

**UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY  
FOR DEVELOPMENT (CSTD), twenty-fourth session  
Geneva, 17-21 May 2021**

**Using science, technology and innovation to close the gap on Sustainable  
Development Goal 3, good health and well-being**

Statement submitted by

Mr. José E. Cassiolato  
Professor, Federal University of Rio de Janeiro  
Brazil

DISCLAIMER: The views presented here are the contributors' and do not necessarily reflect the views and position of the United Nations or the United Nations Conference on Trade and Development.

Statement: José E Cassiolato – 17/05/2021

Good afternoon, good morning and good evening to everybody.

Thank you very much for inviting me to participate in this “Roundtable on using science, technology and innovation to close the gap on Sustainable Development Goal 3 on good health and well-being.

You asked me to comment on two questions;

- What are the particular features of health innovation systems and how health systems may be organized and managed to become more inclusive towards marginalized groups?
- How can we be more effective in mobilizing STI in national health systems?

Health care is a perfect example of how knowledge-based inequality prevails in the contemporary world.

In the globalized world nowadays, health is founded on the notion of “disease” that has and continues to be the focus of global campaigns aimed at eradication or control, such as smallpox, polio, cholera, and flu”.

The concept of disease drives most health policies and, most important, the agenda and strategies of the main productive actors of the system: large pharmaceutical transnational companies.

Seeking an inclusive innovation strategy requires considering health in a totally different way. We should support the development of health innovation systems capable of addressing health inequities and promoting inclusive development.

Such perspective on health incorporates two central dimensions of development: it is at the same time one structuring factor of well-being (life quality and citizenship), and it is also a major driver of economic growth.

Despite such linkages, there is a widespread dissociation of the social and economic dimensions of health in the scope of public policies. The influence of powerful private interests on public policies frequently ends up to misleading policies that decouple these dimensions, restricting the possibilities of adequately addressing the issues of health systems, equity and development in an integrated perspective.

**So to be effective in mobilizing STI in national health systems, one has to distance from the notion of health as the absence of disease and act upon the**

**idea of health a a complete state of physical, mental, and spiritual well-being (WHO, 2006).**

When I was reading your excellent Report of the Secretary-General (that serves as a background for this discussion ) I recalled the 1970 Sussex Manifesto prepared for the debates of the UN Second Development Decade and which combined the discussions on the role of science and technology, poverty and self-reliance.

Among other things, the Manifesto expressed deep concerns about the extent to which R&D in developing countries actually resulted in any kind of innovative application. Much of it seemed to be application-ineffective. 50 years after, most updated discussions on the Manifesto conclude that innovation-ineffective R&D is common in most R&D organisations and fields across a wide range of developing countries.

Health challenges are complex and multifaceted, requiring a wide and systemic approach that goes beyond the focus on individual components of health systems, diseases or technologies. STI is an important tool to address inequality in health in different ways. However, STI as a tool for promoting equity in health cannot be an isolated activity inside the STI area. We know at least since the 1970s, that implicit policies (economic, monetary, trade, financing, regulatory, etc) are much more important for innovation strategies than explicit STI policies and this should be taken into account when we discuss health STI policies.

Then, a broad notion of health innovation systems (and policies geared to them), should be used. This notion consists not only of the institutions and organisations that are directly associated with STI but includes all actors that directly or indirectly impact on innovation strategies.

In order to take a broad view of innovation systems, one has to address issues that are normally outside the domain of STI. One of these issues regards power relations and governance, in the different layers – global, national and local. The lack of analysis of power relations and conflicting interests within the health systems frequently leads to the failure to understand systematic and unfair differences in health outcomes and how and why innovation strategies fail.

In our work we argue that the majority of health systems are decentralized and their operative model requires multiple-level articulations. This is essential to improve knowledge of how to build effective strategies to strengthen local capacities articulated with upper levels of decision-making structures and policies. In addition, a territorial approach to health systems is a key for using the capillarity of health services to stimulate the territorial diffusion of productive and innovative activities, as well as to articulate the economic and social dimensions of development.

In short “context” matters and the “community” should be the defining parameter for thinking about how to improve health and how to design and implement innovation policies and strategies. Such a vision attributes value to local knowledge and ownership through community participation in decision making. It eschews top down, one-size-fits-all prescriptions imposed from the “outside” and embraces the concepts of “subsidiarity” and decentralized planning.

The analytical work on local health innovation systems we did some years ago in Brazil, India, China, South Africa and Uruguay highlighted also (i) the importance of developing local capabilities to deal with health and wellbeing; (ii) the importance of designing better financing tools to cope with the inevitable lack of resources and unsuitability of traditional funding mechanisms by private agents. Innovation policy proposals and action should take into account, respect and interconnect with the existing local ethos of the targeted communities, their norms and accumulated historical knowledge and values.

The acute crisis brought on by the pandemic presented itself with shortages of medical equipment, protective materials, medicines, etc., with some countries banning their export in the face of high demand for the pandemic and others struggling to have access to them even though some are home to the largest TNCs in the area. In response, in a relatively short period of time, a significant number of local initiatives of universities, organisations of the civil society and local people and government – together – were able to design and produce – cost efficiently - essential health goods using e-health technologies (artificial intelligence, 3D printing, etc.) . Health and food security at local level became highly valued and are paving the way for a necessary new, sustainable world. The pandemic showed that it is possible and feasible to develop health innovations that are relevant to local health problems.

But at the end the whole approach to inclusive innovation systems in health should be based on a political vision in order to seek effective ways to translate to, and interact with, the needs and interests of the poorest and marginalized actors in helpful innovation that really addresses their problems.

Thank you very much.