

INSTITUT DE FRANCE Académie des sciences

Science20 Summit Meeting

Jakarta (Indonesia) & Zoom September 20, 2022

Intervention of the French Academy of Sciences

Dear Colleagues from the Academies of the G20 countries, Ladies and Gentlemen,

The French academy of sciences wishes to thank warmly the Indonesian Academy of Sciences and its President, Prof. Satryo, for the tremendous work they accomplished in organizing and setting up this meeting, and in preparing this an important and timely communique.

While we are not yet out of the pandemic that has disrupted our lives for more than two years, we are now clearly at a turning point where we must both learn from the past and project ourselves into the future. In this respect, the choice of the goal "Recover together, recover stronger" could not be more appropriate.

Many things are written in the communique and I will only highlight some general issues that we may consider at stake for effective actions.

Promoting the role of science is of course a priority and amongst the natural missions of academies of sciences. Science at-large, including technology and social sciences, has a key role to play in facing current and forthcoming challenges, related in particular to health and climate crises.

What we have witnessed with the amazingly fast development of mRNA vaccines is an undisputable proof of what science can achieve. It also underlined the importance of basic research, carried over for twenty years before eventually ending up with effective applications.

Science-based solutions also must be looked after for climate issues such as the reduction of carbon emissions. However, a constant care has to be taken for mitigating negative impacts that can result from massive deployments or rebound effects of scientific and technological advances. While energy production and consumption must be revisited in terms of sustainability, one should also consider the whole picture, from manufacturing to usages. Information and communication technologies offer great promises for instance in telemedicine, smart cities, or agriculture, given the increasingly efficient communication networks, the availability of larger datasets, and the increasing power of artificial intelligence algorithms. But at the same time, the exploding growth of digital activities has a cost in terms of energy and of resources, notwithstanding the social impacts attached to the ubiquity of platforms and social networks.

The above concerns raise the need for fostering tighter interactions between science, citizens and policy makers. In order to be accepted and considered in decision-making, science has to be understood. Science should not rule but science must feed democratic debates with facts rather than opinions, on which well-informed decisions can be taken. Unfortunately, we have to recognize that trust in science cannot be taken for granted. We are facing everyday situations in which the claims of scientists are readily questioned, with an exacerbation of the role of social networks which are often used to spread fake news and disinformation. The most effective way of getting out of this situation is education, with the recognition that science should be a genuine part of culture at-large. Not everybody has to become a scientist, but anyone should be given the possibility of practicing science, even at elementary levels, at least as a method and a way of reasoning. Initiatives in this sense, concerned with inclusion and equal access to all—as is the case, for instance, of the Office for Climate Education—, should be encouraged and supported under international umbrellas.

Several points raised in this presentation may look wishful thinking, given what the situation presently is. Indeed, the members of S20 gather once a year, exchange and produce statements but, as our scientific colleagues often ask, what is the impact? To address this concern, we should ensure effective follow-ups from one meeting to the next, looking back to our previous recommendations to build upon actual achievements, if any, and revisit unachieved issues that need to be further supported and better explained. While recognizing of course that each summit has its own agenda, we should find a way— for instance as a common platform—for a better continuity and a better visibility.

Finally, science-based contributions to respond to the new challenges faced by our planet should be most effective when promoted by partners who share a common vision of mutual respect and freedom. In this sense, and this has been publicly stated by the G7 academies in March, "the unprovoked attack against Ukraine, a democratic and independent country, is a blatant violation of international law and of core values of humanity. The Russian invasion is an assault on the fundamental principles of freedom, democracy and self-determination, which provide the basis for academic freedom and opportunities for scientific exchange and cooperation." More than ever, it is of the utmost importance to reaffirm our support to the National Academy of Sciences of Ukraine and to stand in solidarity with the scientific community in Ukraine.

Ladies and Gentlemen, Dear colleagues, we do hope that the international community of scientists will find the proper way to contribute to the preservation of a peaceful world, which is a prerequisite for facing the current challenges in environmental and global health issues.