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**Harnessing blockchain for sustainable development:
prospects and challenges**

Statement submitted by

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2021 Annual Session of the CSTD

High-level round table on harnessing blockchain for sustainable development: prospects and challenges

**Speech for Honourable Dr. Douglas Letsholathebe,
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19 May 2021, 2 pm – 4 pm CET**

Acting Secretary-General of UNCTAD, Ms. Isabelle Durant,

Excellencies,

Ladies and gentlemen,

Chair, CSTD

Mr Chair, let me start by appreciating the opportunity you have once more granted me to contribute to the discussions in this annual session, in particular on this emerging and complex technology of harnessing blockchain for sustainable development. Science and innovation is the source of hope for sustainable development, and blockchain technologies are coming up strongly.

Mr Chair, In the early days of Blockchain technology the focus remained largely on the cryptocurrency itself and not the technology behind it probably because huge gains in cryptocurrency tended to overshadow the driving force behind it. This focus has therefore led many of us to think blockchain technology is only about cryptocurrency.

Governments and captains of industry have now embarked on projects to fully assess blockchain's capabilities and how it can be incorporated into day to day processes. Some sectors particularly the finance sector has moved faster than most sectors. Blockchain has been touted as the golden egg for the financial system. It is important to acknowledge other uses of block chain technology for instance to direct resources to multitudes of people, for example refugees; to authenticate transfers of vouchers to multitudes of people; for medical records; and to prevent election fraud, just to mention a few.

Mr Chair, Through implementation of the Vision 2036 and the National Development Plan number 11, Botswana is determined to diversify its economy, to promote job creation, support structural transformation, and long-term inclusive, sustainable, and resilient development while building on its current strengths in commodity sectors. The Blockchain technology will become handy for the country. In this regard, for Botswana, blockchain technology could initially be critical for further improvement of the efficiency of global commodity value chains, and to create opportunities for diversification in digital sectors.

As highlighted in the Secretary-General's Report, blockchain technology is expected to lead to profound transformations of global commodity value chains by enhancing transparency, traceability, and reliability resulting in continuous reduction in transaction costs, increasing efficiency, and profitability.

Excellencies, ladies and gentlemen, blockchain technologies promise of automatizing trust that could lead to significant innovation along the value chain. The diamond industry is of great importance for Botswana. This industry faces strict requirements regarding Provenance, Supply Chain Traceability, involvement of Third-Party in the Verification process, and reliability of Transactions to meet best international practices. Trust is a critical element in this industry, which affects all its stages from diamond mining, valuing, shipping, polishing and cutting, and finally selling the

stones. In this regard, blockchain technology helps to meet these requirements.

Several other industries of importance to Botswana such as the beef industry likewise face strict traceability requirements. Similar to diamond mining, blockchain technology may provide useful solutions for providing traceability in the cattle and beef industry in order to secure sustainable international markets. The potential for this requires further investigation.

Potential applications in finance exist and have been adopted in some countries. The use of blockchain in the financial industry requires careful consideration in view of the critical importance of the smooth functioning of financial markets in any country. We are made to understand that the blockchain technology may have beneficial effects, for instance, for financial inclusion.

Mr Chair, My second point is that blockchain technology may have profound effects on the economy and society. Again, as highlighted by the Secretary General's Report, blockchain is part of a new set of technologies that constitute the new paradigm of Industry 4.0. We agree with UNCTAD's Technology and Innovation Report 2021, which has argued that developing countries cannot afford to miss out on this new wave of technological transformation. In this regard, realizing the criticality of technological transformation to development, Botswana has embarked on an initiative dubbed Smart Botswana.

Smart Botswana presents the country's new proposition to drive transformation across the economy through a select key strategic initiatives and projects. Smart Botswana is an action plan that delivers a smart sustainable society for Botswana and Batswana. This strategy adopts a whole of government approach to transform the public sector to efficiently provide services to citizens and businesses. In addition the strategy engages the private sector whose contribution will secure success of this transformation. Botswana intends to deliver the Smart Botswana strategy through frameworks as pillars to address Digital Economy, Governance and Readiness.

Botswana is therefore very interested in understanding how to harness blockchain to diversify her economy in digital sectors. Using blockchain in our commodity value chains and engaging our people in learning and working with these technologies in that value chain, we can promote the spillover of that knowledge and skills to other economic sectors and promote economic diversification into digital services.

There is still a lot to be learned on the real benefits and the potential downsides that blockchain technology can bring. In this regard, I welcome the recommendations of the Report of the Secretary-General for the Commission to share experiences in national strategies for harnessing blockchain technology for sustainable development, compile and share examples of the use of blockchain technology for sustainable development and facilitate regional and international partnerships for blockchain innovation and system development.

Mr Chair, Let me highlight once more an area in which we need to share more experiences and knowledge. The promise of the benefits of blockchain for the diamond business relies on the assumption that diamond data is inserted correctly in the blockchain. This is similar to all value chains. However, this highlights the challenges of the "first mile" of the solution - how to ensure that the correct data is entered in the blockchain? What are the institutions and technological changes required to provide trust in this part of the data generation and process outside the blockchain?

As highlighted by the Secretary-General's Report, a critical challenge is for developing countries to invest in improving the digital infrastructure and skills needed to benefit fully from digital technologies such as blockchain. Providing widely available, fast, and low-cost Internet services and building digital skills and know-how will be necessary to facilitate the deployment of digital technologies such as blockchain.

We also need to share experiences on how to assess our countries' capacity to engage and benefit from blockchain innovation. That could be an area in which UNCTAD could contribute as part of its Programme on Science, Technology, and Innovation Policy reviews, which includes assessments of innovation systems in a country.

My Ministry is currently collaborating with UNCTAD in conducting an STI Policy Review in Botswana. We look forward to having a good diagnostic of the innovation capacity of Botswana, including the challenges and prospects in using frontier technologies such as blockchains for promoting development.

I look forward to the sharing of perspectives and national experiences during this session of the CSTD. We hope to benefit from this discussion to help inform our national discussions on the potential for harnessing blockchain technology going forward. Thank you