

**UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY
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**High-level roundtable on “The impact of rapid technological change on sustainable
development”**

Statement submitted by

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Moderator

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The Impact of rapid technological change on sustainable development goals

@4:00 pm – 6:00 pm –

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Introduction by **Ms. Shamika Sirimanne, the Director of the Division on technology and logistics of UNCTAD.**

INTRODUCTION JULIA

Ms. Shamika Sirimane. Thank you chair for those opening comments. Excellences, ladies and gentlemen, welcome. My name is Julia Sieger and I'm a journalist for the French international TV station France 24. I present a tech show called tech24 and I'm delighted to be here to moderate this panel.

As Ms. Shamika Sirimanne just mentioned the report of the Secretary General on the impact on rapid technological change is ambitious in its scope. It takes a closer look at the opportunities and the drawbacks we face as a society in the midst of rapid technological change. It analyzes how technology can help us achieve the UN sustainable development goals – or more simply put, how technology can serve as a vector for prosperity, peace and harmony.

Some have described our world as volatile, uncertain, complex and ambiguous. To that list we could add RAPID. Innovations are indeed emerging throughout the world at a pace never seen before... so fast, that we don't always have – or we don't always TAKE – the time to reflect on their long-term consequences. How will an innovation affect our planet? Is it biased in any way? Is it inclusive both of gender but also geographically? What kind of legal framework does it require? If in the wrong hands, what could become of that technology? To what extent should we push the limits of science while humbly respecting the fact that the laws of nature surpass us?

Every technology is a double-edged sword – with the best and worst in store for us.

It is our duty to have a deeper reflection of the path we want to take and on how we want to get there. Hence the importance of foresight. And that's what this report gives us – a base to debate on our common future.

Let me know introduce our panelists.

- Mr. Jacob Corn, Professor of Genome Biology, Principal Investigator at Corn lab, ETH Zurich. (10 minutes)
- Ms. Kriti Sharma, Vice President of Artificial Intelligence, Sage Group. (10 minutes)
- Mr. David Grier, Associate Professor at George Washington University. (10 minutes)

It's a great pleasure to now welcome two distinguished guests, his excellency M. Thapelo Olopeng, minister of Tertiary Education, Research, Science and Technology of Bostwana. And his Excellency M. Og-bonnaya ONU, Minister for Science and Technology of Nigeria.

Mr. Jacob Corn - Professor of Genome Biology, Principal Investigator at Corn lab, ETH Zurich.

Q1. You are working with the CRISP-R / CAS9 technique? Its often referred to as the DNA scissors? How does it work?

Q2. What are the greatest opportunities of genome editing in the medical field? How is it set to change our world for the best? What are the real-life consequences?

Q2. Bis. I read this article about how genome editing was revolutionizing agriculture and they were explaining how other than help in producing crops resistant to diseases and pest, it could help produce hornless dairy cows to avoid safety issues with farmers, and I couldn't but think is it ethical to use genome editing for that purpose?

Q3. We spoke about the good sides of genome editing but what about if this tool – which is relatively simple to use- where to land in the wrong hands and be used for harmful purposes, this could be a weapon of mass destruction?

Q4. There are discussions about whether genome editing should be used to make modifications in human reproductive cells – or so-called germline modification, what's your take on this?

Q5. What are the main challenges you face on the issue, are they ethical concerns?

Q6. Where do you draw the limit between what constitutes a breakthrough and a leap for humanity vs. what is unethical and as disturbing the laws of our universe? From an outsider's point of view, it seems as though we are pushing the tech forward without having a clear understanding of what its potential is?

Q7. Is it realistic to think we could agree on an international legal framework on this topic considering the fact that we don't all share the same point of view worldwide about what is ethical?

Q8. Breakthrough biotechs are emerging in developed countries but how are they serving developing countries?

Q9. How many research institutes are working on CRISP-R CAS9 techniques in the global south?

Q10. How can North and South collaborate on the emergence of this technology? Can the north provide research to the South? What kind of collaborative framework do you reckon?

Ms. Kriti Sharma, VP of Sage Group

Q1. We hear the word artificial intelligence all the time, it's everywhere? Do we even know what we're talking about when speaking of AI?

Q2. You often voice concern about the fact that AI is biased, that because it learns through observations, AI will reproduce the biases... Could you give us concrete examples of how AI can be biased and what negative consequences this can have on our society?

Q3. And how can we fight that bias?

Q4. What are the best ways in which AI solve some of the world's issues? I think you've just created a concept that serves as a great example of AI for Good, it's an app and it's called rainbow?

Q5. How inclusive is AI gender wise? How many leading AI researchers are women in the world today?

Q6. Other than bias, other concerns having to do with AI is the amount of data it consumes as well as data privacy and job loss?

Q6. What are the best practices in developing AI in the corporate world?

Q7. How can the international community provide guidance on norms and standards to abide to?

Q8. How can we control and positively drive the rapid development of AI?

Mr. David Grier, Associate Professor at George Washington University

Q1. You've studied the history of computer science from when it was first created by Charles Babich to now.. having a historical perspective on things can really help when talking about rapid technological change because we can draw lessons from the past. But first, where does AI fit in to the broader picture?

Q2. From a historical perspective, what should we look out for in the emergence of AI?

Q3. This morning, there was a conversation with great minds and one panelist was suggesting that the future of AI will not be based on big data, because as much as we learn from experience, it doesn't take that much data to teach AI a deed. Do you agree with that? Kriti?

Q4. There's often discussions about how AI will take people's jobs, but it will also create others, how do you think AI will impact the workforce?

Q4. Google has open an AI research center in Ghana and its headed by Mustapha Cisse, but lets be realistic how inclusive is AI geographically and more specifically in relations with the global south?

Q5. What will be the implications for developing countries to not have the same access to AI? And how could we fix that?

Q6. You've also extensively researched about the impact on crowd funding and digital labor platform, what conclusions have you drawn?

Q7. What are some potential scenarios for the future of work?

Conclusion

As you've seen through this discussion, there is still a long way to go to clarify the ins and outs of AI and the uncertainties surrounding the ethics. But clearly, we are at a crossroads, where politicians and businesses must act. There is a need to work hand in hand to establish norms on the design, development, regulation, and deployment of AI.

We hope this roundtable has helped you get a better understanding what role rapid technological change can play on sustainable development – including its transformative and disruptive impacts on the economy, society and the environment – and that it gave more insight about some of the critical trends