, however, this practice remains largely spontaneous and uncoordinated. Interview data reveal that platforms such as Facebook, WhatsApp, and LinkedIn are commonly employed to disseminate publications, announce conferences, or circulate calls for papers, often in the absence of any formal institutional framework. As one lecturer-researcher from FSHSE explained: *"Facebook has become our main means of scientific communication, especially for sharing our publications."* A research administrator at INFTS noted: *"Social networks provide visibility, but without scientific validation. This sometimes creates credibility challenges."* A policymaker from the Council of Higher Education further observed: *"Young researchers use social networks extensively, but without training in responsible communication."* While this growing reliance on social media constitutes an opportunity to democratize science and broaden access to knowledge, it simultaneously underscores the need for ethical guidelines and structured training programs to enhance the quality, credibility, and rigor of online scientific communication.

Administrators generally exhibit a more favorable perception of media coverage than faculty members, often asserting that institutions are making deliberate efforts to enhance visibility through websites and official pages. Yet this optimistic assessment obscures a more complex reality: most institutional sites are rarely updated and contain minimal content showcasing scientific production. As one research administrator at INFTS observed: *"Our websites exist, but they mainly serve as a platform for public consumption—to present the administration, not to disseminate research."* A lecturer-researcher from US added: "*We have an institutional page, but updates depend on the goodwill of a technician."* A policymaker from MSDS emphasized: *"Institutions need genuine scientific communication units, staffed with trained professionals."* This divergence between institutional perception and lived experience underscores the absence of centralized governance for science outreach and the lack of a coherent national policy for research communication.

In essence, the interviews confirm that science communication in Mali remains weakly institutionalized and underdeveloped, despite increasing recognition of its strategic importance. This situation is shaped by several structural constraints: the absence of a culture of dialogue between science and the media; the lack of a national framework for science communication; insufficient training in research popularization; and the continued artisanal reliance on digital and social media tools.

4.4. Policies implementations

The application of research policies refers to the systematic process of mobilizing and adopting research outputs for policy-relevant purposes, or of applying research findings and methodologies in a direct and targeted manner. In this context, the notion encompasses research that informs policy development, evidence-based policymaking, the design of research-derived policy instruments, and the utilization of scholarly knowledge to enhance the quality and effectiveness of public policies.

4.4.1. Research policies value

Policy-supporting research denotes scholarly outputs explicitly oriented toward informing and advancing policy development. Critical dimensions encompass the

substantive policy value of the research, its contextual relevance to policymaking processes, and the strength of the institutional and epistemic linkages established between research and policy domains.

Indicators of the policy value of research encompass the degree of independence of the knowledge produced, the extent of demand for research contributions in policy formulation, and the level of subsidies allocated by policymakers, either at the institutional level or directly to social science researchers. The degree of independence of research registers an average score of 2.15 out of a maximum of 6, according to survey results collected from faculty-researchers. Among the 301 respondents, 25.25% reported that policymakers never influence the independence of research outcomes, 17.28% stated rarely, 16.94% sometimes, 2.33% regularly, 2.66% frequently, and 1.33% all the time, while 28.57% indicated they did not know and 5.65% provided no response.

A majority of respondents (42.53%) affirmed genuine independence by indicating "never" or "rarely," reflecting a perception of relative autonomy in research activities. These faculty members believe that the outcomes of their work are, overall, not significantly shaped by political considerations. Conversely, a notable proportion (23.26%) reported experiencing influence ("sometimes," "regularly," "frequently," or "all the time"), suggesting the presence of varying degrees of political interference in the production or dissemination of research results. Equally important, a substantial share of respondents (34.22%) expressed uncertainty or reticence, either by declaring "don't know" or by abstaining from answering. This pattern points to an area of ambiguity, caution, or indecision, likely linked to the absence of direct experience, apprehension about expressing views on a sensitive issue, or limited awareness of potential political pressures exerted on colleagues.

Table 20: Indicators related to research policy value, policies research, and the link between research and policies (research use) in Mali

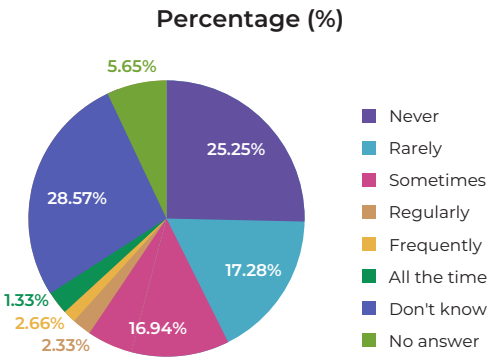
FACTOR	INDICATORS	VALUE	SOURCES
3.1.a Policy value research	Independence of produced research (satisfaction, scale 1-6)	2.15%	Researchers survey+ Interviews + Research administrators survey
	Incidence of requests for research input in development of policy	22.63%	Researchers survey
	Percentage of respondents indicating they received a grant from policymakers, at the institutional or researcher level in the social sciences, over the last 3 years	2.99%	Researchers survey + Research administrators survey
3.1.b Policy relevant research	Quality of collaboration between researchers and policymakers in policy design (satisfaction, scale 1-6)	2.09	Researchers survey
	Number of communication materials produced for policymakers, per social science researcher last three years	4.50	Literature review + Researchers survey + Political community Survey
3.1.c Link between research and policy	Frequency of contact with policymakers after the publication of an article or report (satisfaction, scale 1-6)	1.25	Researchers survey + Interviews + Administrators and political community research
	Researchers who have held/currently hold a policy leadership position	3%	Literature review + Researchers survey

Source: Doing Research in Mali, 1st edition, 2026

At the level of research administrators, average scores per category concerning the independence of research results are as follows: social science findings with potential policy implications are openly discussed (2.44/6); researchers are perceived as able to produce independent work without undue influence (3.94); policymakers are seen as granting researchers the necessary space for data collection (3.34); and the prevailing policy climate is considered to favor the production of independent research results (3.65). These scores reported by administrators reinforce the perspectives of surveyed faculty members, indicating that political influence on the independence of research outcomes is either non-existent or remains marginal.

The demand for research input in policymaking registers a low average score of 22.63%, based on the combined survey results of research administrators and faculty members, indicating that policymakers have made limited use of academic expertise over the past three years. Disaggregated data show that this demand has reached 30.30% among research administrators and only 14.95% among faculty members. The frequency of research commissioned directly by policymakers during the same period averages 2.93 for administrators and 1.79 for faculty. Among the surveyed faculty, 45.70% reported undertaking such work once per year, 34.80% two to three times annually, 4.30% four to five times annually, while 15.20% expressed uncertainty. Similarly, only 14.29% of research administrators affirmed that their institution had conducted research commissioned by policymakers in the past three years. Of these, 10% reported one request per year, 40% two to three requests annually, 10% four to five requests annually, 10% five or more requests annually, , and 30% did not know. Within the political community, the average score for requests addressed to individual researchers or research teams on specific topics over the past three years was 2/6. Of this, 40% reported making one request annually, while 60% did not respond. Among those who did, the proportion of national to foreign researchers engaged varied between 80% and 100%.

Chart 6: Policy influence perceived by researchers on the independence of research results, based on responses from 301 surveyed faculty-researchers



Source: Doing Research in Mali, 1st edition, 2026

Grants allocated by policymakers to institutions or individual researchers in the social sciences register an average score of 2.99%. Only 9.30% of the 301 surveyed faculty members and 1% of the 49 administrators reported receiving funds for research commissioned by political decision-makers over the past three years—individually for the former and institutionally for the latter. Teaching and research staff reported an average of 648,928,571 FCFA per person.

The administrator of the sole institution that responded indicated receiving 120,000,000 FCFA over the same period. Dividing this amount by the number of researchers at the institution yields 705,882,353 FCFA per researcher, which is higher than the average reported by faculty (648,928,571 FCFA). However, this difference may not be statistically significant once taxes, duties, and management fees—typically deducted from institutional allocations and not directly accessible to researchers—are taken into account.

With regard to research relevance for policy, the key indicators encompass the quality of collaboration between researchers and policymakers in the design of policy initiatives, as well as the number of communication materials produced for policymakers per social science researcher. The indicator concerning collaboration quality specifically assesses the extent to which policymakers actively contribute to defining research objectives and represent stakeholder interests during the initial phases of research planning. Such participation is expected to guide research agendas toward alignment with broader societal needs.

Survey data from faculty-researchers reveal an average score of 2.09/6 for this indicator, with emphasis placed on the dimension of research design. By contrast, respondents from the political community reported a higher average score of 4/6, focusing instead on policy implementation as the relevant dimension. In this regard, surveys conducted with policymakers on the various stages of the policy cycle yielded the results presented in Table 21.

Table 21: Perception of researchers regarding the quality of collaboration with policy actors at different points of the policy cycle

Phase of political cycle	Very ineffective	Ineffective	Rather ineffective	Quite effective	Effective	Very effective	Doesn't know	No response
Policy design	28.90	17.60	10.30	5.30	4.70	-	17.90	15.30
Policy implementation	24.60	19.60	11.30	7.30	2.70	1.00	16.90	16.60
Policy monitoring	24.60	18.93	10.30	7.30	2.66	0.33	17.94	17.94

Policy evaluation	24.30	20.30	8.00	7.30	3.30	0.30	12.30	24.20

Source: Doing Research in Mali, 1st edition, 2026

The proportion of negative assessments ("very ineffective," "ineffective," "somewhat ineffective") exceeds half of the respondents across all phases of the policy cycle: design (56.80%), implementation (55.50%), monitoring (53.83%), and evaluation (52.60%). This pattern underscores a pronounced lack of integration of faculty members into policymaking processes, irrespective of stage. Only a small minority of faculty members perceive collaboration as effective ("somewhat effective," "effective," "very effective"), with rates consistently below 15% in all phases. Even when aggregating positive responses, the figures remain marginal: design (10.00%), implementation (11.00%), monitoring (10.29%), and evaluation (10.90%). These findings demonstrate that constructive interactions are exceptional and that mechanisms for co-producing policies are either absent or insufficiently valued. The cumulative proportion of "don't know" and "no response" ranges from 33% to 37% depending on the phase, revealing a significant degree of ambiguity, caution, or lack of information regarding political collaboration among nearly one-third of respondents. Overall, these results highlight a substantial disconnect between the academic research community and decision-making arenas.

Scientific expertise thus appears to be underutilized in the formulation, implementation, monitoring, and evaluation of public policies. This raises critical questions not only about the political will to integrate researchers into governance processes but also about the capacity of researchers to actively engage in public action. Within the political community, only 27.27% of respondents reported having collaborated with social science researchers to develop a policy for which they or their institution was responsible. The evaluation of collaboration quality between policymakers and researchers across the different phases of the policy cycle yielded consistently weak results. Specifically, 9.10% acknowledged collaboration during the design, implementation, monitoring, and evaluation stages, with 9.10% stating that such collaboration occurred frequently, while 81.80% provided no response.

Communication materials in this context refer to diverse forms of publication produced outside conventional academic journals, intended for broader audiences and designed to present research findings on social issues (e.g., policy briefs, studies, and reports). The average number of communication materials produced for policymakers per social science researcher over the past three years is 4.5, comprising approximately 2.5 reports (such as technical documents, project outputs, or consultation results) and two policy notes (short documents outlining the political implications of research). Among respondents from the political community, 78% reported having benefited from researchers' outputs—including policy notes, white papers, and presentations—while only 30% indicated having co-produced policy documents (summaries, white papers, etc.) in collaboration with researchers drawing on social science evidence.

Finally, indicators of the linkage between research and policy include the frequency of contact with policymakers following the publication of an article or report, as well as the proportion of researchers who have held or currently hold positions of political responsibility. The frequency of contact with policymakers after publication registers a low average score of 1.25 out of 6. With respect to political leadership roles, only 3.15% of surveyed faculty members reported having occupied or currently occupying such positions, of which 3% were at the level of central government and 3.30% at the level of decentralized government.

In summary, the review of policy-supporting research within the implementation framework indicates that the policy value of research is constrained by a low level of independence as perceived by faculty members (average score of 2.15/6), even though research administrators report only marginal influence of policymakers on research outcomes. The demand for academic contributions to policymaking is similarly limited, with an average of 22.63% of requests recorded over the past three years, and commissioned research remains infrequent. Grants provided by policymakers are scarce (9.30% among faculty members and 1% among administrators) and generally modest in scale. With respect to policy-relevant research, collaboration between researchers and policymakers across the phases of the policy cycle is of poor quality, with particularly low scores for the design stage (2.09/6 among faculty). On average, each researcher produced 4.5 communication materials for policymakers, including reports and policy briefs, yet only 30% of decision-makers reported co-producing such documents with researchers.

Finally, the linkage between research and policy remains weak. The frequency of contact with policymakers following publication is low (1.25/6). Moreover, only 3.15% of faculty members reported having held positions of political responsibility, primarily at the decentralized level (3.30%).

Qualitative illustration data on the policy value research

The data reveal a perceived low level of scientific independence (average score 2.15/6 according to faculty members), although administrators report only limited political influence on research outcomes. Interviews suggest that dependence is less political than financial and institutional, as researchers operate in an environment where research remains largely "unfunded" and thus vulnerable to external pressures. As one research administrator from FSHSE/ULSHB noted: "Research is not funded by the State; it relies on teachers' personal efforts and partnership opportunities." Another administrator from INFTS explained: *"There is no direct interference from decision-makers in the results, but the lack of resources leads researchers to self-censor at times to satisfy funders."* A research administrator from IER added: *"Politicians do not sponsor research, so they are not interested. There is no tension, simply a lack of connection."* These accounts confirm that scientific independence remains fragile: formally respected, yet practically contingent upon external resources and opportunities.

Statistical evidence shows that only 22.63% of faculty members were invited to contribute to public policy development, and commissioned research remains rare. Interviews corroborate this weak culture of policy-oriented research, exacerbated by the absence of dialogue between researchers and policymakers. As a lecturer-researcher from FHG observed: *"Authorities do not automatically consult researchers before making important decisions."* A colleague from ULSHB added: *"We do not conduct research at the government's request, except when an external project requires it."* A research administrator from IER emphasized: *"There is no official mechanism for involving researchers in the formulation of public policies."* These testimonies highlight the persistent disconnection between research and political needs, rooted in the absence of a formal framework for interaction or public commissioning of scientific work.

According to survey data, only 9.30% of faculty members and 1% of administrators reported receiving grants from policymakers, and even then, the amounts were modest. Interviews confirm this lack of national funding and underscore the reliance on international donors. A research administrator from INFTS stated: *"Research is not supported by the state budget. We depend on external funding."* A faculty member from FSHSE/ULSHB added: *"Projects are funded by partners, never by national institutions."* A policymaker from MSDS suggested: *"It would be necessary to create a national competitive fund to encourage researchers to work on topics relevant to public policy."* The absence of public funding generates a vicious cycle: without resources, research struggles to produce usable results, and without visible outputs, policymakers continue to perceive it as marginal.

Low scores (2.09/6 for the design phase) further indicate poor collaboration across public policy cycles. Interviews reveal that, where collaboration exists, it is sporadic, non-institutionalized, and often dependent on international projects or personal networks. As a lecturer-researcher from FHG explained: *"We sometimes participate in validation workshops, but rarely in policy design."* Another respondent noted: *"Decision-makers involve researchers only at the end, to justify choices already made."* (Lecturer-Researcher, FSHSE/ULSHB). *"Consultation with researchers is not yet systematic, but it is gradually emerging through specific collaborative initiatives."* (Policymaker, Council of Higher Education). These accounts exemplify a predominantly top down model of collaboration, in which research engagement tends to occur ex post facto, rather than being integrated into the initial stages of policy planning and design.

The data indicate that, on average, each researcher produces 4.5 communication materials for policymakers (including reports, policy briefs, and recommendations), yet only 30% of decision-makers report having co-produced a document with researchers. Interview evidence suggests that such outputs exist but are neither systematically disseminated nor effectively utilized within political arenas. As one lecturer-researcher from ULSHB observed: *"We produce public policy briefs, but they are not always read by the ministries."* A research administrator from IER added: *"Decision-makers do not actively seek results, and researchers lack the means to popularize them."* A policymaker from MSDS further noted: *"Scientific output is not aligned with government priorities, which makes its valorization difficult."*

Survey data (average score of 1.25/6) reveal that direct contact between researchers and policymakers after publication is rare and largely informal. Interviews confirm that exchanges occur sporadically, often within the framework of specific projects, and without the support of permanent mediation structures. As a lecturer-researcher from FHG explained: *"After publication, there is no framework for discussing the results with policymakers."* A research administrator from FSHSE/ULSHB emphasized: *"Researchers and policymakers live in two worlds that rarely intersect."* A policymaker from the Council of Higher Education concluded: *"We need to create regular consultation spaces to link research to public policy."* This situation reflects a deficit of scientific mediation, constraining the circulation of knowledge and its integration into political processes, and confirms that

Malian research remains underutilized as an instrument for supporting public decision-making.

Statistical evidence further shows that only 3.15% of faculty members have held positions of political responsibility, primarily at the decentralized level (3.30%), underscoring the marginal political involvement of researchers. Interviews corroborate that this limited presence within decision-making spheres partly explains the weak influence of research on public policy. As a research administrator from IER remarked: *"Very few researchers become involved in politics, either by choice or due to lack of recognition."* A lecturer-researcher from FSHSE/ULSHB added: *"Those who have tried to engage in politics have often been marginalized within academia."* A policymaker from MSDS concluded: *"Public policies would benefit from being co-constructed with researchers."* This persistent distance between the scientific and political spheres constrains the country's capacity to develop evidence-based policies.

The evidence converges to depict a weakly integrated ecosystem between research and public policy. While researchers generate relevant knowledge, structural barriers prevent its effective use: funding is virtually absent, institutional demand remains marginal, dialogue channels between science and policy are missing, and dissemination of findings is inadequate. As a result, research remains confined to the academic sphere and disconnected from governance processes.

4.4.2. Research-based policymaking

The development of research-based policymaking pertains to the activities, institutional capacities, regulatory frameworks, and policy-making structures that foster the systematic integration of research into the policy process. These encompass, among other dimensions, formal collaboration—such as the active participation of researchers in policy design—and informal collaboration, including consultative engagements with researchers.

Table 22: Indicators related to formal and informal collaboration between researchers and decision-makers (research use) in Mali

FACTOR	INDICATORS	VALUE	SOURCES
3.2.a Formal collaboration: participation of researchers	Share of researchers in bodies advising policymakers at the central and decentralized levels	4.32%	Researchers survey
3.2.b Informal collaboration: researchers consultation	Frequency of interactions with policymakers (satisfaction, scale 1-6)	1.80	Researchers survey
	Perception of the effective research influence on policymaking of institution of affiliation	84.48%	Research administrators survey + Researchers survey

Source: Doing Research in Mali, 1st edition, 2026

At the level of formal collaboration—namely researcher participation—only one indicator is considered: the proportion of researchers represented within advisory bodies that counsel political decision-makers at both central and decentralized levels. On average, researchers constitute 4.32% of these advisory structures. Specifically, 3% of surveyed faculty members reported membership in a central-level policy advisory body, while 5.6% indicated participation at the decentralized level.

With respect to informal collaboration—defined as consultation with researchers—the relevant indicators include the frequency of interactions with policymakers and the perceived influence of research on policymaking. The frequency of interactions registers an average score of 1.80 out of 6, based on survey responses from faculty members. Among the 301 respondents, 43.9% reported never having interacted with political decision-makers, 16.9% indicated rare interactions, 15% occasional interactions, 1.3% regular interactions, 2.3% frequent interactions, and 1% constant interactions, while 9% stated they did not know and 10.6% provided no response.

Conversely, 84.48% of all faculty members and research administrators surveyed perceive their institution as capable of exerting influence on public policy. Disaggregated results show this perception at 83.24% among researchers and 85.71% among administrators. This very high perception of institutional influence, however, reveals a notable inconsistency, as the quality of collaboration with political decision-makers across the phases of the policy cycle registers a low average score of 2.09/6.

In summary, within the implementation framework of research-based policymaking, formal collaboration—

defined as researcher participation in policy advisory bodies—remains limited, with an average representation of 4.32%. Only 3% of surveyed faculty members reported serving on advisory bodies at the central level, and 5.6% at the decentralized level. Informal collaboration—operationalized as consultation with researchers—also demonstrates weak interaction, with an average score of 1.80/6, and 43.9% of faculty members reporting no engagement with policymakers. Despite these low indicators of collaboration, 84.48% of faculty members and administrators continue to perceive their institutions as capable of influencing policy, underscoring the paradox between perceived influence and the actual quality of collaborative practices.

Qualitative illustration data on the research-based policymaking

The data indicate a low level of institutional participation of researchers in decision-making structures, with an average representation of only 4.32%—3% at the central level and 5.6% at the decentralized level. Interview evidence corroborates this exclusion from bodies responsible for formulating or monitoring public policies. As one lecturer-researcher from FSHSE/ULSHB observed: *"Researchers are almost never involved in policy development. They are only consulted when a document that has already been finalized requires validation."* Another lecturer-researcher from FHG added: *"We do not hold permanent seats on national councils or commissions, even when the issues directly concern our fields of expertise."* A research administrator from FSHSE/ULSHB emphasized: *"There is no mechanism obliging political institutions to include researchers in decision-making bodies."* These accounts underscore the weak institutionalization of the role of researchers in advisory structures, thereby limiting their capacity to influence public policy.

Statistical findings further reveal that informal consultation of researchers by policymakers remains rare, with an average frequency of 1.80/6 and 43.9% of faculty members reporting no interaction with policymakers. Interviews confirm that such exchanges, when they occur, are personalized, irregular, and largely informal. A faculty member from ULSHB noted: *"Decision-makers rarely contact us. When they do, it is often informally, on a personal basis."* A lecturer-researcher from FSHSE/ULSHB explained: *"There is no regular framework for consultation between researchers and policymakers. Meetings occur on an ad hoc basis, often within workshops or projects funded by external partners."* A policymaker from MSDS added: *"We consult researchers on certain policies, but this depends on the context and budgetary availability."* Collectively, these accounts highlight that the relationship between science and politics in Mali remains informal, relying more on personal networks than on permanent institutional mechanisms.

Paradoxically, survey results indicate that 84.48% of faculty members and research administrators believe their institutions possess the capacity to influence political stakeholders, even though the overall quality of collaboration is rated at only 2.09/6. Interview data reveal a genuine willingness among researchers to contribute, yet this potential is constrained by the absence of formalized channels of engagement. As one lecturer-researcher from FHG/ULSHB explained: *"We produce data useful for decision-making, but it is not utilized by the authorities. Yet, our results could inform public policy."* A research administrator from IER added: *"Decision-makers should rely more on research results. Our institutions have the necessary expertise to support them."* A policymaker from the Council of Higher Education emphasized: *"There is significant scientific potential in Mali, but bridges need to be built between researchers and policymakers."* Collectively, these accounts highlight a mutual recognition of the potential for influence, while simultaneously underscoring the persistent disconnect between the scientific and political spheres.

Stakeholders further underscored the absence of an institutional framework for mediation that could transform research outputs into actionable recommendations. Research institutions currently lack both policy liaison services and mechanisms for systematically disseminating findings to policymakers. As a research administrator from INFTS noted: *"We need a national body that centralizes research results and translates them into policy briefs accessible to decision-makers."* Another administrator from FSHSE/ULSHB observed: *"Researchers produce a great deal, but without institutional support, their results do not reach the right people."* A policymaker from MSDS concluded: *"Research must be institutionally linked to policy planning and evaluation structures."* This mediation deficit constrains the translation of scientific evidence into policy instruments and inhibits the development of an evidence-based policy culture.

Decision-makers themselves acknowledge that research does not yet occupy a strategic position within policy processes, which remain dominated by immediate administrative or political imperatives. A policymaker from the Council of Higher Education remarked: *"We lack a culture of research-based decision-making. Public policies are still too often made in a rush."* Another policymaker from MSDS added: *"Decision-makers need to be made aware of the value of using research findings before formulating or evaluating policies."* A research administrator from IER emphasized: *"As long as there is no legal framework linking research and national*

planning, researchers will remain on the sidelines." These reflections demonstrate that the weakness of collaboration is not attributable solely to researchers, but also to the absence of an institutional culture that values scientific input in governance.

In summary, the interviews confirm the structural fragility of collaboration between researchers and policymakers in Mali, both formally (through participation in advisory bodies) and informally (via ad hoc consultations). Nevertheless, the majority of respondents acknowledge the potential influence of research on public policy, provided that institutional mechanisms for mediation and consultation are established.

4.4.3. Research policies tools

This section examines policy outputs informed by research, with the study focusing exclusively on their instrumental use.

As indicated in the table, the indicators of instrumental use pertain to the frequency with which research is cited in policy documents and the extent of support provided for policy implementation. The citation frequency reflects the degree to which political decision-makers draw upon social science publications to substantiate analyses and inform evidence-based decision-making. This was assessed through the number of references to academic work in policy documents as reported by surveyed faculty members. The average score recorded was 2.67/6. Specifically, 7.30% of respondents stated that government publications or reports never cite academic work, 19.90% reported rare citation, 21.60% occasional citation, 5.30% regular citation, 3.70% frequent citation, and 1% constant citation, while 33.60% indicated they did not know and 7.60% provided no response. With respect to the number of citations of their own work in policy documents, the average score was particularly low at 0.63/6. Survey data show that 0.70% of respondents estimated two citations, 0.30% four citations, 0.70% seven citations, 0.30% zero citations, 0.60% did not know, and 97.70% did not respond.

Table 23: Indicators related to the instrumental use of research by decision-makers (research use) in Mali

FACTOR	INDICATORS	VALUE	SOURCES
3.3.a Instrumental use	Frequency of research citations in policy documents (satisfaction, scale 1-6)	2.67	Researchers survey + Literature review + Interviews
	Frequency of request for support for policy implementation (satisfaction, scale 1-6)	3.10	Researchers survey

Source: Doing Research in Mali, 1st edition, 2026

Regarding the frequency of policy implementation support, this indicator refers to the provision of technical assistance to policymakers in operationalizing relevant policies, including activities such as targeting and monitoring. Policy implementation support received an overall average score of 3.10/6, based on the combined survey results of academics and political stakeholders. Disaggregated data reveal an average score of 2.20/6 among academics and 4/6 among respondents from the political community. Thus, while academics report limited involvement, political stakeholders perceive comparatively higher levels of support.

In summary, within the implementation framework of research-based policy tools, the instrumental utilization of research in public policy remains limited. With respect to the frequency of citations in policy documents, academic publications register an average score of 2.67/6, yet a significant proportion of respondents (33.6%) report not knowing whether their work is cited, and the average number of specific citations remains particularly low (0.63/6). Concerning the frequency of support provided to policymakers in the implementation of policies, the overall score is 3.10/6. This support is perceived as weak among faculty members (2.20/6), but comparatively stronger among respondents from the political community (4/6), underscoring a clear divergence in the assessment of the practical contributions of researchers.

Qualitative illustration data on research policies tools

The data demonstrate that the direct instrumental utilization of research findings in public policy remains minimal, with an average score of 2.67/6 for citation frequency in policy documents and an average of only 0.63 specific citations out of 6. Interview evidence confirms that academic outputs are seldom mobilized to guide or justify policy decisions. As one lecturer-researcher from FHG observed: *"Researchers produce many reports and theses, but they are not used in public policy."* A lecturer-researcher from FSHSE/ULSHB added: *"Decision-makers do not read our publications. They rarely consider scientific findings before adopting a reform."* A research administrator from IER emphasized:

"Policy documents cite very few academic references. Decisions are based primarily on administrative directives or government priorities."

These accounts underscore that research evidence has not yet become a direct source of influence in the formulation of public policies, despite increasing recognition of its potential relevance.

Nearly 33.6% of respondents reported not knowing whether their work was cited in policy documents. Interviews further revealed a lack of traceability between scientific production and its political application, attributable to the absence of institutional feedback mechanisms between researchers and government ministries.

As a lecturer-researcher from FHG explained: *"We do not know if our research is cited or used because there is no monitoring mechanism."* A lecturer-researcher from ULSHB noted: *"When a ministry uses our results, we are not even informed. There is no culture of citing scientific findings in policy documents."* A research administrator from FSHSE/ULSHB concluded: *"Researchers are not involved in policymaking, so their work is not cited."* This lack of visibility contributes both to the underestimation of the political value of research and to a sense of marginalization among many faculty members.

The data indicate an overall score of 3.10/6 for research support in the implementation of public policies, though assessments diverge: faculty members perceive this support as weak (2.20/6), whereas the political community evaluates it more favorably (4/6). Interview evidence confirms this disparity in perception between the two groups: researchers report limited involvement, while policymakers consider research to contribute indirectly to their activities. As one faculty member from FSHSE/ULSHB noted: *"We do not participate in policy implementation, except when a project funded by a partner involves us."* A policymaker from MSDS added: *"Faculty members conduct useful research, but they do not approach us with concrete solutions."* A research administrator from INFTS explained: *"Some ministries use our reports as references, but without involving us formally."* Thus, research support for policy implementation remains unstructured, dependent on ad hoc initiatives or externally funded projects rather than systematic cooperation.

Interviews converge on a recurring observation: Mali does not yet possess a formalized structure for transferring scientific results to policymakers. This absence constrains the instrumental function of research and perpetuates the gap between scientific production and policy needs. As a research administrator from IER stated: *"There is no mechanism for transferring results to ministries. Researchers work in isolation."* Another administrator from FSHSE/ULSHB emphasized: *"Our universities lack a technology transfer unit or a department responsible for transforming research results into decision-making tools."*

A policymaker from the Council of Higher Education suggested: *"A national body could centralize researchers' outputs and translate them into practical recommendations for public policy."* These accounts highlight a critical missing link between scientific production and its political application: the absence of institutional interfaces dedicated to science–policy mediation.

Some policymakers acknowledge positive instances of research mobilization, yet characterize them as exceptional and non-reproducible due to the absence of structural support mechanisms. As one political decision-maker from MSDS noted: *"It sometimes happens that certain studies by researchers inform our sectoral policies, but that is rare and context-dependent."* A policymaker from the Council of Higher Education added: *"Research contributes to strategic reflection, but not yet to the stages of planning or implementation."*

Similarly, a research administrator from IER observed: *"We collaborate with universities on an ad hoc basis, but there is no permanent framework."* These accounts illustrate that while the instrumental value of research is acknowledged, it remains empirical, sporadic, and unsystematized.

In core, the interviews confirm that Malian research continues to be underutilized as a tool for informing and guiding public policy. This situation is attributable to several structural constraints: the absence of institutional mechanisms for transferring knowledge to political structures; the lack of sustained dialogue between researchers and policymakers; limited awareness of scientific publications among authorities; and insufficient academic recognition of the political relevance of research.

4.4.4. Research in the service of better policies

Research for improved policy formulation entails that public policies are grounded in independent, methodologically rigorous, and transparently produced evidence, thereby yielding more effective outcomes. This notion underscores the extent to which scholarly inquiry influences policy trajectories and outcomes.

Table 24: Indicators related to research impact on policy outcomes (research use) in Mali

FACTOR	INDICATORS	VALUE	SOURCES
3.4.a Influence of research on policy outcomes	Perceptions of the usefulness of social science for policymakers (satisfaction, scale 1-6)	3.55	Community survey policy + interviews

Source: Doing Research in Mali, 1st edition, 2026

The principal indicator identified in relation to the impact of research on policy outcomes is the perceived utility of social science knowledge for policymakers. This indicator reflects the degree to which policymakers value social science evidence across different stages of the policy cycle, including agenda-setting, policy design, implementation, and evaluation. According to survey data collected from the political community, the average score assigned to this indicator is 3.55/5. Specifically, 45.5% of respondents reported incorporating elements of social science research into their deliberations and decision-making processes, whereas 36.3% indicated the opposite, and 18.2% expressed uncertainty. Regarding the perceived utility of social science data, 11.2% considered it moderately useful across policy phases, while 44.4% regarded it as useful and another 44.4% as very useful.

In summary, with respect to research serving the advancement of policy implementation, the influence of scholarly evidence on policy outcomes is operationalized through policymakers' perceptions of its utility. Survey findings reveal that this indicator achieves an average score of 3.55/5. Nearly half of policymakers (45.5%) acknowledge integrating social science insights into their decisions, while 36.3% do not, and 18.2% remain undecided. Concerning perceived usefulness, 44.4% of respondents classify social science research as useful and 44.4% as very useful, underscoring its pivotal role throughout the entire policy cycle.

Qualitative illustration data on the research in the service of better policies

The empirical evidence demonstrates that 45.5% of policymakers report incorporating research findings into their decision-making processes, while 44.4% assess such evidence as useful and another 44.4% as highly useful, yielding an average score of 3.55/5. Qualitative interviews corroborate this ambivalent perception, characterized by an increasing acknowledgment of the strategic relevance of research yet constrained by limited systematic application. As one policymaker from the MSDS noted, *"Research helps inform our decisions, especially when it concerns education and youth."*

Similarly, a representative from the Higher Education Council observed, *"We use some research findings to develop sectoral policies, but the problem is that researchers don't get close enough to us."* A research administrator from INFTS added, *"The studies carried out by researchers have real utility, but they often arrive too late to influence decisions."* Collectively, these reflections highlight both temporal and institutional discontinuities between the production of knowledge and its integration into the policy process.

Nearly half of decision-makers acknowledge consulting or utilizing scientific work; however, appropriation remains partial and is frequently contingent upon sectoral priorities or projects financed by external technical and financial partners. As a research administrator from IER explained, *"In some ministries, such as the Ministry of Health or Education, research is taken into account, but elsewhere, it is ignored."* A lecturer-researcher from FHG/ULSHB emphasized, *"The usefulness of research is recognized, but it remains confined to certain areas. Researchers are only consulted when funding bodies require it."* Likewise, a policymaker from MSDS remarked, *"We integrate research results into our plans, but often in an ad hoc manner, not systematically."* These testimonies collectively affirm that research exerts influence on public policy in a circumstantial and sector-specific fashion, without yet being institutionalized as a consistent instrument of governance.

Several political decision-makers interviewed underscored that research constitutes a critical resource across all phases of the public policy cycle—formulation, implementation, monitoring, and evaluation—yet remains insufficiently institutionalized. As one policymaker from MSDS remarked, *"Research findings should guide our policies from the design stage, not just the evaluation stage."* Similarly, a representative from the Council of Higher Education observed, *"When research is involved from the outset, it makes our policies more effective."* A research administrator from INFTS added, *"We need researchers to translate their findings into clear recommendations for policymakers."* These perspectives resonate with survey data, which indicate that nearly 90% of policymakers perceive research as useful or very useful, though its application continues to be reactive rather than systematically embedded in policy processes.

Within the academic community, numerous accounts reveal both a strong aspiration to contribute to public policy and frustration with the marginalization of scholarly outputs. As noted by faculty at the University of Lorraine's Humanities and Social Sciences division, *"We produce high-quality data, but it just sits in drawers."* Another faculty member from the Arts and Humanities emphasized, *"There's no bridge between research and decision-making. Decision-makers only consult us when there's a crisis."* Likewise, a colleague from the University of Lorraine observed, *"Our work can help policymakers, but we're almost never invited to consultation meetings."* Collectively, these testimonies highlight the persistent disjunction between scientific knowledge production and its uptake in governance, despite widespread acknowledgment of the societal value of research.

The three categories of stakeholders—administrators, researchers, and policymakers—converge on the necessity of establishing mediation mechanisms between scientific inquiry and policy practice, designed to translate empirical findings into actionable recommendations. As emphasized by a research administrator from IER, *"Permanent frameworks are needed. Dialogue between researchers and policymakers is essential to strengthen the impact of research."* A policymaker from the Council of Higher Education similarly noted, *"The creation of a joint committee between the CNRST and the ministries would help to promote the results of researchers."* Another policymaker from MSDS added, *"We need intermediaries capable of transforming scientific results into decision-making tools."* Collectively, these perspectives underscore the imperative of institutional arrangements for the transfer, valorization, and systematic integration of research into the service of public policy.

In synthesis, the analysis demonstrates that research is widely perceived as a strategic lever for enhancing public policy in Mali, yet its substantive influence remains constrained. Although its perceived utility receives an average score of 3.55/5, the declared reliance on research by policymakers is insufficient to offset structural limitations. Weak institutionalization of science–policy dialogue, the absence of robust mechanisms for knowledge transfer, and a still underdeveloped culture of evidence-based evaluation collectively hinder the systematic incorporation of research into governance processes.

CONCLUSION

The assessment of the social science research system in Mali reveals an ecosystem marked by divergent dynamics. On one side, the country benefits from a relatively structured institutional architecture, a long-standing intellectual tradition, and growing integration into international scientific networks. On the other, social science research remains constrained by chronic underinvestment, organizational fragmentation, and limited institutional recognition. These structural weaknesses are further compounded by an unstable socio-political environment, excessive reliance on external funding, and persistent barriers to accessing data and research sites. The findings also highlight significant asymmetries in disciplinary representation, low levels of female participation, and a markedly insufficient rate of academic supervision. The spatial concentration of researchers in the Bamako district underscores the urgent need for diversification and decentralization of research activities. Moreover, the marginal share of social sciences in competitive funding schemes and research projects restricts their potential contribution to evidence-informed policymaking and national development strategies.

Stakeholder mapping within Mali's social science research landscape reveals a fragmented ecosystem characterized by weakly institutionalized interdependencies, deficits in communication, and pronounced dependence on foreign funding. While higher education institutions occupy a central role in training and knowledge production, the engagement of other stakeholders remains uneven, shaped by their relative power and interest in research

The rigorous sampling strategy employed in this study ensures the representativeness of researchers and provides a more nuanced understanding of institutional dynamics and systemic constraints.

In terms of scientific production, Mali hosts a considerable number of social science researchers; however, the proportion of women remains markedly low. The rate of doctoral enrollment falls below the global average, and public investment in research and development remains inadequate, lagging behind the objectives established at the continental level. Research infrastructure and access to reliable datasets are limited, thereby constraining both the quality and the societal impact of scholarly outputs.

With respect to the dissemination of research findings, Malian scholars are insufficiently integrated into international scientific networks and face restricted access to recognized publication platforms. As a result, the visibility of national scientific output at the international level remains weak, characterized by low rates of inter-institutional collaboration and a limited number of open-access publications. The adoption of digital technologies and modern communication tools for the diffusion and popularization of research results requires significant reinforcement.

Concerning the implementation of research outcomes to public policy, interactions between researchers and policymakers remain sporadic and weakly institutionalized. Contributions of social science research to public debate and policy formulation are constrained by limited consultation of researchers in decision-making processes. Moreover, the citation of academic work in strategic policy documents is marginal, reflecting the insufficient institutional recognition of research as a critical instrument for evidence-informed governance.

To sum up, the social science research system in Mali confronts significant structural challenges, particularly with respect to funding, research infrastructure, gender inclusion, and the dissemination of scholarly outputs. Greater integration of researchers into international scientific networks, the establishment of more effective mechanisms for publishing and valorizing research, and the consolidation of linkages between research and policymaking emerge as strategic levers for the sector's sustainable development. Enhanced engagement from both national and international institutions is indispensable for fostering a more robust and influential research system capable of contributing meaningfully to the country's development trajectory.

In light of these findings, several key lessons can be identified. Reinforcing the financial and organizational foundations of the social sciences is critical to amplifying their impact on public policy and governance. Stronger incorporation of researchers into decision-making arenas, systematic promotion of scientific outputs, and expanded support for early-career scholars constitute priority interventions. This assessment underscores the imperative of improved coordination among stakeholders to maximize the societal relevance of social science research. Reforming funding policies, institutionalizing intersectoral collaborations, and advancing the practical application of research findings represent essential levers for cultivating more autonomous and contextually responsive scholarship in the face of Mali's contemporary challenges. Finally, a more assertive national research policy, coupled with strategic management of international partnerships, would ensure the consolidation of autonomous knowledge production tailored to the country's developmental needs.

RECOMMENDATIONS

To consolidate and strengthen the social science research system in Mali, several strategic measures can be envisaged:

1. Establish an Integrated and Inclusive National Governance Framework for Research: Create a National Council for the Coordination of Research and Open Science, under the auspices of the CNRST, bringing together universities, research institutes, government ministries, technical and financial partners, the private sector, and civil society organizations. This council would be mandated to ensure the coherence of scientific policies, strategic planning, inter-institutional coordination, and systematic monitoring of the performance of social science research.

Responsible stakeholders: CNRST, MESRS

2. Increase Funding for Research, Innovation, and Scientific Publication: Develop a recurring and transparent funding mechanism dedicated primarily to social science and interdisciplinary research, the establishment and indexing of national scientific journals, and support for open-access publishing (including in national languages). This mechanism should diversify funding sources by mobilizing public, private, and international partnerships, with the aim of approaching the continental benchmark of 1% of GDP allocated to R&D.

Responsible stakeholders: MESRS, MEF, CNRST

3. Create a National Portal for Open Science and Institutional Archives: Establish a national digital platform interconnected with SCImago, Scopus, and UNESCO, centralizing scientific publications, open data, theses, and research reports. This portal would enhance the international visibility, transparency, and traceability of Malian social science research outputs.

Responsible stakeholders: CNRST, IESRS, DNEN, AGETIC

4. Institutionalize Academic Mentoring and Continuous Scientific Training: Develop a National Framework for University Mentoring aimed at strengthening methodological, writing, and ethical training for early-career researchers; promoting women's participation and leadership in research; and enhancing the role of mentors in academic career development. This initiative seeks to professionalize the next generation of scholars while reducing gender disparities in the research system.

Responsible stakeholders: IESRS, DGESRS, CNRST, MESRS

5. Develop a National Framework for Scientific Assessment and Evaluation: Establish a framework tailored to the social sciences, complementary to AMAQ-SUP, integrating peer review as a benchmark of quality; the popularization of science and societal impact as key performance criteria; and indicators attentive to gender equity and local knowledge production. This framework will foster institutional recognition of researchers and facilitate the systematic incorporation of research findings into public policy.

Responsible stakeholders: AMAQ-SUP, CNRST, IESRS, MESRS

6. Modernize Research Infrastructure and Strengthen Administrative Support: Invest in digital infrastructure (anti-plagiarism software, virtual libraries, databases); collaborative research environments; and the establishment of research support units within each higher education institution IESRS (including faculties) to manage project development, administration, and monitoring. These mechanisms will enhance organizational efficiency and provide greater autonomy for researchers.

Responsible stakeholders: IESRS, CNRST, PTF, Private Sector

7. Promote Gender Equity and Participation in Research: Implement incentive policies that advance women researchers into leadership roles and funded projects; ensure equitable access to mentorship and training opportunities; and establish a dedicated grant program for women in the social sciences. The objective is to strengthen gender diversity and representation in scientific production.

Responsible stakeholders: MPFEF, MESRS, IESRS

8. Reduce Teaching Load and Expand Research Time: Revise legislative and regulatory provisions on teaching obligations to increase the proportion of time allocated to research for active teacher-researchers. This measure will stimulate higher levels of scientific output, greater participation in international conferences, and improved quality of publications.

Responsible stakeholders: MESRS, MTFPDS, MRECRI, IESRS

9. Establish Sustainable Mechanisms for Science–Policy Mediation Institutionalize research–policy transfer units within universities and ministries to translate scientific

findings into policy briefs and notes; involve researchers in technical and advisory committees for public policy; and provide joint training for researchers and policymakers in evidence utilization. These mechanisms will strengthen demand for and application of research findings in national governance.

Responsible stakeholders: CNRST, Sectoral Ministries, Think Tanks

10. Promote Scientific Communication and Popularization: Allocate an annual budget for scientific communication within higher education and research institutions to: provide training for researchers in science communication, simplified academic writing, and media engagement; establish dedicated scientific communication units; and incorporate the dissemination of research results into the criteria for academic promotion and institutional evaluation. This measure will enhance the social and media visibility of the social sciences in Mali and reinforce their societal relevance.

Responsible stakeholders: MESRS, MEF, CNRST, IESRS, Public and Private Media

By implementing these recommendations, Mali will be able to more effectively harness the potential of its social science researchers and consolidate their contribution to national development and evidence-informed decision-making.

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ANNEXES

Annex 1

Table 25: List of Stakeholders (partial)

Researcher's Stakeholder	Categories	Does employ researchers
University of Letters and Human Science of Bamako (ULSHB)	Higher education and/or research institutions	Yes+
University of Social Science and Management of Bamako (USSGB)	Higher education and/or research institutions	Yes+
University of Sciences, Techniques and Technologies of Bamako (USTTB)	Higher education and/or research institutions	Yes+
University of Law, and Political Sciences of Bamako (USJPB)	Higher education and/or research institutions	Yes+
University Ségou (US)	Higher education and/or research institutions	Yes+
Private Higher Education Institutions	Higher education and/or research institutions	Yes-
National School of Engineers- Abdrahmane Baba Touré (ENI-ABT)	Higher education and/or research institutions	Yes+
National Institute of Youth and Sports (NIYS)	Higher education and/or research institutions	Yes+
National Institute of Health Sciences and Training (INFSS)	Higher education and/or research institutions	Yes+
Institute of Higher Islamic Studies and Research - Ahmed Baba of Timbuktu (l'IHERI- ABT)	Higher education and/or research institutions	Yes+
Zayed Institute of Economic and Legal Science of Bamako (IZSGJB)	Higher education and/or research institutions	Yes+
University of Pedagogy (UP)	Higher education and/or research institutions	Yes+
Higher Normal School (ENSup)	Higher education and/or research institutions	Yes+
Research and Training Center for Light Industries and Textile (ENETP)	Higher education and/or research institutions	Yes+
Institute of Rural Polytechnic / Training and Research (IPR/ITAR)	Higher education and/or research institutions	Yes+
National Institute of Social Workers & Training (INFTS)	Higher education and/or research institutions	Yes+
National Institute of Judicial Training (NIJT)	Higher education and/or research institutions	Yes+
Higher School of Journalism and Communication Sciences (HSJCS)	Higher education and/or research institutions	Yes+
Institute of Social Sciences (ICSS)	Higher education and/or research institutions	Yes+

Institute of Rural Economics (IER)	Higher education and/or research institutions	Yes+
Central Veterinary Laboratory (CVL)	Higher education and/or research institutions	Yes+
National Health Laboratory (NHL)	Higher education and/or research institutions	Yes+
Malaria Research and Training Center (MRTC)	Higher education and/or research institutions	Yes+
National Institute of Public Health (NIPH)	Higher education and/or research institutions	Yes+
National Institute of Statistics (INSTAT)	Higher education and/or research institutions	Yes+
Research, Studies and Documentation Center of Children Survival (CREDOS)	Higher education and/or research institutions	Yes+
National Museum	Higher education and/or research institutions	Yes+
National School of Administration (NSA)	Higher education and/or research institutions	Yes+
Balla Fasséké Kouyaté - Multimedia Conservatory of Arts and Crafts (BFKMCAC)	Higher education and/or research institutions	Yes+
National Center of Solar Renewable Energies – (NCSRE)	Higher education and/or research institutions	Yes+
Institute of Studies and Research – Geronto -Geriatrics- (IERGG)	Higher education and/or research institutions	Yes+
Geographical Institute of Mali – (GIM)	Higher education and/or research institutions	Yes+
National Center to Support Fight Against Disease- (CNAM)	Higher education and/or research institutions	Yes+
National Institute for Training, Equipment and Transportation – (NITET)	Higher education and/or research institutions	Yes+
National Agency of Food Security and Safety – NAFS	Higher education and/or research institutions	Yes+
National Center of Documentation and Information for Women and Children – (NCDIWC)	Higher education and/or research institutions	Yes+
Academy of Science of Mali	Higher education and/or research institutions	Yes+
International Institute of Strategic Relationships of Mali (IISRM)	Higher education and/or research institutions	Yes+
Institute of Security Studies of Mali (ISS Africa)	Higher education and/or research institutions	Yes+
International Institute of Tropical Agriculture (IITA)	Higher education and/or research institutions	Yes+
Institute of Mérieux	Higher education and/or research institutions	Yes+
Presidency of Transition	Government and funding bodies	Yes-
Prime Minister's Office	Government and funding bodies	Yes-
Ministries (Office, central and attached services, and personalized bodies)	Government and funding bodies	Yes-
National Council of Transition	Government and funding bodies	Yes-

Council of Economy, Social, Cultural and Environment	Government and funding bodies	Yes-
High Council of Local Authorities	Government and funding bodies	Yes-
Council of Higher Education and Culture	Government and funding bodies	Yes-
Malian Academy of Languages (MAL)	Government and funding bodies	Yes+
Development Center of International Cooperation and Agronomic Research (CIRAD)	Higher education and/or research institutions	Yes+
National Committee of Agricultural Research (NCAR)	Government and funding bodies	Yes+
Malian Institute for Research Action and Peace (MIRAP)	Government and funding bodies	Yes+
Institute of Research & Development (IRD)	Government and funding bodies	Yes+
International Research Center of Cultures and Tropical Zones (ICRISAT)	Government and funding bodies	Yes+
International Center of Agroforestry Research (ICAFR)	Government and funding bodies	Yes+
Institute of Sahel	Government and funding bodies	Yes+
National Center for Information, Education and Communication for Health (CNIES)	Government and funding bodies	Yes-
World Bank (WB)	Government and funding bodies	Yes-
United Nations for Development Program Development (UNDP)	Government and funding bodies	Yes-
United Nations Funds of Children (UNICEF)	Government and funding bodies	Yes-
World Health Organization (WHO)	Government and funding bodies	Yes-
United Nations Funds for Population (UNFPA)	Government and funding bodies	Yes-
United States Agency for International Development (USAID)	Government and funding bodies	Yes-
Union European (EU)	Government and funding bodies	Yes-
Japan	Government and funding bodies	Yes-
China	Government and funding bodies	Yes-
Belgium	Government and funding bodies	Yes-
National and Internationals NGO	Government and funding bodies	Yes-
German Society for International Zusammenarbeit (GIZ)	Government and funding bodies	Yes-
Netherland Development Organization (NDO)	Government and funding bodies	Yes-
GFO	Government and funding bodies	Yes-
Chamber of Commerce and Industry of Mali (CCIM)	Private Sector	Yes-

Cabinet GAAYA	Private Sector	Yes+
Alliance to Rebuild Governance in Africa (ARGA)	Private Sector	Yes+
Malian Society of Applied Sciences (MSAS)	Private Sector	Yes+
Network of Traditional Communicators for Development in Mali (NTCDM)	Civil society	Yes-
Media	Civil society	Yes-
South Point	Civil society	Yes+
West and Central African Education Research Network (ROCARE)	Civil society	Yes+
Association N'KO	Civil society	Yes+
Do	Civil society	Yes-
Kayira	Civil society	Yes-
Djoko ani Maya	Civil society	Yes-
GREAT Mali	Civil society	Yes+
GRAD	Civil society	Yes+
Association for the Development of Activities of Promotion and Training - Galle (ADAPT-Galle)	Civil society	Yes+
West African Market for Information Network (WAMInet)	Civil society	Yes+

Annex 2

Table 26: Values of Indicators

Indicator	Factor	Options	Values
	PEOPLE		
	1.1. a	Population (millions)	22 395489
	1.1. a	Number of population aged 15 to 65 or of working-age population (millions)	10663415
	1.1. a	Number of social science researchers	1171
X	1.1. a	Number of social science researchers per million working-age population	117
	1.1. a	Number of social science researchers with a PhD	503
X	1.1. a	Percentage of social science researchers with a PhD	42.95
	1.1. a	Number of female social science researchers	142
X	1.1. a	Percentage of female social science researchers	12,13
	1.1. a	Number of social science researchers in higher education institutions (HEIs)	992
	1.1. a	Number of social science researchers outside HEIs	179

	1.3. b	Number of university staff (working/related to social sciences) with a PhD	160
X	1.3. b	Percentage of university staff (working/related to social sciences) with a PhD	38.50
X	1.4. a	Number of social science researchers outside HEIs per million working-age population	17.90
	FUNDING		
	b	Research funding in the social sciences (local currency)	4 677 130 000
	b	Research funding in the social sciences (PPP dollars)	8 503,872.73
X	b	Research funding in the social sciences (PPP dollars), per researcher	7,262.06
	c	Funding for research capacity building (local currency)	63 399 222 000
	c	Funding for research capacity building (PPP dollars)	115 271 313
X	c	Funding for research capacity building (PPP dollars), per researcher	98 438.35
	PRODUCTION		
X	1.1.c	Percentage of open access documents	18.87%
	1.1.c	Number of documents from 1996 to the most recent year	652
	1.1.c	Number of citations from 1996 to the most recent year	10 750
X	b	Number of peer-reviewed publications – “citable documents,” last three years, per researcher	0.14
	b	Number of open access documents	123
	a	Number of documents (citable and non-citable), last three years	176
X	1.3. a	Number of documents, per researcher, last three years	0.15
	1.3. a	Number of peer-reviewed publications – “citable documents,” last three years, per researcher	159
X	1.3. a	Number of citations, per document, average from 1996 to the most recent year	16.49
	STUDENTS		
	1.3. b	Number of students enrolled in social sciences, final year	47725
	1.3. b	Number of social science students who graduated, final year	5653
	1.3. b	Number of people aged 18 to 25	3069533
X	1.3. b	Percentage of social science graduates in the 18-25 age group	0.00184
	1.3. b	Number of social science graduates/enrollees	3996
	RESEARCHERS CONCENTRATION		
	2.1. a	Number of institutions	134
	2.1. a	Number of institutions in the capital (main)	123

X	2.1. a	Estimated share of the total number of social science researchers in the top 10% of institutions	49.80%
X	2.1. a	Estimated share of the total number of social science researchers in institutions located in the capital (main)	0.8915
		COMMUNICATION/DISSEMINATION	
	2.2. a	Number of social science journals in the region	53
X	2.2. a	Number of social science journals in the region, per researcher	0.05
	2.2. a	Number of national social science journals in national languages	8
X	2.2. a	Number of national social science journals in national languages, per researcher	0.00683
	2.2. b	Number of papers with international collaboration, last three years	156
X	2.2. b	Percentage of papers that were the subject of international collaboration in the last three years	0.89
	2.3. b	Number of social media posts	141
	2.4. b	Number of citations of publications in journals	No information for the moment
	a	Number of citations of research in policy papers	13

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