PRIMER

BSR

The Right to Science

APRIL 2021

An issue brief on how companies can meet their responsibility to respect the right to science—as well as opportunities to promote the enjoyment, fulfillment, and realization of this right.

The extraordinary speed with which COVID-19 vaccines were developed by the private sector demonstrates how significant science is to the role of business in enabling the realization of human rights. However, the pandemic should not be considered a one-off—the role of companies in respecting and promoting the right to science will grow substantially over the decades to come.

There are two key forces shaping the growing importance of the right to science for business:

» **The expanding role of the private sector in all types of scientific research**. Whether it is as artificial intelligence, agricultural research, food science, biotechnology, nanotechnology, genetic engineering, or communications technology, the private sector is increasingly the main source of capital, research, expertise, and breakthroughs.

  It is essential that companies meet their responsibility to respect human rights as they engage in scientific research, discovery, and application, especially as they continue to outpace scientific research in the public sector.

» **The significance of science in addressing or contributing to global challenges.** Whether it is climate change, public health, or access to information, science will play an increasingly important role in many of the megatrends impacting our collective ability to support the enjoyment, fulfillment, or realization of human rights.

  It is essential that we have a collective understanding of the link between science and human rights in each of these areas and understand how advances in scientific progress may both enhance the realization of rights and result in an inequitable distribution of benefits.

Despite this, there is a distinct lack of literature exploring the right to science and the role of companies. In this context, the publication in 2020 of a new General Comment No. 25 on the Right to Science by the

UN Committee on Economic, Social, and Cultural Rights was a significant development, and this primer interprets its significance for companies, along with other relevant literature.[1] [2] [3] [4]

General Comment No. 25 states that science encompasses both natural and social sciences and refers to both a process following a certain methodology (i.e., doing science) and to the results of this process (i.e., knowledge and applications).

The right to science is found in two places:

» **Article 27 of the Universal Declaration of Human Rights (UDHR)** sets out the right to "share in scientific advancement and its benefits."

» **Article 15 of the International Covenant on Economic, Social, and Cultural Rights (ICESCR)** sets out the right "to enjoy the benefits of scientific progress and its applications."[5]

While these Articles are written for states rather than the private sector, companies clearly have a significant role to play in spreading the benefits of scientific progress and its applications—think everything from vaccines to technology—as well as a basic responsibility to respect these rights under the UN Guiding Principles on Business and Human Rights (UNGPs).

We believe that there are seven main implications for companies relating to the right to science.

1. **Science should be deployed in the service of the universal enjoyment of human rights.** General Comment No. 25 states that "science in the service of peace and human rights should be prioritized by States over other uses." Companies can take inspiration from this in their research strategies by establishing the potential to fulfill human rights as a criterion when prioritizing research efforts to fund and when reviewing the success of research efforts over time.

2. **The right to science applies to everyone.** The right to benefit from scientific progress connotes a right of accessing scientific knowledge, information, and applications for everyone without discrimination—in other words, this is a right for ordinary citizens, not just scientific professionals. The right to science encompasses the following:

    a. **Availability**—scientific knowledge and its applications should be widely disseminated and distributed, especially to marginalized populations and vulnerable groups. Here, intellectual property regimes and business model decisions (such as pricing) that influence the availability of the benefits of applications are important, especially if they impact the ability of governments to fulfill their human rights obligations (such as the right to the highest attainable standard of health for their population).

---

[1] General comment No. 25 (2020) on science and economic, social and cultural rights (article 15 (1) (b), (2), (3) and (4) of the International Covenant on Economic, Social and Cultural Rights)

[2] Report of the Special Rapporteur in the field of cultural rights, Farida Shaheed, on the right to enjoy the benefits of scientific progress and its applications;

[3] Declaration on the Use of Scientific and Technological Progress in the Interests of Peace and for the Benefit of Mankind

[4] Venice Statement on the Right to Enjoy the Benefits of Scientific Progress and its Applications

[5] Both Articles also describe the right to the protection of the moral and material interests resulting from any scientific, literary, or artistic production of which the rightsholder is the author. However, this primer does not cover this topic.

b. **Accessibility**—scientific progress and its applications should be accessible without discrimination, such as making knowledge accessible for different geographies, languages, and capabilities, especially when instrumental for the enjoyment of other rights. Here, the role of business in supporting the fulfillment of the right to education may be important.

c. **Quality**—the most advanced and generally accepted science available should be shared, including the appropriate regulation and certification of new scientific applications.

d. **Acceptability**—science should be explained, and its applications disseminated in a manner that facilitates their acceptance in different social and cultural contexts, acknowledging that ideological, religious, or cultural beliefs may be disturbed by the progress of science. Acceptability also means that scientific research incorporates ethical standards that respect human dignity, autonomy, and free and informed consent.

While these principles apply to states, companies can use them as inspiration for their own approaches—for example, by investing in initiatives that promote access to and understanding of science among a diverse range of communities.

In addition, they underscore the urgent need for government policies and regulations to keep pace with rapid scientific progress being led by the private sector, such as affective technology, machine learning, and artificial intelligence,

3. **Human rights due diligence should be undertaken on research, including whether research should be undertaken in the first place.** Just like any other business activity, companies should subject their scientific research to human rights due diligence by identifying potential adverse impacts that could arise from scientific progress and its applications and establish appropriate measures—such as new and revised research questions—to address potential adverse impacts.

   However, scientific research is further removed from actual and potential human rights impacts than typical company operations, and for this reason, innovative methods of ongoing due diligence will be needed.

   Specifically, human rights due diligence of research will need to: (1) anticipate a wider variety of outcomes given the uncertain destination of research; (2) be truly ongoing, given the extended timeline of research; and (3) explore the relationship between the research and the enjoyment of other human rights. In some cases, companies will need to address the dilemma of whether research should be undertaken at all or whether it should be abandoned if severe human rights impacts appear reasonably foreseeable.

4. **Companies need diverse research teams and relationships.** Human rights due diligence of scientific research should pay special attention to the needs of vulnerable groups that have experienced systematic discrimination in the enjoyment of the right to science, such as women, persons with disabilities, LGBTI persons, indigenous peoples, rural populations, and persons living in poverty. However, the effectiveness of this approach will be enhanced by increasing the diversity of research staff, direct engagement with affected populations, and through the development of relationships with civil society organizations that provide informed insights into the interests of vulnerable groups.

5. **Companies should provide the public with accessible information concerning the risks and benefits of science and technology so that informed decisions can be made.** General Comment No. 25 and other related commentary emphasize the importance of transparency, participation, and informed decision making on scientific advancements.

   For example, the 2012 report of the UN Special Rapporteur in the field of cultural rights[6] emphasizes "opportunities given to individuals and peoples to make informed decisions after considering both the possible improvements offered by scientific advances and their potential side effects or dangerous usages."

   Similarly, General Comment No. 25 states that "information concerning the risks and benefits of science and technology should be accessible" so that informed judgments can be made and "enable society, through informed, transparent and participatory public deliberation, to decide whether or not the risks are acceptable."

   This emphasis implies an important role for companies in publishing information about the impact of their research on the realization of human rights so that that policy makers, society, and the public at large can make informed judgments.

6. **Companies should deploy approaches based on informed consent.** The issue of informed consent is becoming more important when scientific research falls outside of preexisting ethical frameworks for consent—for example, new methods of research utilizing the collection; storage, use, and sharing of data in machine learning; and big data analytics for the purposes of artificial intelligence. Consent is defined by both participation (i.e., the ability to participate in decisions) and empowerment (i.e., the ability to understand both risks and rights when consenting).

7. **The right to science has limits.** There are legitimate limitations to the right to science that companies should be aware of, such as when scientific research may be deployed or misused for nefarious purposes.

   General Comment No. 25 states that "some limitations on the right to participate in and to enjoy the benefits of scientific progress and its applications might be necessary, as science and its applications can, in certain contexts, affect economic, social, and cultural rights." General Comment No. 25 and previous relevant literature draw upon recognized international human rights standards—especially those relating to freedom of expression—to suggest that limitations should be determined by law, have a legitimate purpose (i.e., human rights protection), be proportionate (i.e., the least restrictive measures possible), and be necessary (i.e., cannot be achieved by other means). These limits have implications for the scientific research that companies may choose to pursue or publish.

What's Next?

BSR anticipates that new dilemmas about how to respect the right to science will emerge over time. We offer the following questions and dilemmas as meriting deeper exploration:

[6] https://digitallibrary.un.org/record/730844?ln=en

» On scientific research, when is it right to abandon research priorities on account of potential future harms arising from use of the research, even if the same research has the potential to bring benefits too?

» On the application of scientific research, how should responsibility for addressing adverse human rights impacts be distributed between the entity undertaking the research and the entity using it?

» On the growth of climate disinformation, when and how is it right for companies to restrict freedom of expression in order to pursue the goal of high-quality public information on the science of climate change?

» On intellectual property, what approaches will both respect the material interests of the user and spread the benefits of scientific research? How can incentives be designed that reward investment in research while ensuring that the benefits are widely distributed?

These are not easy questions, and they will benefit from further exploration, debate, and dialogue. We believe that the right to science is a right for our times, and we look forward to exploring these and other difficult questions with our member companies.

ABOUT BSR

BSR™ is an organization of sustainable business experts that works with its global network of the world's leading companies to build a just and sustainable world. With offices in Asia, Europe, and North America, BSR™ provides insight, advice, and collaborative initiatives to help you see a changing world more clearly, create long-term business value, and scale impact. Visit www.bsr.org for more information about BSR's 25 years of leadership in sustainability.

ABOUT THIS REPORT

This report was written by Dunstan Allison-Hope, Hannah Darnton, Joanna Lovatt, and Cynthia Wang.

www.bsr.org