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Contribution by Brazil

to the CSTD 2023-2024 priority theme on "Data for Development"

PRIORITY THEME 1: Data for Development

1. **What are the major contributions and risks of data in relation to the achievement of the 2030 Agenda for Sustainable Development?**

Institute for Applied Economic Research (IPEA), Brazil:

Contributions:

i. Producing indicators for monitoring the Sustainable Development Goals.

ii. Measure progress with regard to the SDGs, identify gaps and/or inequalities, and guide the necessary policies and actions to accelerate the process.

iii. Access to additional information on population, natural resources, environment, infrastructure, security, technology, economy, among others, with a view to implementing the SDGs.

iv. Facilitate citizen participation, transparency, accountability and cooperation between the different actors involved in the implementation of the 2030 Agenda.

v. Encourage innovation, creativity, efficiency and effectiveness in the search for sustainable solutions to global problems.

vi. Facilitate studies and the implementation of inclusion and social protection programs, using data on the population.

Risks:

i. The indiscriminate collection and use of personal data.

ii. Violations of the privacy, security and rights of the people providing or represented by the data.

iii. Exclude or marginalize groups or individuals who do not have access to data or who are not adequately represented by it.

iv. Generate distortions, biases, errors or manipulations in the data that compromise its quality, reliability and validity.

v. Create inequalities or conflicts between different users or data subjects, especially if there are diverging or competing interests involved.

vi. Generate data colonialism, through the use of developing countries in the production of basic raw material (data), while developed countries are left with the development of products with technological content.

General Coordination of Sciences for Ocean and Antarctica, Ministry of Science, Technology and Innovation of Brazil:

The Digitization of Science is often marked by fast developments. Some represent opportunities for developing countries and for the achievement of the 2030 Agenda for Sustainable Development as they allow for more cost effective practices. However, many require considerable investment in infrastructure and capacity development that is not globally and readily available, creating knowledge silos, often under proprietary corporate control.

One risk in Ocean Science is that, as we rely more and more on data for decision making, we overlook regions where data is not available. We must not mistake the lack of measurement on a region for a lack of change or impact in the state of the ocean.

The growing recognition and awareness of the rights of knowledge holders, by the adoption, for instance of the CARE Principles (https://www.gida-global.org/care), is another positive development that can lead to the design and adoption of better policies. The CARE principles are:

● Collective Benefit - Data ecosystems shall be designed and function in ways that enable Indigenous Peoples to derive benefit from the data.

● Authority to Control - Indigenous Peoples' rights and interests in Indigenous data must be recognised and their authority to control such data be empowered. Indigenous data governance enables Indigenous Peoples and governing bodies to determine how Indigenous Peoples, as well as Indigenous lands, territories, resources, knowledge and geographical indicators, are represented and identified within data.

● Responsibility - Those working with Indigenous data have a responsibility to share how those data are used to support Indigenous Peoples' self determination and collective benefit. Accountability requires meaningful and openly available evidence of these efforts and the benefits accruing to Indigenous Peoples.

● Ethics - Indigenous Peoples' rights and wellbeing should be the primary concern at all stages of the data life cycle and across the data ecosystem.

Access Processing Charges (APCs), in the context of Open Access, and publication policies that require the relinquishing of data rights pose a risk for the equitable and fair participation of Global South researchers.

General Coordination of Ecosystems and Biodiversity, Ministry of Science, Technology and Innovation of Brazil:

Contributions: Monitoring and Evaluation; Innovation and Problem Solving.

Risks: Privacy and Security in data storage; Inequality and possible data deletions.

2. **How can developing countries benefit from the data revolution while considering risks?**

Institute for Applied Economic Research (IPEA), Brazil:

Benefits:

i. Increase the ability to produce, analyse and disseminate quality data on the various dimensions of sustainable development, such as health, education, environment, economy, among others.

ii. Improve planning, monitoring and evaluation of public policies aimed at meeting the Sustainable Development Goals (SDGs), as well as resource allocation and accountability.

iii. Expand the participation and engagement of civil society, the private sector, academia and other relevant actors in the production and use of data for sustainable development.

iv. Promote innovation, creativity, competitiveness and social inclusion, taking advantage of new technologies and opportunities generated by the data revolution.

v. Strengthen regional and global cooperation and integration between developing and developed countries, as well as between international and regional organizations working in the area of data for sustainable development.

vi. Citizen can have access to transparent and readily available data produced by the government, being able to evaluate public policies.

vii. Citizens can be more confident that: (i) their personal data is being handled according to appropriate protocols and, when this is not the case, (ii) individuals and organizations must be held accountable for this misuse.

viii. The scientific community and society in general can have access to the knowledge that is being produced with funds paid by taxpayers.

ix. Delivering secure digital public services, saving money and time for citizens and government alike.

Risks:

i. Lack of infrastructure, human, financial and technical resources, legal and regulatory frameworks, adequate standards and methodologies for the production and use of data.

ii. The existence of gaps and inequalities in the availability, access, quality and representativeness of data between and within developing countries.

iii. Vulnerability to the violation of the privacy, security and rights of the people who provide or are represented by the data, as well as its manipulation or misuse.

iv. Dependency or subordination to the interests or agendas of other countries or organizations that have greater power or capacity in the production and use of data.

v. Resistance or difficulty in adapting to the cultural, organizational and institutional changes that the data revolution demands.

General Coordination of Sciences for Ocean and Antarctica, Ministry of Science, Technology and Innovation of Brazil:

- Follow the CARE Principles;

● Recognize the value of all forms of contributions from data collection to data dissemination;

● Follow jointly designed roadmaps, such as the "AA-DATA2030 Report: Roadmap for the All-Atlantic Data Space – Draft Zero –" https://allatlanticocean.org/wp-content/uploads/2023/06/AA-DATA2030_8_9_Roadmap_OS _FINAL.pdf

○ The report identify the following focus areas:

■ Common Standards for Information and Data Sharing

■ Invest in Human Resources

■ Sustainable funding

● The Report OCEAN DECADE AFRICA ROADMAP identify these gaps:

■ "Need for training on data collection, analysis and interpretation (including capacity building in programs and software to analyze different environmental datasets)

■ Inadequate common platforms for data sharing, adaptation of technologies, facilities and infrastructure within Africa

■ Identified gaps in research programmes on ocean policy agenda in order to analyze objectives, identify priorities, align teaching/research/outreach activities capable of impacting on policy

■ Need to better manage, develop and transfer know-how within the contributing research community"

● See also: Ocean FAIR Data Services . 2

General Coordination of Ecosystems and Biodiversity, Ministry of Science, Technology and Innovation of Brazil:

Developing countries can benefit through capacity building, improving infrastructure and through international partnerships.

3. <u>**What national and international policies and support measures can help address the challenges of the developing countries in the area of data relevant for sustainable development, including scientific and research purposes, data quality, data capabilities and data governance, while taking into account the multiple dimensions of data?**</u>

Institute for Applied Economic Research (IPEA), Brazil:

National Policies:

i. Investing in strengthening national statistics and data systems, as well as training professionals involved in this area (SDG Target 17.18 and 17.19).

ii. Integrating relevant data for sustainable development into public policies, action plans, budgets and SDG monitoring and evaluation mechanisms.

iii. Promoting the quality, standardization, interoperability, updating and dissemination of data relevant to sustainable development, using new technologies and best international practices.

iv. Adopting ethical principles, legal and regulatory standards, technical and methodological standards that guarantee the quality, reliability and inclusion of data.

v. Adopting legal and regulatory frameworks that guarantee the protection of personal data, cyber security, access to information, transparency and responsibility in the use of data.

vi. Promoting a data culture that values the use of data as a tool for sustainable development, as well as the involvement of all relevant actors in this process.

vii. Establishing a national data strategy for sustainable development, which defines priorities, objectives, responsibilities, resources and indicators for the production and use of data relevant to the SDGs.

viii. Strengthening the institutional and human capacities of national statistics and data systems, as well as other data producers and users, through investments, training, partnerships and technical cooperation.

ix. Fostering the participation and collaboration of all relevant actors in the production and use of data for sustainable development, such as government, private sector, civil society, academia, international and regional organizations, among others.

x. Supporting research and innovation initiatives that contribute to the advancement of scientific and technological knowledge in the area of data for sustainable development.

xi. Participating in international and regional forums and networks that promote the exchange of experiences, knowledge, data and good practices on sustainable development.

xii. Establishing partnerships and alliances with other developing countries, with developed countries, with international and regional organizations, with the private sector, with civil society and with academia to share experiences, knowledge, resources and good practices in data for sustainable development (SDG 17.16).

International Policies:

i. Avoiding data colonialism through the transfer of relevant technologies.

ii. It is essential that data is treated and managed in a democratic, participatory and collaborative manner, respecting the principles and values of the 2030 Agenda.

iii. Collective commitment from all countries, organizations and individuals who produce, share and use data for sustainable development.

iv. Establishing, through forums and international networks, legal and regulatory frameworks that guarantee the protection of personal data, cybersecurity, access to information, transparency and responsibility in the use of data.

v. Promoting, financially and technically, research and innovation initiatives that contribute to the advancement of scientific and technological knowledge in the area of data for sustainable development.

vi. Strengthening the institutional and human capacities of national statistical and data systems in developing countries, as well as other data producers and users, through investment, funding, training, partnerships and technical cooperation.

vii. Improving access to science, technology and innovation and increasing knowledge sharing on mutually agreed terms through technology transfer (SDG Targets 17.6, 17.7 and 17.8).

General Coordination of Sciences for Ocean and Antarctica, Ministry of Science, Technology and Innovation of Brazil:

● The UNESCO Recommendation on Open Science was adopted by the General Conference of UNESCO at its 41st session, in November 2021.

● AA-DATA2030 Report: Roadmap for the All-Atlantic Data Space.

General Coordination of Ecosystems and Biodiversity, Ministry of Science, Technology and Innovation of Brazil:

National Data Policies, in the Brazilian case, there is the General Data Protection Law - LGPD;

International Partnerships for Cooperation, in the case of biodiversity, one can mention the Global Biodiversity Information Facility – GBIF.

4. **In your country's view, what role could CSTD play in respect of data for development, including in the context of the Global Digital Compact?**

Institute for Applied Economic Research (IPEA), Brazil:

i. Promoting dialogue and cooperation among member countries, international and regional organizations, the private sector, civil society, academia and other relevant actors on the challenges and opportunities of the data revolution for sustainable development.

ii. Monitoring and assessing advances and gaps in the production and use of SDG-relevant data, as well as good practices and lessons learned in this area.

iii. Recommending policies and support measures to strengthen national and regional capacities in the area of data for sustainable development, taking into account the different realities and needs of developing countries.

iv. Supporting the implementation of the Global Digital Compact, which aims to promote inclusive, democratic and human rights-based digital governance, as well as effective international cooperation to address the challenges and seize the opportunities of the digital economy.

v. Fostering research and innovation in the area of data for sustainable development, encouraging the exchange of scientific and technological knowledge among member countries and other relevant actors.

vi. Working with the Brazilian Cooperation Agency (Agência Brasileira de Cooperação – ABC) to help promote South-South cooperation with lessons and practices from the process of digitizing services and personal data security in Brazil.

General Coordination of Sciences for Ocean and Antarctica, Ministry of Science, Technology and Innovation of Brazil:

● Maintain Diamond Open Access and Open Data repositories;

● Support and promote the CARE Principles;

● Support and promote Capacity Development.

General Coordination of Ecosystems and Biodiversity, Ministry of Science, Technology and Innovation of Brazil:

CSTD may to provide guidelines and basic principles through the "Global Digital Compact - GDC" initiative, mainly in the areas of governance; access and connectivity; ethics and human rights; digital economy and innovation; and, international cooperation.