



SCIENCE FOR GLOBAL TRANSFORMATION SOCIAL JUSTICE: PROMOTING INCLUSION, ENDING POVERTY, AND REDUCING INEQUALITIES Task Force 5 - Preliminary Document

Introduction

Scientific development plays a pivotal role in promoting human and social well-being. The history of recent centuries reveals how humanity has benefited from the advancement in scientific knowledge, enabling significant transformations in people's lives and society. Major technological innovations have led to remarkable progresses in food production, energy generation, transportation, communication, the development of vaccines, the cure of diseases, and various others are examples of achievements that represent significant milestones in the civilizational process. Lives have been saved, life expectancy has grown remarkably, resources have multiplied, providing well-being and comfort.

Science provides an important way to understand the world, which can inform policy and personal decisions, improve human and ecological health and well-being, and promote knowledge and innovation. Technology and innovation are essential for economic development and social progress. Together, they expand the potential of knowledge. Their advancement should normatively and empirically enhance the well-being of society. Nevertheless, they can also be potential instruments of disasters and injustices. The existential risks faced by humanity are evidence of this latent ambiguity. The climate crisis, concerns about the uncontrolled advancement of AI, pandemics, and nuclear threats are dramatic illustrations of the inherent ambiguity of science and technology as sources of progress, but also of their complete negation. The ambiguous duality of science and technology manifests in the patterns of distribution of socially produced goods. The advancement of knowledge and production techniques contributes to the spread of the appropriation and use of resources that can increase well-being but can also lead to the appropriation of resources and privileges that exacerbate social inequalities within and between countries. New strategies and mechanisms are necessary to ensure that the products of science and technology reach society in a more equal, fast, and effective manner.

However, despite extraordinary progress, the world continues to be afflicted by glaring social disparities that, in many ways, even widen. Poverty remains a scourge that afflicts vast segments of the global population. This reality is marked by large human contingents facing food deprivation, lacking shelter, devoid of medical care, and deprived of access to clean water and basic sanitation.

When we investigate the roots of this problem, we understand that the core issue is not resource scarcity but rather its unequal distribution. In this context, while some of humanity struggles to satisfy their hunger, another segment suffers from obesity. Even more bewildering, some of the resource-poor population becomes obese because, lacking education and vulnerable to irresponsible advertising, they consume processed foods that lead to weight gain and health problems. If it is true that the extremely unequal distribution of resources is grave enough to create such disparate living conditions, the problem will worsen even more if sustainable use of natural resources is not respected, as scientific analyses of the problem anticipate.

Among the Sustainable Development Goals set by the United Nations, the elimination of poverty in all its forms is the first listed. As emphasized by the UN, "each country must implement appropriate measures,





actions, and strategies to ensure sustenance for all and reduce the exposure and vulnerability of the poorest classes." Eradicating hunger, promoting health and well-being, ensuring access to clean water and sanitation, besides quality education, are some of the crucial conditions for achieving this goal.

Although poverty and inequality can be distinct, as evidenced by the fact that it is possible to reduce poverty without reducing inequality, there is no doubt that the world we live in offers a reality in which poverty and inequality are deeply intertwined. Since the French Revolution, equality has emerged as a modern ideal opposed to the hierarchy of the feudal world. By demystifying the illusion that people are naturally born different and destined to be noble or commoners due to their family origin, the modern world legitimized the ideal of equality. However, we know that this ideal has been vehemently denied in practice. In recent decades, although the gap between the poorest and richest countries may have narrowed, social inequalities persist internally and, in many cases, expand. Thus, this ideal moves further away as a significant part of the planet witnesses the widening disparity in terms of income, education, and access to goods.

Social inequality, characterized by the unjust distribution of resources and opportunities among various social strata, such as income, education, health, and employment, deprives large segments of the population of their well-being. Reducing internal and external disparities, a fundamental condition for social inclusion, is the path to be pursued, regardless of age, gender, disability, race, ethnicity, origin, faith, or economic status.

Perspectives on the Role of Social Sciences and the Humanities

The purpose of science is to generate knowledge and make discoveries that enhance social and human wellbeing, thereby fostering the reduction of social inequalities. It is crucial for scientific advancements to be pursued with ethical considerations and a consciousness of their consequences. All branches of science are inherently social; nevertheless, social sciences and the humanities play a key role. Some examples are discussed below.

- The digitalization of economies and societies is an ongoing global phenomenon that carries significant implications that can benefit from insights from the social sciences and humanities. These issues include the impact of digital transformation on employment and the necessary skills that should be provided by the quality education, in order to develop effective strategies and policies. It is necessary to explore how access to technology, digital skills, and digital resources can either exacerbate or alleviate existing disparities. Addressing these issues can help in formulating inclusive and equitable approaches to digital development. By actively engaging with these topics and leveraging insights from the social sciences and humanities, countries can effectively navigate the complexities of digital transformation and contribute to inclusive and sustainable digital development on a global scale.
- It is imperative to conduct studies that thoroughly investigate the nature and extent of the problem of science-related disinformation, understand its varied impacts, and identify effective measures to curb its dissemination. The detrimental effects of disinformation on digital media have had a profound impact on society. Building national and global strategies to combat disinformation needs the involvement of science and the scientific community, besides an active participation from civil society. The dissemination of false information concerning scientific





matters can lead to adverse consequences, as it was the case on the alleged efficacy of hydroxychloroquine and ivermectin for the treatment of COVID-19. The G20 countries are well-positioned to foster collaborations in global initiatives focused on combating disinformation in health and science.

- Scientific literacy plays a crucial role in enabling all individuals to comprehend and engage with future scientific endeavors. In order to tackle the complexities of sustainable development, it is essential for governments and citizens alike to grasp the language of science and cultivate scientific literacy. Today's challenges surpass the confines of traditional disciplines and encompass a wide range of scientific domains, spanning research, knowledge advancement, and their practical implementation. By fostering scientific literacy, we can create an environment where everyone is equipped to understand and actively participate in addressing the multifaceted challenges of our time.
- Social sciences and humanities are most relevant to help achieve the 17 Sustainable Development Goals (SDGs), which requires coordinated efforts from governments, civil society, businesses, universities, and other sectors. The collaboration between science and society can lead to: (1) promoting education, social equality, and fair treatment for all genders and sexual orientations; (2) focusing on health, well-being, and achieving demographic balance; (3) transitioning to sustainable energy and industry practices to reduce carbon emissions; (4) ensuring sustainability in food production, land use, water management, and ocean health; (5) developing sustainable cities and communities that are inclusive and resilient; and (6) harnessing the digital revolution for sustainable development. By working together, these transformations can pave the way for achieving the SDGs outlined in the 2030 Agenda.

Final Remarks

The members of the G20, representing the world's 20 largest economies, play a central role in the fight against poverty and social inequalities. Implementing programs aimed at eradicating hunger, expanding education, and providing housing and sanitation access is an ethical and moral imperative. Initiatives such as basic income and direct resource transfers quickly impact the nutrition and health of large portions of the population. The revision of tax structures must also be considered essential in this process. The adoption of progressive taxes on higher incomes, as well as wealth taxation, are crucial measures to promote social justice. Policies for racial and social inclusion, gender equity, and combating all forms of discrimination are equally crucial for building a fairer society.

It is also important to remember that reducing inequality, in addition to being an ethical imperative, is a decisive condition for enriching the human resources available for the advancement of society. Last, but not least, social justice constitutes a powerful antidote in the fight against violence, intolerance, and the crystallization of significant social divides that weaken trust levels and degrees of solidarity that constitute the social fabric of life. Social inclusion, poverty eradication, and the reduction of inequalities are vital resources for collective life. In this sense, science in all its specialties, honoring the social value that legitimizes it, has a valuable tool in the production and dissemination of knowledge to fulfill its role.