Summary

Briefing of the General Assembly on Science-based Evidence in support of Sustainable Solutions

12 April 2023

Aligning with the motto "Solutions through Solidarity, Sustainability and Science", the President of the United Nations General Assembly (PGA) convened the second science briefing to inform negotiating processes in the Assembly on 12 April 2023, at UN Headquarters. The briefing focused on science-based evidence in support of sustainable solutions. Three panels addressed the following topics: "Beyond GDP: How We Measure Matters"; "Food Security and Sustainability Transformation"; and "Scientific Support System at the UN: A new science-based 'normal?"".

The informal briefing offered scientific decision support for Member States with the aim to contribute to the Financing for Development process, Summit of the Future, the High-Level Political Forum, and preparations for the SDG Summit in September 2023.

After presentations from the speakers of each panel, Member States, Observers of the General Assembly, and ECOSOC-accredited NGOs were given the floor for reactions and questions.

Morning session

In his opening remarks, the President of the General Assembly recalled Target 19 of SDG17 that gave the mandate to "build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product", on which the discussion on the "Beyond GDP" concept was based. The PGA stressed the need to identify the right tools and methodology to measure SDGs, including the impact of unintended consequences of human activities and policies, or the so-called "externalities" that often resulted in human induced climate change, biodiversity loss, water crisis, soil degradation, pandemic, debt crisis etc. Referring to the second panel, the President noted that the number of people dealing with acute food insecurity had continued to grow in recent years, while the ability to feed sustainably feed ten billion people exists. Regarding the scientific support system in the UN, the PGA stressed that in times of crisis the solutions must be comprehensive and based on scientific evidence. However, he added, that the validation of the current processes were still lacking the scientific backup.

Panel 1: Beyond GDP- How We Measure Matters

In the first panel, the presenters **Ms. Deborah Sills**, Global Public Sector Consulting Leader at Deloitte, **Prof. Amit Kapoor**, Honorary Chairman at the Institute for Competitiveness in India, Ms. **Ana Peltola**, Acting Director of UNCTAD, **Dr. Rutger Hoekstra**, Associate Professor at Leiden University and **Mr. Thierry Watrin**, Green Economy and Climate Change Advisor to the Ministry of Finance and Economic Planning of Rwanda, deliberated on the positive and negative aspects of GDP and expounded on the idea and possibility of a kind of measurement system that complemented the GDP. The discussion was moderated by **Mr. Stefan Schweinfest**, Director of

the UN Statistics Division. The panel agreed that while GDP remained important, there was a need for a new approach in measuring SDGs implementation through a multi-angle perspective.

Ms. Sills explained the importance to have the right tools to measure social impact of a particular business decision for the private sector, not only from the economic perspective, but also from the perspective of fulfilling a greater mission of supporting communities, making sure that its footprint is positive and that its values are shared by its clients. Data and technology helps with a better measurement system but according to her, the hardest part is reaching consensus.

Prof. Kapoor spoke of the rapid and massive societal changes driven by technology and AI, which apart from their multiple benefits, also accentuated inequality and deepened divides. This, he stated, can not be measured by GDP alone. He illustrated with the example of Indian Governments' 'Competitive Federalism' concept and 'Aspirational Districts Program' how a new multidimensional approach to understanding, accounting, and measuring financial, social wellbeing, health and income is driving appropriate decisions to address special differences across Indian districts.

Ms. Peltola pointed to the disconnection between development and wellbeing and the heavy stress that a GDP-driven economic development is causing to the environment, the planet and will affect future generations. She recalled that the GDP emerged to fill an economic data gap after the Great Depression, at the time when world population was 2.4 billion, while now the situation is completely different. She highlighted three necessary steps towards adopting a new methodology: political commitment; technological scientific process; and investments in data and technical capacities to ensure that no one is left behind in pursuing this new approach.

Dr. Hoekstra highlighted the fact that there is certain unease of citizens regarding the current economic system which does not focus on wellbeing. He added that the UN has a historic opportunity to create a new policy paradigm where people's needs are at the forefront and notions such as wellbeing, agency, inequality and sustainability - that really matter at grassroots level - are counted and measured.

Mr. Watrin illustrated his country's example of building back from zero after the genocide in 1994, with the Green GDP framework, which integrated the environment and biodiversity to the GDP framework, thus departing from conventional economic narratives towards more inclusive, bottom-up and comprehensive approaches. The Green GDP framework, he explained, is based on three pillars: operationalization (who does what); initialization (the measuring of Green GDP); integration in the macroeconomic framework (how to present the results).

Panel 2: Food Security and Sustainability Transformation

In the second panel, the presenters **Mr**. **Olav Kjørven**, Senior Director for Strategy of EAT Foundation; **Mr**. **Rikin Gandhi**, CEO and Co-founder of Digital Green; **Dr Inbal Becker-Reshef**, Program Director of NASA Harvest; **Dr Ravi Kanbur**, Co-Chair of Food Systems Economics Commission; and **Ms**. **Corinna Hawkes**, Director of Food Systems and Food Safety, FAO addressed the topic of global food security and transformation to sustainable and inclusive agriculture and food systems. **Ambassador Ferrero y de Loma-Osorio** from the UN Committee

on World Food Security moderated the panel discussion. The conversation drew attention to the current unprecedent crisis of food security that affected all dimensions of human development. The panel concluded that measuring this jointly with the impacts of climate change requires comprehensive, scientific approach.

Mr. Kjørven expressed concern that the world is falling short on economic and social goals and blasting through several of the planetary boundaries. Food systems are a huge part of the problem but can also be pieces of the solution. Change of dietary pattern can contribute significantly to staying within several planetary boundaries with safe space for humanity. However, currently more than 3 billion people are lacking healthy diets as policies around the globe are not aligned with scientific evidence. He urged the international community to take necessary actions to address food issues, so that it can drive progress towards most of the SDGs.

Mr. Gandhi advocated for more investments in human infrastructure and digital transformation as digital technologies can transform the work of farmers. He gave the example of Digital Green, a global development organization that seeks to help small farmers out of poverty, using technology and grassroots level partnerships. However, digital technologies are not enough to close the divide of climate and food security on their own. Hence digital technologies must be linked with extension systems and farmer organizations. He also added that digital technologies must work together with finance, political institutions, capacities to improve the lives of farmers.

Dr Kanbur emphasized that food production is a leading cause of environmental degradation and climate change, and poor dietary health a major driver of premature mortality in most countries. Limited access and affordability of healthy diets, and structural inequalities in food production and distribution, perpetuate poverty and inequality. To address these challenges, he proposed an assessment of the complex interplay of what needs to be done (Incentives, Innovation and Investments) and what is impeding change (Interests, Institutions and Ideas). He stated that all stakeholders must start a global conversation on international institutional management of the essential functions of international food system governance.

Dr Becker-Reshef introduced the idea of satellite data for a more food secure world, to monitor the crops and agricultural land. The data received from satellite can be translated into actionable science-driven information in support of agricultural sustainability, markets, and food security decisions. However, in order to reach the full potential of the satellite data, there is a need to come together across governments, industries and academia, including informing key policies, and decisions at farm to global scales.

Ms. Hawkes focused on the importance of a new science-based thinking to minimize trade-offs and to maximize synergies for food security, nutrition, poverty reduction, water, and climate change. Agricultural extension services can be designed to bring synergies for crop yields, diversification, sustainable practices, higher-quality diet, higher incomes, gender equality, if consciously crafted to address gender inequality on the farm and in the household and to benefit environmental sustainability.

Afternoon session

Panel 3: Scientific Support System at the UN: A new science-based "normal"?

In the afternoon panel, the panelists **Dr Claire Melamed**, CEO, Global Partnership for Sustainable Development Data; **Dr Riko Oki**, Deputy Director, Earth Observation Research Center of Japan Aerospace Exploration Agency; Prof. **Felix Ankomah Asante**, Vice-Chancellor for Research, Innovation and Development of the University of Ghana; **Dr Samira Asma**, Assistant Director-General, Data, Analytics and Delivery for Impact of the World Health Organization; and **Dr Salvatore Arico**, CEO of the International Science Council addressed the General Assembly. The discussion was moderated by **Johannes Cullman** Chief Scientific Advisor to the President of the UN General Assembly. The panel was of the view that data was of utmost importance for the application of science. Panellists underscored that cooperation between scientists and policymakers was imperative, especially to improve the validation of sustainable development options and to establish a mechanism to support science-based policy development.

Dr Asma explained that while the world was in the midst of multiple global crises, there is growing potential of science, data, digital solutions, partnerships and solidarity. Data is critical to the global agenda and governed at the right levels with the right approaches, it can be leveraged as a strong strategic asset, while ensuring information security and fulfilling the data needs of all.

Dr Oki focused her presentation on water-related disasters, demonstrating that advanced meteorological and hydrological information can help decrease the risk of water-related disasters and build more resilience. As an example, she presented the global, satellite derived precipitation data set, which is freely accessible online, in real-time. She emphasized the importance of comprehending the situation globally and taking early action by using satellite data and scientific technology to address water crisis. She also called for an enhanced global cooperation to refine existing and to develop further services based on remote sensing.

Prof. Asante iterated that data and statistics on income, poverty, health, and gender are not consistently available in many countries, especially in developing countries causing mistrust. Therefore, investment is required in human resources, and scientific analysis to help in assessing the SDG indicators. Data must also take into consideration each country's particular challenges and characteristics. In order to create such a well-resourced system, he urged Member States to collaborate with universities and research centers before creating new institutions. There are already many excellent science organizations that are working with data sets and can be linked to form part of a scientific validation mechanism for the general Assembly.

Dr Melamed reminded the participants, that in order to talk about science supporting the UN, they often forget that data supported science. Data and science are not a drain on the budget but an investment for progress and development. It is evident, she pointed out, that these investments had not been made yet and big data gaps remained. However, this issue can be solved by investment, capacity strengthening, and partnerships. The SDG Summit is the opportunity to agree on the aspirations for building global data system, where countries can cooperate to pledge new investments, new partnerships, and capacity collaboration.

Dr. Arico elucidated the main features of science advice to the UN and multilateral system: salience, policy relevance, timeliness, clarity in the language and diversity of epistemologies among different disciplines and cultures. He urged for integrated science advice to support all relevant UN deliberations, bridge science to action gaps, and promote durable solutions to complex problems.

Group of Friends of Science of Action

At the closing of the informal plenary, the Permanent Representative of India, the Permanent Representative of Belgium, and the Deputy Permanent Representative of South Africa announced the launch of the Group of Friends of Science for Action, with the support of International Science Council. Building on ongoing initiatives, the Group of Friends on Science for Action will provide an important push to promote and cultivate a culture and practice of science-informed discussions and cooperation in the UN. Science is an essential component in addressing current interrelated problems. Avoiding and responding to global epidemics, addressing deepening inequalities, reversing environmental degradation, tackling climate change and water emergencies, utilizing technological change for the common good, and other challenges necessitate ambitious global cooperation and robust scientific data. A more powerful and adaptable link between research, politics, and society will benefit the United Nations and its Member States.

The Group of Friends of Science for Action are providing an informal venue for debate and open exchange between countries that take the lead in applying science in policy and decision-making to facilitate peer-learning, the exchange of best practices, and the creation of opportunities for bilateral cooperation. Moreover, the group will provide an informal setting for interaction with experts on pressing issues essential to present or forthcoming negotiations and deliberations in New York where scientific knowledge, synthesis, and recommendations are required, and generate a demand-led scientific dialogue.

The Group of Friends is an informal platform for Member States to address the role of science within the UN, as well as to strengthen Member States' involvement in scientific briefings important to UN discussions and scientists.