**Written contribution in response to the invitation to comment on the draft general comment *on the right to enjoy the benefits of scientific progress and its applications* Article 15 of the ICESCR**

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**Introduction and basic premises**

1. The general comment needs to present the REBSP in the context of it being a *‘facilitatory’* right to other rights, such as the right to health, as opposed to it being an end in itself.
2. The definition of science in the general comment needs to be broadened to include the concept of indigenous knowledge. Indigenous knowledge, also known as local knowledge, folk knowledge, people's knowledge, traditional wisdom or traditional science is critical to advancing human rights for a lot of communities without access to western technology. It forms the basis for agriculture, food preparation and conservation, health care, education, and the wide range of other activities that sustain a society and its environment in many parts of the world for many centuries.[[1]](#footnote-1) Article D should also be brought up under the definition of science and scientific progress.
3. Include the guidance of the Special Rapporteur in the field of Cultural Rights (2012) on what she considered to be the normative content of the right as follows, “*access by everyone without discrimination to the benefits of science and its applications, including scientific knowledge; opportunities for all to contribute to the scientific enterprise and freedom indispensable for scientific research; participation of individuals and communities in decision-making and the related right to information; and an enabling environment fostering the conservation, development and diffusion of science and technology”*.[[2]](#footnote-2)
4. Refer to the REBSP as the right to enjoy the benefits of scientific progress and its application and not as the *right to science*. A right to science can mean different things to different people and might reduce the right to simply the production of science and the protection of the authors. It is important that the enjoyment of benefits is explicit in the name of the general comment and the right itself

**Elements of the Right**

1. *Availability* also means that the production of science is actually taking place and the results are widely available. This requires a strong research infrastructure, a national framework law and adequate resources towards investments in science, technology and innovation (STI). The state must both marshal its own resources and coordinate the actions of multiple other actors in order to make ensure science happens and benefits of scientific progress are widely available to the public with particular attention to the vulnerable and marginalised populations.
2. The element of availability also requires investment in education. State parties need to take deliberate steps to progressively achieve universal access to education. Investing in the education of the people and availing opportunities for people to engage in scientific work will contribute to the number of scientists and the number of scientific outputs and applications. Consequently, this may expedite scientific progress in a number of fields including health
3. *Accessibility* to the benefits of scientific progress means there need to be support systems and processes that encourage the application of science and its diffusion into knowledge or products that the public can use. Accessibility also means ensuring physical, economic, and information accessibility, and non-discrimination. It is important to note that access to benefits of scientific progress needs to be tailored to specific groups depending on what applications are most appropriate for specific users. In this regard, we second the submission made by the American Association for the Advancement of Science (AAAS) to the Committee in 2018, suggesting a continuum of access to scientific benefits which places the general public and scientists on two ends of the continuum.
4. Scientific progress must show quality in both **process** and **outcomes**. Quality in the process may include proper training for researchers as well as maintaining ethical standards in their research. Quality in outcomes would mean ensuring that the products and new knowledge arising from science meets certain standards of quality. Another important element of quality in REBSP is ensuring that the application of scientific progress contributes to the advancement of people’s dignity. This reiterates the notion that progress must be positive and imply advancement from the current state. Ensuring quality in science must therefore, go beyond the notion that quality is the absence of errors, but should focus on how science can improve the quality of life, particularly for those living in harsh social and economic conditions.

**Obligations**

**State Obligations**

1. We propose that the REBSP should impose four types of obligations on the state: (i) core obligations which should be prioritised by the state; (ii) specific legal obligations which specifically apply to the REBSP (iii) general obligations by virtue of the REBSP being an ESC right and (iv) extraterritorial obligations in the context of the need for international cooperation

## Core obligations

1. We posit that the state has the core obligation to:
* ensure the satisfaction of, at the very least, minimum essential levels of the REBSP
* develop a national framework law on the REBSP to enforce the right and provide legal relief or remedies in case of violations;
* ensure access to scientific discoveries which are critical to the facilitation of good health, including access to effective diagnosis and treatment on a non-discriminatory basis, especially for vulnerable and marginalised groups;
* adopt and implement a national R&D strategy that promotes the production of science and access to benefits arising from science for the whole population, but especially communities whose lives are hugely impacted by the lack of such R&D;
* ensure public and third parties’ resources are directed to where there is the greatest need for scientific progress in health, including in neglected diseases and among vulnerable and marginalised populations, and
* develop a list of essential research areas which receive priority in terms of financial and technical support and international cooperation.

## Obligation to protect

1. We propose that the Committee adds the following to the obligation to protect. States must:
* Monitor and regulate the conduct of third parties
* Compel third-parties doing research in local communities to make ensure that the benefits such as knowledge or applications are available to such communities at low or no cost, and
* Monitor the potentially harmful effects of science and technology to effectively react to findings and inform the public in transparent ways

## Obligation to fulfil

1. States must take deliberate, concrete measures to progressively achieve the full realisation of the REBSP and must meet its minimum core obligations so that everyone has access to scientific progress necessary for their health, dignity and well-being. Such measures involve administrative, legislative, economic, technical and structural cooperation. The state must allocate maximum available resources towards these measures in a transparent and accountable manner. We propose the following specific measures to fulfil the REBSP:
* Facilitating access to scientific knowledge and products such as medicines by reviewing national laws and policies that govern scientific research and development.
* Creating enabling legal and policy environments which balance the rights of authors and those of users in benefiting from scientific progress.
* Mobilising public and private research into more effective diagnosis and treatment approaches for neglected diseases.
* Providing access to education and information concerning main health problems such as TB in communities including methods of preventing and controlling them, and widely disseminating research findings.
* Providing appropriate training for health researchers, scientists and personnel, including education on science, health and human rights.

**Extraterritorial obligations (ETOs)**

1. We call upon the Committee to add extraterritorial obligations under international cooperation. Principle 29 of the Maastricht Principles provides guidance on the expectations on the part of states as far as ETOs are concerned. States need to take deliberate, tangible and targeted steps, individually, and “jointly through international cooperation, to create an international enabling environment”,[[3]](#footnote-3) conducive to the realisation of the REBSP. States should among other things ensure that their citizens, as well as state or non-state agencies outside their borders, desist from infringing on or curtailing the REBSP of individuals or communities. The scope of the REBSP, which requires multiple domestic and international actors makes the right a fitting candidate for ETOs. Based on the Committee’s recommendations on ETOs in General Comment 24, we propose the following REBSP ETOs:
2. **Respect:** The ETO to respect requires state parties to refrain from directly or indirectly interfering with people’s enjoyment of the REBSP outside its borders. In meeting their ETO to respect, state parties must ensure that they do not obstruct another State from meeting its obligations under the REBSP. The ETO to respect is “particularly relevant to the negotiation and conclusion of trade and investment agreements or of financial and tax treaties as well as to judicial cooperation”[[4]](#footnote-4) this is very important in relation to IP rights.
3. **Protect:** The ETO to protect requires state parties to take steps to prevent and redress infringements of the REBSP which occur outside their borders due to the activities of third parties such as multinational corporations over which they have the ability to exercise control. The ETO to protect is particularly important in situations where judicial remedies through domestic courts within the state where the harm occurs are unavailable or ineffective.[[5]](#footnote-5) Discharging the ETO to protect requires international cooperation particularly from multinational corporations and their subsidiaries. The home states of multinational corporations have an obligation to regulate and monitor the conduct of multinational companies abroad.
4. **Fulfil:** The ETO to fulfil requires the state to contribute to creating an international environment that enables the realisation of the REBSP. Specifically, the international community needs to cooperate with local states struggling in health R&D and direct efforts and resources to assist such countries. These states need to take necessary steps through legislation and policies, including diplomatic and foreign relations measures…to promote and help create an environment where the production of science thrives, and the enjoyment of benefits from scientific progress is guaranteed.

# **Responsibilities of non-state actors**

1. State Parties that have ratified the ICESCR are primary duty bearers of the REBSP. However, they are not the only duty-bearers as there are also non-state actors with responsibilities such as drug manufacturing companies and research institutions, which may or may not utilise public funds to conduct research. Such actors should bear the responsibility to avail their products to the state and the people. Therefore, a non-state actor has the responsibility to:
* desist from infringing on people’s right to enjoy the benefits of scientific progress
* engage in responsible R&D, by avoiding harm and holding the highest ethical standards of science and research,
* direct resources towards research into public health concerns
* develop dissemination strategies for research to ensure that information is packaged accurately for each target audience
* use need and not profit to determine research areas, if such research is on public health,
* abide by the laws of a particular territory where the non-state actor conducts business regardless of its country of origin or registration (particularly for transnational corporations),
* monitor and regulate the conduct of its subsidiaries, ensuring respect for human rights,
* develop a corporate social responsibility framework that fosters public health good, and
* share information on the cost of producing diagnostic tools or treatment and anticipated profits after cost recovery.
* Accept fair balance between intellectual property rights and access to essential medicines and be fair in determining prices of medicines and tools

**Science and the right to health**

1. Considering the important facilitatory role that the REBSP has to the right to health, the general comment needs a specific section that deals with science and the right to health
2. The link between the REBSP and the right to health has sparked interest from public health and human scholars in recent years. Access to medicines does not only mean investing in research and development to meet health needs, but also ensuring that R&D is translated into products and that those most in need of these products including vulnerable populations have access to them. Inadequate, and in some cases sheer lack of investment in researching diseases affecting the poor, exacerbate absence of effective health technologies such as vaccines, drugs and diagnostics.
3. The REBSP is intricately connected to the right to health in a number of ways. First, in order for people to enjoy the right to health, it is necessary to continuously invest in newer and more effective scientific research that can make health accessible and affordable to everyone, particularly the most vulnerable. In this respect, the REBSP becomes a vehicle for realising the right to health. Second, the REBSP has implications on how scientific advancements are produced, shared and utilised. Because authors of scientific progress are protected through intellectual property rights, the REBSP assists in making sure that these property rights are not realised at the expense of human rights. The REBSP becomes a significant mediator between a human right (the right to health) and a property right (intellectual property rights.)
4. For the right to health to be realised the state needs to meet its obligations under Article 12(2) (C) of the ICESCR – which include the prevention, treatment and control of epidemic, endemic, occupational and other diseases. In this regard, scientific progress is expected to result in new, advanced and better ways of providing for health needs such as epidemic prevention, control or treatment. It is afterall scientific research which has led to breakthroughs in managing diseases from prevention to diagnosis to treatment. For tuberculosis, the contribution that investment in TB research would bring, includes better science about prevention, enhancing access to current treatment despite its side-effects and also better use of available regimens. Scientific research has also the potential to discover safer, more effective and affordable medicines to treat both drug-susceptible and drug-resistant TB.

**Special topics of broad application**

**Non-discrimination**

The following broad considerations must be taken into account to ensure non-discrimination:

* Integration of a gender perspective in scientific and health-related policies, programmes and research
* Development and implementation of a comprehensive national strategy to promote women’s participation in R&D, including deliberate policies on gender equality in science, technology, engineering and mathematics (STEM).
* Provision of a safe and supportive environment for adolescents and young people that ensures opportunities to participate in the production and application of science.
* Development of specific measures that meaningfully engage and accommodate persons with disabilities as well as ethnic minorities.

**The REBSP and other human rights**

1. Due to the broad and multi-dimensional nature of science, there are very close links between the REBSP and other human rights guaranteed in international law, such as:
* The right to health- requires scientific progress in order to be realised whether it is in medicines, medical equipment or delivery of health services; good science is necessary for effective and quality healthcare.
* The right to food- requires scientific progress to mitigate the impact of climate change and global warming on food production; to advance climate smart agriculture, and to contribute food security and are the result of scientific research.
* The right to education- is one right that actually does not only benefit from scientific progress but significantly contributes to it; education is a precondition for scientific progress.
* The right to property- includes intangible property such as intellectual property; a result of scientific research and development.

**National implementation of the right**

1. It is important that states develop normative guidelines for applying the REBSP to specific human rights or sectors such as health, education, food, environment etc. Only then can states develop clear and specific minimum essential levels of the REBSP, and work to meeting them. However, at the general comment level, the Council should provide broad and adaptable minimum essential levels of the REBSP. In light of this, we propose that minimum essential levels need to be fewer in number, we propose the following minimum essential levels for the REBSP based on the components of the REBSP (production of science, and access to its benefits)

**Minimum essential levels**

## Production of scientific progress

* To ensure, at the very least, the right of access to research health facilities, resources, and infrastructure, without discrimination, and to prioritise researchers whose work seek to contribute to health and wellbeing of the population especially the vulnerable and marginalized populations;
* To have a national science system in place which supports the production of science and removes impediments to scientific progress;
* To have in place a globally agreed but nationally adapted list of essential research, which is critically needed to address public health challenges;
* To equitably distribute research resources (human and financial) and infrastructure across the rural-urban divide, and especially target vulnerable and marginalised populations;
* To have in place a national research strategy and action plan, which is based on evidence of need, and prioritises the production of science in most neglected diseases and for the most vulnerable populations; the action plan and strategy need to be periodically revised, through a transparent and participatory process; the strategy and action plan must include a scorecard and monitoring framework upon which measurement of progress should be based;
* To create an enabling legal and policy environment for the production of science.

## Access to the benefits of scientific progress

* A legal framework is in place which guarantees access to scientific information directly impacting on the health and well-being of the population;
* Laws are developed and implemented which ensure access to research data and information resulting from publicly-funded research;
* To ensure adequate training for professionals in using and applying modern tools and medicines resulting from scientific progress;
* To ensure that people have access to basic education and skills necessary for the comprehension and application of scientific knowledge;
* Communities, groups and individuals are aware of their entitlements within the REBSP and have information on the obligations of the state and responsibilities of non-state actors;
* The regulatory environment is conducive for expedited registration of tools and drugs that show potential for improving people’s lives from what is currently available.
1. These minimum essential levels are general enough to be adapted to specific country contexts, and require the effort of both state and non-state actors to be met. Further, the minimum essential levels comprise the basis for developing core obligations of the state, extraterritorial obligations of foreign states, responsibilities of non-state actors, and entitlements of rights-holders.
1. Senanayake, S.G.J.N.. (2006). Indigenous knowledge as a key to sustainable development. Journal of Agricultural Sciences. 2. 10.4038/jas.v2i1.8117. [↑](#footnote-ref-1)
2. Human Rights Council, 2012 [↑](#footnote-ref-2)
3. Maastricht Principles, Principle 29 [↑](#footnote-ref-3)
4. General Comment 24, Para 29 [↑](#footnote-ref-4)
5. General Comment 24, Para 30 [↑](#footnote-ref-5)