

1 **Scientific Evidence for formulating Public Policies** 2 **aimed at Rural Development: The Role of Scientific** 3 **Dissemination**

4
5 *This article aims to analyze how scientists in the field of sustainable rural*
6 *development provide scientific evidence for public policies on sustainable*
7 *rural development and the role of scientific dissemination in this process. To*
8 *this end, the research topics and researchers were selected based on a report*
9 *prepared by Bori/Overton (2025). Analyzing those researchers as influential*
10 *in government policy documents, the research highlights a significant*
11 *geographic concentration in São Paulo and Rio de Janeiro, a notable gender*
12 *gap, and a thematic focus on ecosystems and land use. Findings suggest that*
13 *media visibility, institutional prestige, and geographic location are key*
14 *drivers of scientific influence, with traditional press and YouTube playing*
15 *central roles. Ten researchers were also interviewed, who shared their views*
16 *on how they use evidence to inform public policy. The study concludes that*
17 *strengthening structured science communication is crucial to create a*
18 *connection between academia and policymakers, fostering more sustainable,*
19 *evidence-based rural development in Brazil. A gap persists between technical*
20 *scientific output and the needs of policymakers, who require accessible*
21 *communication over academic jargon. Preliminary findings suggest that*
22 *researchers who successfully create this connection often benefit from*
23 *institutional prestige, proximity to major urban centers, and leadership in*
24 *high-impact fields.*

25
26 **Keywords:** *scientific dissemination; scientific evidence; public policies;*
27 *sustainable rural development; policymakers.*

28 29 30 **Introduction**

31
32 The recent global crises that society has been facing, such as COVID-19;
33 refugee issues; opioid epidemics; global warming; and many others, have made
34 it even more evident how important and necessary it is for policymakers¹ to use
35 scientific research to develop more effective public policies (Crowley et al.,
36 2021).

37 These complex social, economic, demographic, technological,
38 environmental, and cultural challenges are multiplying and becoming more
39 constant every day, and, in this sense, the need to address them is also becoming
40 urgent. According to Powell, Davies, and Nutley (2008), such complex problems
41 must be solved by combining different types of knowledge, among which they
42 list political, cultural, and contextual awareness in combination with theoretical
43 knowledge; empirical research knowledge associated with the experiential

¹For the purposes of this research, policymakers will be considered to include both those with decision-making power and those who perform analytical and advisory functions in the development of public policies.

1 knowledge of policymakers, professionals, service users, and citizens in general.
2 Such arrangements are part of the process of knowledge mobilization.

3 Levin (2008) defines knowledge mobilization as the process of bringing
4 high-quality information to the right people, in the right format and at the right
5 time, in order to influence decision-making. Thus, knowledge mobilization
6 includes the dissemination, transfer, and translation of scientific knowledge that
7 can be fundamental to public policy analyses. However, approaching public
8 policy from this perspective cannot ignore the disputes waged by the different
9 groups and actors who will define the public.

10 Therefore, it can be said that it is impossible to analyze the policy context
11 without examining the disputes waged by the various actors involved in the
12 process of setting an agenda and, consequently, the alternatives presented. Riege
13 and Lindsay (2006) assert that public policies, in general, are based on social and
14 behavioral theories and are influenced by the interests that a given government
15 prioritizes, and to that end, allocates public resources for that purpose. The
16 authors further assert that the deeper the knowledge underpinning a policy, the
17 greater its likelihood of success.

18 According to Silva et al. (2022), although there is a consensus on the
19 positive relationship between the use of scientific evidence² and determining
20 where the government should optimally allocate resources, this relationship does
21 not automatically materialize in practice. In this sense, the collaboration between
22 science and policymakers becomes extremely important, as the former provides
23 the necessary groundwork so that public policies can be based on solid evidence
24 grounded in high-quality research. For a type of evidence to be relevant to use
25 in policy formulation, it must be relevant, representative, and reliable
26 (Solesbury, 2001).

27 In this regard, scientific dissemination can play a crucial role in helping
28 public policymakers and society at large understand research findings,
29 effectively reducing denialism and fostering a culture grounded in scientific
30 evidence (Bernardo & Gleiser, 2022). Innvaer et al. (2002) also believe that, to
31 overcome the communication barriers between scientists and policymakers,
32 scientific dissemination focused on social and/or institutional contexts would be
33 essential.

34 Although there are many concepts of scientific dissemination, this article
35 draws on the concept of scientific dissemination proposed by Bernardo and
36 Gleiser (2022, p. 23), according to whom it is

37
38 a set of activities that fosters dialogue—either indirectly or directly—between
39 scientists and public outpeers, with the overall goal of raising public awareness of
40 science and specific objectives including the democratization of knowledge; citizen
41 empowerment; the promotion of institutional visibility; the presentation of the
42 beauty of science (wonder); scientific literacy (educational); supporting public
43 policy and stimulating interdisciplinary research.
44

²For the purposes of this research, scientific evidence will be defined, according to Silva (2019, p.31) as “knowledge produced from data and the use of rules and procedures known and shared by the community, identified with the scientific method.

1 It should be noted that the definition adopted in this article already sets as
2 it's specific objective the use of scientific dissemination to inform the
3 formulation of public policy. In Brazil, the use of scientific dissemination for
4 this purpose is not yet a common practice, and even where it is, no studies have
5 yet evaluated its effectiveness. Effective initiatives are already underway in
6 countries such as the United States, where the American Association for the
7 Advancement of Science (AAAS)—the world's largest multidisciplinary
8 scientific society—has undertaken various efforts to bring scientists and public
9 policymakers together, with the aim of promoting the use of scientific evidence.
10 The association even maintains a network that brings together scientists and
11 policymakers—the Local Science Engagement Network (LSEN).

12 In this context, it is clear that it is extremely important to examine the
13 practices employed by scientists who have provided scientific evidence for
14 Brazilian public policies, in order to assess the role of scientific dissemination
15 among these practices. With regard to the provision of scientific evidence
16 specifically geared toward public policies for sustainable rural development in
17 Brazil, certain scientists have stood out. A report prepared by Overton (an
18 international platform that aims to map the interface between science and public
19 policy) and Agência Bori (an agency that seeks to connect Brazilian science and
20 knowledge production to society through the media) highlighted 107 Brazilian
21 scientists who influenced documents used by governments to inform public
22 policy between 2019 and 2025, among whom 44 conduct research directly or
23 indirectly related to sustainable rural development, with perspectives focused on
24 land use, ecosystems, climate change, food and nutrition, economics and
25 finance, and sustainability (Bori-Overton, 2025).

26 To address this gap, this article aims to analyze how scientists in the field of
27 sustainable rural development provide scientific evidence for public policies on
28 sustainable rural development and the role of scientific dissemination in this
29 process. To this end, the research topics and researchers were selected based on
30 a report prepared by Bori/Overton (2025).

31 The following sections are organized as follows: a literature review, which
32 presents the main concepts used in this article, notably public policy, scientific
33 evidence, rural development, and scientific dissemination. The following section
34 describes the research methodology used to develop the article, which includes
35 a literature review, document analysis, and the administration of a survey.
36 Subsequently, the results found in both the Bori-Overton report (2025) and the
37 data obtained from the questionnaires are presented and discussed. The article
38 concludes with the findings and the references used.

39 40 41 **Literature Review**

42
43 According to Bevilacqua et al. (2020), the reasons for the lack of use of
44 scientific evidence in public policy stem from various factors, including access
45 to research; the training of policymakers; comprehension ability; the nature of
46 the policy; and even the difficulty in discerning high-quality research. According
47 to Silva et al. (2017), in addition to the difficulties already mentioned, Science,

1 Innovation, and Technology (SIT) are only taken into consideration in the
2 Brazilian National Congress if they serve the interests of the groups that
3 dominate the country's politics, leaving public interests in the background.

4 Faria and Sanches (2022) summarize several factors that hinder the
5 incorporation of high-quality scientific evidence into public policy-making,
6 namely: the provision of inadequate or inaccessible information; scientists'
7 limited understanding of the public policy-making process and unrealistic
8 recommendations; inefficient dissemination of research results; lack of
9 knowledge and even ignorance among public policymakers; low capacity of
10 public policymakers; "politicization" of research, selected to legitimize
11 decisions already made; discrepancies and gaps in understanding among
12 scientists, the public, and public policymakers; a time lag between the
13 dissemination of research results and their impact on policy; failure to address
14 the political and even ideological interests of public policymakers; and the fact
15 that certain forms of knowledge are considered more valid than others.

16 Dias et al. (2015), referring to the health sector, highlight the lack of
17 communication and collaboration between scientists and policymakers as one of
18 the most significant barriers in the use of scientific evidence in the development
19 of such plans. There is also the question of how scientific information reaches
20 policymakers. It is well known that research results are published by scientists
21 in scientific journals, written in jargon and intended for peer review, and are
22 often incomprehensible to professionals in other fields.

23 However, initiatives already documented in the literature suggest that such
24 barriers could be overcome if there were sufficient interest. And although
25 scientists have often mobilized to contribute to important issues where science
26 would be decisive, they do not always achieve effective participation. An iconic
27 Brazilian example of these efforts, undertaken practically in vain, concerns the
28 amendment to the Forest Code. According to Carneiro and Silva Rosa (2018),
29 although it is a topic of broad relevance to society, scientists' participation in the
30 amendments to the Brazilian Forest Code occurred solely through initiatives by
31 the scientists themselves and, for that very reason, took place when discussions
32 were already well advanced in the National Congress. It took considerable
33 insistence by the scientific community on political bodies for them to be able to
34 present research findings and participate in the discussions. The authors report
35 that "unfortunately, the scientists' efforts were practically in vain; their
36 important contributions were scarcely incorporated into the final text of the law"
37 (Carneiro & Silva Rosa, 2018, p.334).

38 In this sense, scientific dissemination becomes a vital pillar for both society
39 and public officials to understand research, combating denialism, and fostering
40 a culture of evidence (Bernardo & Gleiser, 2022). According to Innvaer et al.
41 (2002), this communication is key to breaking down barriers to dialogue between
42 scientists and policymakers. However, the field faces challenges, as the lack of
43 precision regarding the concept of public participation undermines both theory
44 and practice (Rowe & Frewer 2005). In Brazil, Bueno (2010) emphasizes that
45 the lack of conceptual refinement in the literature makes it difficult to clearly
46 define the limits of communication and scientific dissemination.

1 Koga et al. (2020) emphasize that public policy-making is a multifaceted
2 process, which makes it crucial to identify policymakers' sources of information.
3 For Hutchings and Stenseth (2016; 2022), the success of this process lies in
4 "scientific advice," which uses accessible communication to create a connection
5 between science and government. This practice takes various forms: Breviglieri
6 et al. (2019) explore the use of documentaries in climate policy, while Pugel et
7 al. (2022) analyze email as a direct channel. However, Purtle et al. (2017)
8 highlight the urgent need for studies that test the actual effectiveness of these
9 different dissemination strategies.

10 Böcker (2008) argues that scientific dissemination is essential for evidence-
11 based rural development policies, treating information as a strategic resource for
12 policy solutions. Similarly, Kumar (2022) argues that scientists and government
13 agencies share a social responsibility to promote technologies and policies for
14 rural areas. In Brazil, this agenda gained momentum under European influence,
15 prioritizing a territorial approach to strengthen the network of actors (Hentz &
16 Hespanhol, 2022). For Schneider (2004), the success of this model in the country
17 depends on four pillars: social actors, rural poverty, territory, and the
18 environment, allowing rural programs to transform the space beyond agriculture
19 and legitimize local actors.

20 From the perspective of Stumpf Junior and Balsadi (2015), rural
21 development emerges as a new paradigm in light of the inadequacy of the
22 sectoral approach to mitigating historical problems of exclusion and poverty.
23 This model responds to the urgent need for sustainable production processes in
24 the face of environmental damage caused by extensive agriculture and livestock
25 farming, taking the form of a multidimensional dynamic. It brings together
26 diverse actors and institutions—from farmers to universities and public
27 managers. Furthermore, this perspective embraces the sociopolitical identities of
28 the countryside, integrating indigenous peoples, traditional communities, and
29 family farmers as key players in the sector.

30 The complexity of the Brazilian rural landscape requires science and public
31 policy to work in tandem to promote sustainable growth. As Stumpf Junior and
32 Balsadi (2015) point out, the impact of agricultural research is shaped by policies
33 that extend beyond the productive sector, ranging from credit and logistics to
34 fundamental rights such as health and education. Thus, rural development must
35 be treated as a cross-cutting issue, bringing together social, environmental, and
36 economic dimensions.

37 38 39 **Methodology**

40
41 This article was based on the theory of knowledge mobilization and research
42 findings on barriers and drivers for the use of evidence in public policy. To
43 define the factors and actors involved in the topic, we took into account the views
44 of Koga et al. (2022) and Pires (2018), who argue that the development of public
45 policy is not a unidirectional or linear process. The factors considered for this
46 research at this stage were the Bori/Overton (2025) report, which identified the

1 107 Brazilian scientists who most frequently provide scientific evidence for
2 public policies. From this group, 44 were selected who are directly or indirectly
3 related to policies focused on rural development, the subject of this research. The
4 policy areas include agriculture; food and nutritional security; territorial
5 development; and the environment. Of the 44 scientists, 10 had responded to a
6 29-question survey by the time this article was finalized.

7 It should be noted that this article is part of an ongoing study that will
8 interview not only scientists but also public policymakers. The purpose of this
9 instrument was not only to profile this scientist but also to collect data that could
10 corroborate or refute the hypotheses raised for this research. The hypotheses are:
11 1. Sources of evidence; 2. Policy area for rural development; 3. Communication
12 channels; 4. Policy beneficiaries; 5. Attributes of the scientist who provides
13 evidence for public policies; 6. Structural factors; 7. Organizational factors and
14 8. Quality of the relationship between the scientist and the public policymaker.

15 16 17 **Results and Discussion**

18
19 The results presented reveal a complex and strategic landscape regarding
20 the intersection between science and sustainable rural development policies in
21 Brazil. Analysis of these data highlights both the practical impact of scientific
22 knowledge and the structural challenges of representation and communication.

23 Among the 107 scientists cited in the Bori-Oerton report (2025), 44 were
24 selected whose research focuses on sustainable rural development. The
25 predominance of scientists in the Southeast region of Brazil, specifically in the
26 state of São Paulo (13), with a focus on institutions such as the University of São
27 Paulo (USP), the National Institute for Space Research (INPE), and in the state
28 of Rio de Janeiro (12) at the Federal University of Rio de Janeiro (UFRJ) and
29 the Pontifical Catholic University of Rio de Janeiro (PUC Rio), reflects the
30 centralization of influential scientific production in traditional hubs. Although
31 rural development requires a contextual and territorial awareness, the current
32 evidence base appears to be strongly anchored in urban and technological
33 centers. This is relevant because, for evidence to be considered sound for public
34 policy, it must be relevant, representative, and reliable.

35 A critical issue is the low representation of women. According to the general
36 report (Bori-Overton, 2025), only 20.4% of scientists are women, a figure that
37 drops to 15.9% in the area of sustainable rural development. This disparity is
38 concerning from the perspective of knowledge mobilization, as Powell, Davies,
39 and Nutley (2008) argue that this process requires combining different types of
40 knowledge and perspectives to solve complex problems. The lack of female
41 voices may limit the diversity needed to address the social and cultural
42 dimensions of the field.

43 The Bori/Overton report (2025) highlights scientists who provide evidence
44 for policies focused on ecosystems and land use, accounting for 35% of the 107,
45 or 37. The other 7 that I classified as also permeating the areas of sustainable
46 rural development directly or indirectly are in the areas of climate change and
47 food and nutrition, totaling 44 scientists. This research underpins what Stumpf

1 Junior and Balsadi (2015) describe as a new paradigm of rural development,
2 which transcends a purely sectoral (agricultural) perspective to encompass
3 multidimensional dynamics that integrate the environment, economy, and
4 diplomacy. The fact that the evidence provided by these scientists informs
5 climate treaties and management parameters demonstrates that technical
6 knowledge is being successfully integrated into high-level government decision-
7 making processes (Bori-Overton, 2025).

8 Most of the scientists listed in the report have research cited in policy
9 documents on land use and ecosystems, with 37 of them (35% of the 107)
10 standing out for their research on topics that position Brazil as a key player in
11 the global environmental debate. This research addresses restoration,
12 deforestation, conservation, and the role of ecosystems in climate regulation, as
13 well as the provision of essential services to society (Bori-Overton, 2025).

14 Among the key public policies that have incorporated evidence provided by
15 the 44 scientists whose work in some way intersects with the field of sustainable
16 rural development are policies on agricultural expansion, the impacts caused,
17 proposals for the restoration of degraded areas, and monitoring of tropical forest
18 loss. According to the survey by Bori-Overton (2025), the scope of these
19 contributions transcends the academic environment, exerting practical influence
20 on the formulation of public policies. Through solid scientific evidence, it was
21 possible to structure reforestation initiatives, shape climate treaties, and establish
22 parameters for zero deforestation. This movement acts as a strategic link that
23 integrates applied science, economics, and diplomacy, incorporating technical
24 data directly into senior management and government decision-making
25 processes.

26 A search of major Brazilian media outlets reveals that the scientists most
27 frequently cited in rural development policies are also the ones who receive the
28 most media attention, including interviews and invitations from the press to
29 comment on current events. Although these scientists appear frequently in
30 traditional media, they rarely engage in active outreach through their own social
31 media accounts. On LinkedIn, the six scientists with more than 500 citations in
32 public policy maintain profiles but show limited activity. Even so, they are
33 frequently mentioned by institutions and also by colleagues. Searches on
34 YouTube reveal an extensive audiovisual presence, with some of the six most-
35 cited scientists appearing in over 600 videos, including interviews, lectures,
36 debates, and courses. This suggests that the press plays a central role in
37 increasing the visibility of scientists and positioning them as key figures in
38 public policy debates.

39 An analysis of the data obtained from the questionnaires reveals that,
40 regarding sources of evidence, there is complete agreement that high-quality
41 scientific evidence enhances the effectiveness of public policy. This supports the
42 findings of Riege and Lindsay (2006), who state that the more evidence-based a
43 policy is, the greater its likelihood of success, as well as those of Silva et al.
44 (2022) who state that it is essential to strengthen the relationship between science
45 and public policymakers so that scientific knowledge can provide consistent

1 input for the development of public policies grounded in robust evidence and
2 high-quality research.

3 Scientists partially agreed that sources of evidence for public policy mostly
4 come from public research institutions; and once again, there was complete
5 agreement that sources of evidence for public policy from prestigious institutions
6 are used more frequently. With regard to public policy areas for rural
7 development, there is partial agreement that environmental policymakers, given
8 the availability of extensive scientific research in the field and the major
9 challenges faced by the sector—which impact all sectors—make greater use of
10 scientific evidence than others. The interviewees’ view is that there is indeed a
11 vast body of high-quality scientific research in the field; however, there is also
12 significant political contention surrounding this issue, particularly regarding
13 land use and deforestation for crop expansion. This was a critical point raised
14 primarily in relation to issues such as land use and deforestation. Although there
15 is a vast body of high-quality scientific research in these areas, the
16 “politicization” of research often relegates it to a secondary role, serving only to
17 legitimize decisions already made or being ignored when it contradicts the
18 interests of dominant groups, corroborating Faria and Sanches (2022) regarding
19 discussions that hinder the incorporation of high-quality scientific evidence in
20 the formulation of public policies.

21 When asked about the communication channels used to convey scientific
22 evidence to public policymakers, scientists partially disagree that scientific
23 evidence reaches policymakers through scientific articles, as some policymakers
24 who are experts in the field—as well as scientists themselves—may use
25 scientific articles, but these are exceptions rather than the rule. They agree that
26 much scientific evidence reaches policymakers through reports from groups of
27 scientists interested in collaborating in a particular area, but most often this
28 happens at the request of a specific policymaker or ministry. One of the scientists
29 believes that such initiatives usually occur when scientists have significant
30 concerns about a particular issue, as was the case with the Forest Code in Brazil
31 and the reports of the Intergovernmental Panel on Climate Change (IPCC) at the
32 global level. The mention of scientists’ concerns regarding the Forest Code
33 illustrates how Brazilian science attempts to mobilize but frequently faces
34 barriers, resulting in contributions that are rarely incorporated into the final text
35 of laws, as previously discussed by Carneiro and Silva Rosa (2018).

36 With regard to scientific dissemination, they believe it plays a crucial role
37 in providing scientific evidence to public policymakers; however, it has yet to
38 be fully explored in Brazil. There are a few isolated initiatives. Scientists are
39 calling for funding agencies to allocate more resources to this activity. One of
40 the scientists says: “Not by requiring us to do it—because some people simply
41 don’t know how and there’s no way around it—but by ensuring we have the
42 resources to promote this outreach, whether at the institutional level, within our
43 research groups, or even through our individual projects.” Another scientist
44 pointed to the Fapesp Agency as doing interesting scientific dissemination, but
45 it promotes communication more for the academic community itself, as it brings
46 what scientists from other fields are doing to everyone.

1 “I, for example, would never read an article on quantum physics, and Fapesp
2 gives me the opportunity to learn what a scientist in this field is working on, but
3 this information rarely reaches the general public.” In short, everyone agrees that
4 scientific dissemination in Brazil is still underutilized as a means of providing
5 evidence for public policy, and scientists believe that an excellent channel of
6 communication with policymakers is being lost. “Research institutions and
7 universities that truly want to have an impact on society and influence public
8 policy must turn to scientific dissemination”, adds another scientist. It is noted
9 that the availability of specific funding from research funding agencies is crucial.
10 Scientific dissemination should not be merely an extra burden for scientists, but
11 an institutionalized activity that uses accessible communication to create a
12 connection between science and government. Without this support, institutions
13 lose their ability to have a real impact on society, as argued by Bernardo and
14 Geiser (2022).

15 When it comes to the beneficiaries of public policies, scientists believe that
16 policies targeting settlers, small-scale farmers, and family farmers tend to rely
17 less on scientific evidence in their formulation; however, such evidence is widely
18 used in policy evaluations. Most of the scientists interviewed agree that public
19 policies targeting commodity producers tend to rely more on scientific evidence.
20 This clash of agendas may reflect the conflicts waged by groups that dominate
21 the country’s political landscape; science and technology are prioritized when
22 they serve specific economic interests, as discussed by Capella (2018).

23 It is also observed that for rural development to be effective for all actors
24 (including family farmers and traditional peoples), it must be treated as a cross-
25 cutting agenda that unites the social, environmental, and economic dimensions,
26 moving beyond a purely sectoral view, in line with the discussions of Stumpf
27 Junior and Balsadi (2015).

28 Data collection also revealed that, with regard to the characteristics of
29 scientists who provide evidence for public policies, the field itself has a direct
30 influence; while gender and age do not play a role, there is a noticeable
31 predominance of male scientists in the field of rural development. The fact that
32 they are based in major urban centers, close to public policy makers, certainly
33 influences the fact that they are more frequently sought out to participate in
34 public policy discussions, and this interaction leads to a greater supply of
35 evidence for public policies. Scientists who devote more time to research are
36 better able to disseminate their findings and have more time to participate in
37 public policy discussions.

38 With regard to structural factors, scientists partially agree that partial or
39 controversial evidence tends to be used less frequently in public policy.
40 Regarding organizational factors, the data confirm that when research
41 institutions encourage scientists to provide scientific evidence to policymakers,
42 this promotes its use. Finally, regarding the quality of the relationship between
43 policymakers and scientists, from the scientists’ perspective, the stronger the
44 relationship between scientists and policymakers, the greater the likelihood that
45 scientific evidence will be utilized.

46

1 **Conclusions**

2
3 Although Brazil possesses a scientific foundation of excellence with global
4 impact in sustainable rural development, the effective mobilization of this
5 knowledge for public management faces structural, political, and
6 communication barriers. The country misses strategic opportunities due to the
7 lack of a more direct and less bureaucratic channel of communication with public
8 authorities.

9 Brazil stands out as a key player in the environmental and rural debate, with
10 robust research on ecosystems and land use that underpins climate treaties and
11 deforestation metrics. However, this strength is limited by a geographical
12 concentration in the Southeast and a marked gender disparity, with only 15.9%
13 of women among sustainable rural development scientists (direct or indirect).
14 This lack of diversity may compromise the plurality of perspectives needed to
15 address the “complex problems” of the countryside, which require cultural and
16 contextual awareness.

17 A gap remains between the production of scientific articles and the needs of
18 policymakers. While scientists generally focus on peer-reviewed journals filled
19 with technical jargon, policymakers rely on technical reports and accessible
20 communication. However, some scientists—such as those cited in the report and
21 interviewed for this study—have achieved greater success than others. Since the
22 research is still ongoing, it is not yet possible to identify the specific factors, but
23 some indications suggest that belonging to strong and influential research
24 groups; being on the faculty of universities in major urban centers that are closer
25 to policymakers; and working in fields of knowledge with extensive high-quality
26 output in which Brazil is a leader—these are some examples of what can already
27 be observed so far.

28 It is also observed that the use of science in politics is not neutral and suffers
29 from the “politicization” of research, in which evidence may be selected solely
30 to legitimize decisions already made or discarded when it contradicts the
31 interests of dominant groups. This asymmetry is reflected in practice: policies
32 aimed at commodity agribusiness tend to be more evidence-based in their
33 formulation, while those aimed at family farming and settlers use science
34 primarily in the evaluation and monitoring phases.

35 For Brazilian science to maximize its impact, research institutions and
36 funding agencies must treat scientific dissemination as a strategic resource,
37 rather than merely an individual and voluntary effort on the part of scientists.
38 There is an urgent need for specific funding to professionalize this
39 communication, enabling institutions to break down barriers to dialogue and
40 establish a continuous flow of scientific advice to the government.

41 In short, the success of the sustainable rural development paradigm in Brazil
42 depends on transforming science from a “stock of knowledge” into a constant
43 flow of dialogue. This requires overcoming gender and regional barriers,
44 professionalizing the dissemination of knowledge, and ensuring that scientific
45 evidence is the central pillar in building a public agenda that reconciles the
46 economy, the environment, and social justice.

1 In this sense, scientific dissemination should not be viewed merely as an
 2 educational act, but as a strategic and political resource capable of democratizing
 3 knowledge and ensuring that public management acts in harmony with the
 4 country's scientific reality.

7 References

- 9 Bernardo, Cristiane Hengler Corrêa Bernardo; Gleiser, Marcelo. (2022). *Desmistificando a*
 10 *ciência: um caminho para uma política de divulgação científica*. Relatório de
 11 Pesquisa. São Paulo: Fapesp.
- 12 Bevilacqua, Solon, da Paixão, Larissa L. O., de Lima, Renato Sérgio, & da Silva,
 13 Patrícia Cipriano Barcellos (2021). Um estudo bibliométrico sobre gestão baseada
 14 em evidências com enfoque nas políticas públicas no Brasil. *Revista Gestão e*
 15 *Organizações*, 6(1), 103-122.
- 16 Böcher, Michael (2008). Regional governance and rural development in Germany: the
 17 implementation of LEADER+. *sociologia ruralis*, 48(4), 372-388.
- 18 Bori-Overton (2025). *Os cientistas brasileiros que mais influenciam políticas públicas*.
 19 Relatório técnico. Publicado em outubro de 2025. Disponível em: <https://abori.com.br/relatorios/>
- 21 Breviglieri, Gustavo Velloso, Osório, Guarany Ipê do Sol, Lambiasi, Layla, & Monzoni
 22 Neto, Mário Prestes (2019). Aplicação de instrumentos de divulgação científica para
 23 apoiar a implementação do Plano Nacional de Adaptação à Mudança do Clima.
- 24 Bueno, Wilson Costa (2010). Comunicação científica e divulgação científica: aproximações
 25 e rupturas conceituais. *Informação & informação*.
- 26 Carneiro, Maria José, & Silva Rosa, Teresa. (2018). A ciência e seus usos na política: uma
 27 reflexão sobre a Política Baseada em Evidências. *Estudos Sociedade e Agricultura*,
 28 26(2), 331-352.
- 29 Capella, Ana Cláudia Niedhardt (2018). *Formulação de políticas públicas*. Brasília: Enap.
- 30 Crowley, D Max, Scott, J Taylor, Long, Elizabeth C, Green, Lawrie, Israel, Azaliah,
 31 Supplee, Lauren, Jordan, Elizabeth, Oliver, Kathryn, Guillot-Wright Shannon,
 32 Gay, Brittany, Storace, Rachel, Torres-Mackie Naomi, Murphy, Yolanda, Donnay,
 33 Sandra, Reardanz, Jenna, Smith, Rebecca, McGuire, Kristina, Baker, Elizabeth,
 34 Antonopoulos, Ana, McCauley, Mary & Giray, C. (2021). O uso de evidências
 35 científicas pelos legisladores pode ser melhorado. *Anais da Academia Nacional de*
 36 *Ciências*, 118 (9), e2012955118.
- 37 Dias, Raphael Igor Da Silva Correa, Barreto, Jorge Otávio Maia, Vanni, Tazio, Candido,
 38 Ana Maria Silveira Costa, Moraes, Luciana Hentzy, & Gomes, Maria Augusta
 39 Rodrigues (2015). Estratégias para estimular o uso de evidências científicas na
 40 tomada de decisão. *Cadernos Saúde Coletiva*, 23(3), 316-322.
- 41 Hentz, C., & Aparecida de Medeiros Hespanhol, R. (2019). O programa de aquisição
 42 de alimentos (PAA): a evolução de uma política pública múltipla. *Geosul*, 34(72).
- 43 Hutchings, Jeffrey A., & Stenseth, Nils Chr. (2016). Communication of science advice
 44 to government. *Trends in ecology & evolution*, 31(1), 7-11.
- 45 Hutchings, Jeffrey. A. (2022). Tensions in the communication of science advice on fish
 46 and fisheries: northern cod, species at risk, sustainable seafood. *ICES Journal of*
 47 *Marine Science*, 79(2), 308-318.
- 48 Innvaer, Simon, Vist, Gunn, Trommald, Mari, & Oxman, Andrew (2002). Health
 49 policy-makers' perceptions of their use of evidence: a systematic review. *Journal*
 50 *of health services research & policy*, 7(4), 239-244.

- 1 Faria, Carlos Aurélio Pimenta Da, & Sanches, André Emílio (2022). Mapeamento e
2 caracterização do movimento das políticas públicas baseadas em evidências no
3 Brasil. Brasília: IPEA.
- 4 Koga, Natália Massaco, de Moura Palotti, Pedro Lucas, do Couto, Bruno Gontyjo, do
5 Nascimento, Maricilene Isaira Baia & da Silva Lins, Rafael (2020). *O que informa*
6 *as políticas públicas: survey sobre o uso e o não uso de evidências pela burocracia*
7 *federal brasileira* (No. 2619). Texto para Discussão.
- 8 Kumar, Devesh. (2022) Public Engagement in Agricultural Extension Activities: Issues
9 and Challenges in Science Communication for Rural Development. *Journal of*
10 *Agricultural Science & Engineering Innovation (JASEI)*, Vol. 3, No. 1.
- 11 Levin, Ben (2008, May). Thinking about knowledge mobilization. In *an invitational*
12 *symposium sponsored by the Canadian Council on Learning and the Social*
13 *Sciences and Humanities Research Council of Canada* (pp. 15-18).
- 14 Pires, Roberto Rocha Coelho (2018). O trabalho na burocracia de médio escalão e sua
15 influência nas políticas públicas. Brasília: Ipea. Disponível em < [https://repositorio](https://repositorio.ipea.gov.br/server/api/core/bitstreams/4e63e0d5-ffa6-4b39-a151-df79feb22e7d/content)
16 [.ipea.gov.br/server/api/core/bitstreams/4e63e0d5-ffa6-4b39-a151-df79feb22e7](https://repositorio.ipea.gov.br/server/api/core/bitstreams/4e63e0d5-ffa6-4b39-a151-df79feb22e7d/content)
17 [d/content](https://repositorio.ipea.gov.br/server/api/core/bitstreams/4e63e0d5-ffa6-4b39-a151-df79feb22e7d/content)>. Acesso em 15 de maio de 2026.
- 18 Powell, Alison, Davies, Huw T., & Nutley, Sandra M. (2018). Facing the challenges of
19 research-informed knowledge mobilization: ‘Practising what we preach’?. *Public*
20 *Administration*, 96(1), 36-52.
- 21 Pugel, Jessica, Long, Elizabeth C., Fernandes, Mary A., Cruz, K., Giray, C., Crowley,
22 D. M., & Scott, J. T. (2022). Who is listening? Profiles of policymaker engagement
23 with scientific communication. *Policy & Internet*, 14(1), 186-201.
- 24 Purtle, Jonathan, Dodson, Elizabeth A., & Brownson, Ross C. (2017). Policy
25 dissemination research. *Dissemination and implementation research in health:*
26 *Translating science to practice*, 2, 433-447.
- 27 Riege, Andreas & Lindsay, Nicholas. (2006). Knowledge management in the public
28 sector: stakeholder partnerships in the public policy development. *Journal of*
29 *knowledge management*, 10(3), 24-39.
- 30 Rowe, Gene, & Frewer, Lynn Jayne (2005). A typology of public engagement
31 mechanisms. *Science, technology, & human values*, 30(2), 251-290.
- 32 Schneider, Sérgio. (2004) A abordagem territorial do desenvolvimento rural e suas
33 articulações externas. *Revista Sociologias*, ano 6, nº 11, p. 88-125.
- 34 Silva, José Antônio Aleixo Da, Rodrigues, Ricardo Ribeiro, Nobre, Antônio Donato,
35 Joly, Carlos Alfredo & Gandolfi, Sergius (2017). As relações entre a comunidade
36 de CT&I, por meio de suas entidades representativas, e o poder Legislativo: o
37 Código Florestal. *A Ciência e o poder legislativo*, 197-il.
- 38 Solesbury, William (2001). *Evidence based policy: Whence it came and where it's*
39 *going*. London: ESRC UK Centre for Evidence Based Policy and Practice.
- 40 Stumpf Junior, Waldyr., Balsadi, O. V., Junior, W. S., & Balsadi, Otávio Valentim
41 (2015). *Políticas públicas e pesquisa para o desenvolvimento rural no Brasil*.