

# **Venice Statement on the Right to Enjoy the Benefits of Scientific Progress and its Applications**

## **Introduction**

1. In the light of the increasing relevance and continued neglect of the right to enjoy the benefits of scientific progress and its applications, as included *inter alia* in Article 27 of the Universal Declaration of Human Rights and Article 15(1)(b) of the International Covenant on Economic, Social and Cultural Rights (ICESCR), three expert meetings were convened by UNESCO in collaboration with the Amsterdam Center for International Law, the Irish Centre for Human Rights, and the European Inter-University Centre for Human Rights and Democratisation, in Amsterdam, the Netherlands, on 7-8 June 2007, in Galway, Ireland, 23-24 November 2008, and Venice, Italy, 16-17 July 2009.
2. The following preliminary findings and proposals emerged from the discussions at these meetings, with the aim of clarifying the normative content of the right to enjoy the benefits of scientific progress and its applications and generating a discussion among all relevant stakeholders with a view to enhance the implementation of this right.

## **I. The Contemporary Relevance of the Right**

3. The acceleration of the production of knowledge in the context of globalization has increased the effects on human rights in both positive and negative ways, with consequences for inequalities among and within States and across generations. We have identified many examples of these conflicting trends, including the following:
  - i. In the area of food production, although scientific advances have significantly increased crop yields, they may also reduce crop genetic diversity, widen the gap between poor farmers and large-scale producers, and thus affect the right to food.
  - ii. Scientific advances in medicine have helped to cure more diseases and enhance the quality of life. However, these advances are driven primarily by market considerations that often do not correspond to the health needs of the world's population as a whole, thus affecting the right to health.
  - iii. Advances in information and communication technologies have expanded opportunities for education, freedom of expression and trade.

But they have also widened the “digital gap,” and facilitated infringements of privacy, incitement to hatred and censorship, and thus affect the full spectrum of human rights as well as cultural diversity.

4. Significant disparities are increasing among States concerning the availability of resources, capabilities, and infrastructure necessary to engage in research and development. The acceleration of scientific progress is widening the divide between the most and least scientifically and technologically advanced societies. The resulting lack of access reduces the ability to enjoy human rights, including the ability to hold governments accountable, particularly for the direction of scientific progress and its impact on human rights.
5. The relationship between human rights and science is further complicated by the fact that private and non-State actors are increasingly the principal producers of scientific progress and technological advances. It is the responsibility of States to ensure that all relevant interests are balanced, in the advance of scientific progress, in accordance with human rights.

## **II. Conceptual challenges**

6. The ongoing process of science has different meanings and implications in different contexts and may pose significant challenges for human rights in the world today. The processes, products and applications of science should be used for the benefit of all humanity without discrimination, particularly with regard to disadvantaged and marginalized persons and communities. That requires attention to five main issues.
7. First, it is necessary to clarify the nature of scientific knowledge, progress or advancement and who decides on goals, policies, allocation of resources and possible conflicts between freedom of research and the protection of other human rights and human dignity. In addition, whereas the individual right to enjoy the benefits of scientific progress and its applications must be respected, the rights of communities to share in these benefits must be recognized as equally important.
8. Second, freedom of inquiry is a vital element in the development of science in its broadest sense. Science is not only about advancing knowledge of a specific subject matter, nor merely about procuring a set of data and testing hypotheses that may be useful for some practical purpose. It is also, at the same time, about enhancing the conditions for further scientific and cultural activity.
9. Third, States, commercial enterprise and the scientific community have a responsibility to ensure support for scientific inquiry and dissemination of scientific knowledge, and to actively pursue capacity building on a global scale, particularly in those countries which are relatively inactive in this regard.

10. Fourth, the right to enjoy the benefits of scientific progress and its applications may create tensions with the intellectual property regime, which is a temporary monopoly with a valuable social function that should be managed in accordance with a common responsibility to prevent the unacceptable prioritization of profit for some over benefit for all.
11. Fifth, in the context of Article 15 1(b) ICESCR, enjoyment as “participation” is distinct from enjoyment as actual “sharing” in the benefits of scientific progress and its applications. Participation in scientific progress is valuable in its own right, and while the benefits of science should be shared equitably, neither of these components of the right is a substitute for the other. The right to share in scientific benefits should not be predicated on participation, particularly where there is a direct threat to fundamental rights, most notably the rights to life, health and food.

### **III. Elements of the Normative Content and State Obligations**

#### *Fundamental Principles*

12. In the elaboration of the right to enjoy the benefits of scientific progress and its applications, certain fundamental principles should be considered:
  - a) This right is applicable to all fields of science and its applications.
  - b) A human rights-based approach requires that science and its applications are consistent with fundamental human rights principles such as non-discrimination, gender equality, accountability and participation, and that particular attention should be paid to the needs of disadvantaged and marginalized groups.
  - c) In conformity with the principles of universality, indivisibility, interdependence and interrelatedness, this right is relevant to the realization of other civil, cultural, economic, political and social rights.
  - d) This right is inextricably linked not only to the freedom indispensable for scientific research as enshrined in Article 15(3) ICESCR and the rights of authors and creators as recognized in Article 15(1)(c) ICESCR, as well as those rights where reference to access to science and technology is made (i.e. the right to food (Article 11 ICESCR) and the right to health (Article 12 ICESCR)), but also to other rights, such as to a clean environment, education, information, labor rights, social security, sustainable development, water, where access to science is an implicit requirement for their full enjoyment.
  - e) This right can be enjoyed individually and collectively.
  - f) This right should be applied consistently with the precautionary principle according to which, in the absence of scientific consensus, caution and the

avoidance of steps are required in case an action or policy might cause severe or irreversible harm to the public or the environment.

g) The implementation of this right requires close international cooperation and assistance as it is stipulated by the Universal Declaration of Human Rights and other international instruments.

#### *Normative Content*

13. The normative content should be directed towards the following:

a) Creation of an enabling and participatory environment for the conservation, development and diffusion of science and technology, which implies *inter alia* academic and scientific freedom, including freedoms of opinion and expression, to seek, receive and impart information, association and movement; equal access and participation of all public and private actors; and capacity-building and education.

b) Enjoyment of the applications of the benefits of scientific progress, which implies *inter alia* non-discriminatory access to the benefits of scientific progress and its applications, including technology transfer and capacity-building.

c) Protection from abuse and adverse effects of science and its applications. Areas of contemporary controversy include, for example, stem cell research, nanotechnologies, nuclear energy, GMOs, climate change, generic seeds that can be reused, cloning, ethics of science and technology, new technologies in the working environment. The possibility of adverse effects of science in these and other regards requires that impact assessments should be seen as an integral part of the development of science.

#### *State Obligations*

14. The duty to *respect* should include:

a) to respect the freedoms indispensable for scientific research and creative activity, such as freedom of thought, to hold opinions without interference, and to seek, receive, and impart information and ideas of all kinds;

b) to respect the right of scientists to form and join professional societies and associations, as well as academic autonomy;

c) to respect the freedom of the scientific community and its individual members to collaborate with others both within and across the country's borders, including the free exchange of information, research ideas and results;

d) to take appropriate measures to prevent the use of science and technology in a manner that could limit or interfere with the enjoyment of the human rights and fundamental freedoms.

15. The duty to *protect* should include:

a) to take measures, including legislative measures, to prevent and preclude the utilization by third parties of science and technologies to the detriment of human rights and fundamental freedoms and the dignity of the human person by third parties;

b) to take measures to ensure the protection of the human rights of people subject to research activities by entities, whether public or private, in particular the right to information and free and informed consent.

16. The duty to *fulfill* should include:

a) to adopt a legal and policy framework and to establish institutions to promote the development and diffusion of science and technology in a manner consistent with fundamental human rights. The relevant policies should be periodically reviewed on the basis of a participatory and transparent process, with particular attention to the status and needs of disadvantaged and marginalized groups;

b) to promote access to the benefits of science and its applications on a nondiscriminatory basis including measures necessary to address the needs of disadvantaged and marginalized groups;

c) to monitor the potential harmful effects of science and technology, to effectively react to the findings and inform the public in a transparent way;

d) to take measures to encourage and strengthen international cooperation and assistance in science and technology to the benefit of all people and to comply in this regard with the States' obligations under international law;

e) to provide opportunities for public engagement in decision-making about science and technology and their development;

f) to institute effective science curricula at all levels of the educational system, particularly in the State-sponsored schools, leading to development of the skills necessary to engage in scientific research.

#### **IV. Next Steps**

17. The next steps for the further and comprehensive elucidation of the right to enjoy the benefits of scientific progress and its applications, raising awareness about this

right, its implementation, and the monitoring of its realization, require the cooperation and participation of the following actors: the UN system and other intergovernmental organizations, regional organizations, States, the scientific and academic communities, civil society, and the private sector.

### *UN system and other intergovernmental organizations*

#### *UNESCO*

18. Having taken the lead in promoting international action to advance this right, UNESCO should continue its leadership in raising awareness and contributing to the elucidation of the right. It can utilize its comparative advantage as an institution involving a wide range of relevant disciplines to engage both the scientific and human rights communities through inter-sectoral cooperation. Finally, it should promote wider use of the existing complaint procedure under UNESCO Ex 104/Decision 3.3 to provide a recourse for individuals and groups seeking redress for violations of the right to enjoy the benefits of scientific progress and its applications.

#### *Other Specialized Agencies, Funds and Programmes*

19. Among the institutions with a particular contribution to make in elucidating this right in their fields of competence, FAO, ILO, UNDP, UNEP, UNICEF, WIPO and WHO each has responsibility for aspects of science and technology and could reexamine its role in this regard from the perspective of the right to enjoy the benefits of scientific progress and its applications.

#### *OHCHR*

20. In light of enhanced attention to this right, the OHCHR should devote sufficient financial and human resources to research aimed at clarifying the content, identifying obstacles, detailing positive examples of State practice, and emphasizing the inherent link between this right and other human rights. In servicing the Committee on Economic, Social and Cultural Rights it should provide information useful to strengthen the Committee's dialogue with States Parties in relationship to Article 15(1)(b), and Articles 15(2)-(4) as they relate to science.

#### *Human Rights Council*

21. Consistent with its commitment to giving due attention to economic, social and cultural rights, the Human Rights Council should consider including this right in its agenda and eventually the appointment of an independent expert or special rapporteur. Existing Special Procedures should pay increased attention to this right in the fulfillment of their mandate.

### *Treaty bodies*

22. The treaty bodies should pay adequate attention to this right in relation to their monitoring of specific references to scientific progress and advances in their respective treaties. In particular, the Committee on Economic, Social and Cultural Rights should strengthen its dialogue with States Parties in relationship to Article 15(1)(b) by allowing adequate time during its consideration of States reports, and by reminding States of their need to provide information consistent with the Reporting Guidelines. It should also consider holding a day of general discussion towards the development of a General Comment on Article 15(1)(b).

### *Regional organizations*

23. Given that the region of the Americas was the first to adopt an international document containing this right, the OAS should take steps to implement Article 14 of the San Salvador Protocol. In addition, other regional organizations should consider ways and means of implementing this right.

### *States*

24. To ensure that science and technology policy serve human needs in addition to economic prosperity, States should apply human rights-based approaches to their policies and activities in the field of science and technology. Consistent with their obligations under the Covenant and the right to development, they should also promote international cooperation and assistance to countries that encounter difficulties in developing science and technology policy and science education. The right to enjoy the benefits of scientific progress and its applications implies a duty of States to take measures to protect individuals and communities from possible harmful effects of science and scientific development. States Parties to the ICESCR should report more fully on the implementation of this right in their periodic reports. The realization of this right further requires that States provide remedies for violations in national law and by ratifying the Optional Protocol to the ICESCR.

### *Scientific community*

25. Scientists and their professional organizations can manifest their commitment to this right by developing greater awareness of the meaning and significance of this right and an understanding of its application to the conduct of science, as well as participating in the elucidation of this right.

### *Civil society*

26. Human rights organizations and other civil society groups have a critical role in promoting the implementation of this right through advocacy, such as the preparation of shadow reports to treaty bodies in their consideration of State

reports, and by efforts to protect victims of violations of these rights, including by submitting complaints pursuant to UNESCO EX 104/Decision 3.3 and to the Optional Protocol to the ICESCR in cases of the violation of the freedom necessary for scientific inquiry and of individuals to benefit from advances in science and technology.

*Private sector*

27. It is not inconsistent with the economic objectives of the private sector for enterprises to act in ways that advance this right. The private sector plays a major role in advances in science and technology and should examine ways of contributing to this right, by giving greater attention to the basic needs of disadvantaged and marginalized groups, and in particular the right of all to enjoy the benefits of scientific progress (e.g. consider implementing the Guidelines on Pharmaceutical Companies and Human Rights).