



Statement by His Excellency Archbishop Silvano Tomasi, Permanent Observer of the  
Holy See to the United Nations and Other International Organizations in Geneva  
at the High-Level Segment of the Economic and Social Council  
*Geneva, 4 July 2013*

Mr. President,

The international community is searching for new models of development that can fight poverty and improve the quality of life more effectively. In this ECOSOC Substantive Session, “Science, technology and innovation, and the potential of culture for promoting sustainable development” have been chosen as the instruments for a systemic reform and a new way forward. No doubt, for the overall achievement of human development science, technology and innovation (STI) are key elements. They have helped many areas of the world to evolve considerably and take their place in the global context. The discovery of new medicines, for example, has lengthened the average lifespan of entire regions and provided immunity from contagious diseases. Progress of a merely economic and technological kind, however, is insufficient. “Development needs above all to be true and integral,”<sup>1</sup> such as to embrace all the aspirations of the human person who remains its best resource and indispensable protagonist.

STI are critical dimensions of human knowledge and progress. At the same time, they carry a social mortgage that finds expression in solidarity with poorer individuals and countries and in a lifestyle based on human relations that take precedence over technical mechanisms, as useful as these are. The importance of culture rests on the fact that it speaks of the intelligence of rational beings enabling them to understand and order the world that surrounds them. Besides, knowledge is the result of an incredible amount of observations, analysis and reflections accumulated over centuries and that have become a common patrimony. That is why intellectual property protects an invention for only an agreed period of time after which it becomes public and remains at the service of all. Certainly, science and technology are powerful instruments of change. In the last decades the world wide web has created a true revolution. An ever-increasing mass of information documents, statistics and art expressions is uploaded every day, and for the most part it can be accessed freely. But the spread of data and information through IT technologies cannot be automatically equated to a transmission of knowledge whose modality plays a role more important now than ever before. In fact, human culture expresses the way we live together as human beings. Without culture no human being accesses the full possession of faculties like speech, reason and

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<sup>1</sup> BENEDICT XVI, *Caritas in Veritate*, 23.

even freedom<sup>2</sup>. The importance of culture as vehicle of our common humanity is never overstressed. The relationship between culture and development has to be considered, therefore, in a dialectic and not in a deterministic way. Cultural changes are in fact both a cause and an effect of social and economic changes. Culture includes both the system of values, norms, preferences and the level of knowledge acquired through the educational system. It follows that culture is a strategic resource for an effective human development which must include the improvement of human dignity, individual, social, and political freedom, i.e. of human rights.<sup>3</sup> Culture in fact is not just an end in itself or the delivery of new products, but a way to express interpersonal relations, which constitute the fundamental dimension of human beings.

Even if STI all belong to the field of human knowledge, there is no simple and linear link between them. Technology is not only an application of science. "Technology enables us to exercise dominion over matter, to reduce risks, to save labour, to improve our conditions of life... Technology is the objective side of human action"<sup>4</sup>. It is a specific knowledge that accounts for how to achieve a specific objective result. The difference between science and technology is that techniques actually become embedded in real objects or procedures. Thus, by its own nature, technology tends to be protected by intellectual property rights and is consequently a source of power and money. The rationale behind technology, science and innovation is not the same and public policies should avoid equating them.

The Report of the U.N. Secretary-General on "Science, technology and innovation" rightly states their relevance for development as supported by strong evidence from development economics. Public policies should foster science and research, promote a friendly environment for technological development and facilitate a culture of innovation. Private-public partnerships are also welcomed and necessary to meet the growing cost of research and innovation. On the other hand, we cannot simply assume that STI will automatically lead to positive socio-economic gains. Technology and innovation are not neutral: their outcome will vastly depend on what they are used for. Most importantly, we need not surrender to the idea that science has

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<sup>2</sup> "Man comes to a true and full humanity only through culture, that is through the cultivation of the goods and values of nature. Wherever human life is involved, therefore, nature and culture are quite intimately connected one with the other". VATICAN II, *Gaudium et Spes*, 53.

<sup>3</sup> In these conditions, it is no cause of wonder that man, who senses his responsibility for the progress of culture, nourishes a high hope but also looks with anxiety upon many contradictory things which he must resolve: (...) How is the dynamism and expansion of a new culture to be fostered without losing a living fidelity to the heritage of tradition. This question is of particular urgency when a culture which arises from the enormous progress of science and technology must be harmonized with a culture nourished by classical studies according to various traditions. VATICAN II, *Gaudium et Spes*, 56.

<sup>4</sup> "Technology is a profoundly human reality, linked to the autonomy and freedom of man. In technology we express and confirm the hegemony of the spirit over matter. (...) Technology enables us to exercise dominion over matter, to reduce risks, to save labour, to improve our conditions of life. It touches the heart of the vocation of human labour: in technology (...) man recognizes himself and forges his own humanity. Technology is the objective side of human action whose origin and *raison d'être* is found in the subjective element: the worker himself." BENEDICT XVI, *Caritas in veritate*, 69.

embedded a notion of self-determination according to which whatever can be done is feasible. “When technology is allowed to take over, the result is confusion between ends and means, such that the sole criterion for action in business is thought to be the maximization of profit, in politics the consolidation of power, and in science the findings of research. Often, underneath the intricacies of economic, financial and political interconnections, there remain misunderstandings, hardships and injustice. The flow of technological know-how increases, but it is those in possession of it who benefit, while the situation on the ground for the peoples who live in its shadow remains unchanged: for them there is little chance of emancipation”<sup>5</sup>.

Mr. President, two conclusions emerge. First, there is a need for an ethically responsible use of technology. Second, in the use and development of STI forms of solidarity are required that are truly favourable to the poorest countries. In this way, the promotion of scientific knowledge in developing countries and the transfer of technologies to them becomes a moral component of the common good.

Often the development of peoples is considered a matter of financial engineering, the freeing up of markets, the removal of tariffs, investment in production, and institutional reforms — in other words, a purely technical matter. All these factors are of great importance, but we have to ask why technical choices made thus far have yielded rather mixed results. We need to think hard about the cause. Development will never be fully guaranteed through automatic or impersonal forces, whether they derive from the market or from international politics. *“Development is impossible without upright men and women, without financiers and politicians whose consciences are finely attuned to the requirements of the common good.”*

The international community is entering a critical phase of redefining sustainable development in its three pillars-- economic, environmental and social- as an effective way to combat poverty and improve the lives of people worldwide. Investing in education and innovation opens the way toward a future of greater equality and prosperity as they sustain growth, employment and distribution, but with an indispensable condition, that the human person with her dignity, aspirations and fundamental rights be placed at the centre of all policies and programs.

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<sup>5</sup> Benedict XVI, *Caritas in veritate*, 71