

Connectivity in an Age of Volatility, Uncertainty, Complexity and Ambiguity (VUCA): Realising SDG9 amid the COVID Pandemic

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*“As we begin the task of reconstruction in the wake of the coronavirus pandemic, financing for development becomes all the more critical. The overarching principle of Agenda 2030 and the Sustainable Development Goals is that we leave no country behind, and that those furthest behind receive our full support.”*¹ – President Cyril Ramaphosa

The Context of Connectivity in the Age of COVID

This paper is presented in the context of the looming ‘global reset’ as developing nations continue to bear the economic brunt of underdevelopment that was brutally exposed in recent months. To reverse this we need to meet some practical objectives, these are fundamental and include among others, ensuring that medicines and healthcare reach rural communities, to ensure education is minimally disrupted, to protect populations from pandemics COVID and others, to facilitate tourism, to maintain trade and investment flows and many other vital arteries of the international system.

We should avoid treating infrastructure development as merely economic growth issue. It is a developmental issue and in many respects must be treated as a public good. We have learned in this era of COVID that in order to rebuild humanity we must ensure the realisation of SDG 9 which demands inclusive and sustainable industrialization, together with innovation and infrastructure. SDG 9 is crucial to allow for a dynamic and competitive economic environment to generate employment and livelihoods. Connectivity plays key role in introducing and promoting new technologies, facilitating international trade and enabling the efficient use of resources.

The late 20th and 21st century has been characterised by the steady rise of Asia, this has impacted on the world in numerous ways, transnational relationships and new flows of finance, trade, technology, information, energy and labour have created multiple geopolitical formations which are reshaping the world as we know it. Interestingly, all of these

¹ Ramaphosa, CR 2030 Agenda for Sustainable Development in the Era of Covid 19 Ramaphosa, CR Statement, 2030 Agenda for Sustainable Development in the Era of Covid 19 Virtual High Level meeting, 29 September 2020.

developments are taking us to a pre-colonial era. The decolonising of history, trade and even geopolitical maps that reflect the historic, age old and natural trade route that range from the Silk Road to the Spice Route, the Trans Saharan Route in Africa and increasingly the strategic placement of the Indian Ocean as an enabler of trade and commerce for centuries are again coming to the fore.^{2 3}

There are usually two disciplines that have traditionally fed our perceptions of interstate relations, we can either look at interstate relations as either economic or political, idea of complex and multidisciplinary world order, to explain our current context is probably more accurate tool. When we examine events in this way, the zero some logic is easily displaced by an interests driven mutually beneficial logic—as states strive to maintain this equilibrium at any given time.

It is estimated that China's Belt and Road Initiative is likely to boost world GDP by 2040 by \$7.1 trillion per annum. This raises world GDP by 4.2% of likely GDP in 2040 (or 8.3% of GDP in 2019). The benefits of the BRI are widespread. As many as 56 different countries are forecast to have their annual GDP in 2040 boosted by more than \$10 billion as a result of the project. China is Africa's largest trade partner, with Sino-African trade topping \$200 billion per year. Over 10,000 Chinese-owned firms are currently operating throughout the African continent, and the value of Chinese business since 2005 amounts to more than USD 2 trillion, with USD 300 billion in investment currently on the table. Africa has also eclipsed Asia as the largest market for China's overseas construction contracts. In 2019, China announced a USD1 billion Belt and Road Africa infrastructure development fund.

Chinese President Xi Jinping and South African President Cyril Ramaphosa, co-chaired the Beijing Summit of the Forum on China-Africa Cooperation (FOCAC) in September 2020. The summit was drew representation from a large number of heads of state and heads of delegations of other African states. The Summit announced USD 60 billion African aid package, further strengthening Africa's very crucial economic ties and friendship with China.

Similarly, India's development partnership in Africa has acquired new energised momentum in recent years. Historically, India has developed close partnership with African counterparts through its bilateral, regional and multilateral initiatives. Japan, on the other hand, has been

² Frankopan, Peter. *The Silk Roads: a new history of the world 2016* (6th ed), Bloomsbury

³ Robert D. Kaplan, *The Revenge Of Geography: What the Map Tells Us About Coming Conflicts and the Battle Against Fate*, 2014 Random House

engaged in various development projects in Africa as part of its Official Development Assistance including the Tokyo International Conference on African Development (TICAD).

Both India and Japan's development cooperation with Africa is in line with the Agenda 2063 which aims to accelerate Africa's economic growth. Some of those key areas of cooperation that Japan and India currently focus in the framework of AAGC are education, human resource development and skills enhancement, agriculture, infrastructure, information technology and health. This reflects that there are many parallels between India and Japan's approach towards establishing strong connection with the African countries.

Both India and Japan have also been forging strong development cooperation connections with African countries. As is evident, there is a convergence in the development cooperation approach of both the countries in Africa, and they offer possibility of triangular cooperation. Japan is not a stranger to India. Japan has been a valuable development partner for several years, and has been involved in the development of industrial corridors in India and has invested in automobile, telecommunications, pharmaceutical, electrical equipment development in the country.

There has been a flurry of activity between India and Africa since the first India–Africa Forum Summit (IAFS) was hosted in New Delhi, from 4-8 April 2008 in New Delhi. Shortly thereafter the second Summit was convened in Addis Ababa, Ethiopia 24-25 May 2011, and most recently 28-29 October 2015.

During July 2018, Prime Minister Narendra Modi addressed the Ugandan Parliament during his visit. He outlined a vision for both bilateral and multilateral partnerships through '*10 guiding principles for India-Africa engagement*'⁴⁵. This came as a welcome development for Africa, as India had not articulated a clear vision or strategy for Africa until the IAFS 2015 and the announcement of the Guiding Principles for India-Africa engagement in 2018.

⁴ Outward Direct Investment from India: Trends, Objectives and Policy Perspectives", Occasional Paper No. 165. Export-Import Bank of India, 2014. In ORF Online https://www.orfonline.org/research/indian-investment-africa-scale-trends-and-policy-recommendations/#_ednref17

⁵ <https://www.orfonline.org/research/the-ten-guiding-principles-for-india-africa-engagement-finding-coherence-in-indias-africa-policy/>

What is clear is that in order for these objectives to be realised through China, Japan, India or any other international partnership reliant, and durable infrastructure is crucial

SDG 9: in a World Order dominated Volatility, Uncertainty, Complexity and Ambiguity (VUCA)

The initial spread of the COVID virus was rapid, resulting in a threat of collapse for the current global architecture. With states closing borders, restricting travel and confining citizens to their homes, at least during the hard lockdown. By October 2020 the world counted over 40 million Cases, and 1.16 million deaths, the virus has dictated the way in which we live our lives and the methods we use to organise our communities, families, education, work and our most basic daily routines. The logistics and tourism sectors are critical job creators among developing nations, the sector has been hard hit as it is dependent on strong networks and connections.

Future planning will require a more detailed look at risk mitigation. If we had to take an objective and scientific approach to analysing the current state of *Volatility, Uncertainty, Complexity and Ambiguity (VUCA)* we would understand that there has never been a decade that the world has not known this. However, what varies is the level of intensity and the response of the international community to a crises. The acronym VUCA emerged out of the leadership theories of Warren Bennis and Burt Nanus in their 1985 work *Leaders: Strategies for Taking Charge*⁶. The U.S. Army War College introduced the concept of VUCA to describe the more volatile, uncertain, complex and ambiguous world order perceived as resulting from the end of the Cold War.

A recent Deloitte article *Connectivity Resilience in a VUCA world – Enhancing Communication Infrastructure amidst COVID-19* – the VUCA notion emerges as a means to describe the current environment in which the world is trying to recommit to rebuild our severely injured economies. This acronym, captures the stark reality of these challenging, complex but also exciting riddled with change and transformation globally.

⁶ Warren Bennis and Burt Nanus in their 1985 work *Leaders: Strategies for Taking Charge* in Collins Business Essentials

What we can be certain of, is that the unpredictable nature of the COVID-19 pandemic, and a return to previously known ‘normal’ is not likely until a vaccine is developed and universal access ensured.

Connectivity and the Infrastructure development are central to the global development agenda and global development. Improving global connectivity is fundamental, and modelling this connectivity as a public good is vital. In October 2020, President Ramaphosa announced the South African Economic recovery plan where he stated that Infrastructure will be the “linchpin of SA’s economic reconstruction and recovery plan, aimed at helping SA come back from the devastation wrought by the Covid-19 pandemic.” President Ramaphosa announced a “huge” build programme is aimed at unlocking more than R1 trillion in infrastructure investment over the next four years, and will be one leg in the broader package that the state hopes will raise growth to about 3% on average over the coming decade.

This logic is supported by the report of the *G20 Global Infrastructure Outlook*⁷⁸, forecasting infrastructure investment needs and gaps. The report suggests that countries worldwide are on the verge of launching the biggest round of infrastructure investment since the post-2008 financial crisis, and the stimulus measures adopted in the successive years. The world is facing a \$15 trillion gap between the infrastructure investment that is required, and the financial provisions made available by 2040. According to the same report, when 1% of GDP is invested in infrastructure, economic output increases by about 0.4% in the same year and by 1.5% four years later.⁹

Geographical location and distance are fixed, however the nature and extent of infrastructure, connectivity and logistics are variables that can be controlled and managed. Firstly, Resilience but also durability and reliability of internationally connected networks for trade and movement, in an age of disruption and with the persistent COVID pandemic. This threat lurks in an environment in which an event in one part of the world can potentially impact on the global supply chain. The building of resilient and durable connected networks is in reality an issue of economic survival for such countries; Secondly, an efficient global supply chain and the associated Global value chains (GVCs) are a pre requisite for economic activity in the 21st

⁷ <https://outlook.gihub.org/>

⁸ <https://www.weforum.org/agenda/2020/04/coronavirus-covid-19-sustainable-infrastructure-investments-aid-recovery>

⁹ <https://www.weforum.org/agenda/2020/04/coronavirus-covid-19-sustainable-infrastructure-investments-aid-recovery>

Century. The reliability and the links that connect markets are vital to ensure that disruption to the efficient movement of goods and services is minimised. The World Bank's Logistics¹⁰ Performance Index for example demonstrates that poor connectivity results in higher cost and inefficiencies meeting demand and therefore constraining market potential and growth. Durable and resilient infrastructure is also crucial to inclusive participation of GVCs. Thirdly, economic growth, the persistent global financial crisis, and the chaos created by the COVID – 19 pandemic has forced many states to increase public expenditure on infrastructure development, to improve connectivity as a means to ensure future development and prosperity. States, have increasingly started to borrow and channel that deficit to invest infrastructure that would ensure the efficient movement of goods and services.

Africa, Connectivity and the Pandemic Agenda 2063 and the SDG 9

The *African Union's Agenda 2063, 'the Africa we want'* is our initial reference point when defining Africa. Agenda 2063's seven aspirations were launched at the African Union's 50th anniversary celebration in Addis Ababa, Ethiopia, in May 2013. In terms of the plan, African leaders made a pledge to accelerate growth, development and prosperity on the continent going forward to 2063.¹¹

Africa's population of nearly 1.3 billion and growing, with people distributed through all 55 African Union member states is indicative of Africa's current position as being poised for growth and development.

Sub-Saharan Africa, in particular, is expected to reach a GDP of \$29 trillion by 2050, however, the further development of our economies are hampered by a lack of Industrial capacity as well as massive infrastructure backlogs. Industrialisation; Infrastructure development; (which includes ICT); Development of Special Economic Zones (SEZs) and Industrial Parks; Developing the Energy sector; The Ocean Economy; Development Finance; and Human Resource and Skills Development.

The potential to be unleashed through the African Continental Free Trade Area (AfCFTA) agreement will create the largest free trade area in the world. The AfCFTA connects 1.3 billion people across 55 countries with a combined gross domestic product (GDP) valued at US\$3.4 trillion. It is expected to lift 30 million people out of extreme poverty. However, realising its

¹⁰ <https://www.worldbank.org/en/news/press-release/2019/06/19/42-trillion-can-be-saved-by-investing-in-more-resilient-infrastructure-new-world-bank-report-finds>

¹¹ <https://au.int/en/agenda2063/aspirations>

full potential will depend on a number of significant policy measure to ensure trade facilitation. Foremost will be the ability to boost intra-regional trade supported by a resilient and reliable infrastructure network to ensure connectivity.¹²

Africa's developmental vulnerabilities have been exposed by the economic crisis triggered by the COVID-19 pandemic. The International Monetary Fund (IMF) is projecting -3.2% GDP growth in Sub-Saharan Africa, while the World Bank also projects GDP growth rates between -2.1% and -5.1%.

According to the African Development Bank (AfDB), Africa is currently facing an infrastructure deficit of approximately \$130 billion a year. The current financing gap rests at between \$68-\$108 billion, which traverses energy, transportation, water and sanitation infrastructure needs. A recent study, road densities in Sub-Saharan Africa (SSA) are approximately a third of that of South Asia's, and only a quarter of all roads are paved. This implies more expensive transport costs and travel times are longer with more risk than the average for such corridors. Energy generational capacity in Africa is approximately half of that in Southeast Asia, and 50% of the population of 24 countries in SSA lack access to grid-based energy.

However, the nature of any kind of crises is such that where there is destruction there is creation. For Africa in particular, investmeny in technologically advanced, resilient and sustainable infrastructure is will have e significantly positive impact on development and growth thereby allowing for improved economic activity in the future. On a global scale, it is reported that low and middle-income countries alone could see a net benefit of \$4.2 trillion from investing in infrastructure that prioritizes future-focused resiliency. That's a \$4 return for every \$1 spent.

These challenge reinforce barriers for market entry and regional integration while simultaneously increasing national-level vulnerability to macroeconomic shocks.

Integrating new technologies during the design, construction and operational phase of an infrastructure asset can significantly lower the cost while improving the functionality. Artificial intelligence (AI), analytics, fintech, cloud computing, 5G, new materials, renewable energy technology and 3D printing are just a few of the innovations changing the global infrastructure landscape. When used, they can decrease project cost, compress construction time, reduce

¹² <https://www.worldbank.org/en/topic/trade/publication/the-african-continental-free-trade-area>

community disruption, minimize environmental harm and increase safety. Future planning on infrastructure should start incorporating such tech advances to prevent falling back.

The pandemic has disrupted the way in which we communicate and connect ourselves physically and virtually to the world. According to Deloitte the communications technology, industry has been confronted with unprecedented global demand, and this has concentrated demand on the need for fast, efficient communications and hence data.¹³

On 29 April 2020, in what was still the early stages of the COVID 19 pandemic, Makhtar Diop¹⁴ made some interesting observations in a World Bank Blog, Resenting the case for digital connectivity, Makhtar suggests that connectivity is a public good and should be treated as such. The suggestion is based on some startling facts; Firstly, 1.5 billion children need online schooling due to the coronavirus pandemic (COVID-19) and the policy measures, formulated by the World Health Organisation (WHO) and adopted by states to prevent the worst case scenarios associated with the pandemic. Secondly, as social distancing is increasingly becoming a norm, digital connectivity became the only real tool to keeps us informed and employed. For those without, or with limited internet access, the economic and social impact of this pandemic will continue to be detrimental.

Thirdly and critically, Makhtar cites the Broadband Commission report which estimates that around \$100 billion will be needed to achieve universal access to broadband connectivity in Africa. The World Bank Group has launched the Digital Economy for Africa Initiative, in support of Agenda 2063 the Africa we want to digitally connecting every individual, business, and government in Africa by 2030. But the pandemic has demonstrated that we cannot afford to wait.

The battle against COVID-19 has exposed the inherent vulnerability of countries that do not have the infrastructure for widespread digital connectivity. In Sub-Saharan Africa, it is estimated that 60 percent of the population remains out of reach of 4G networks, in many parts of the world, mainly in Africa, Asia and Latin America limited access remains the norm and perpetuated by both financial and regulatory challenges. Reducing and relaxing of internet costs, using technology such as balloons, drones or other mechanisms to create hotspots and open up much need spectrum to ensure faster and more efficient, reliable and affordable,

¹⁴ <https://blogs.worldbank.org/voices/covid-19-reinforces-need-connectivity>

communication are examples of policy interventions that have helped to alleviate some of the burden.

As the crisis continues, and as pandemics of this kind become more common, some countries will be left behind. For a start, being able to deploy digital health care solutions for detecting COVID-19 can save lives, and this will also be important to protect countries against future pandemics.

Conclusion

The COVID Pandemic presents us with a unique global challenge, the very foundations of a humane, interdependent world order seems to be threatened by an increasing trend toward unilateralism and the undermining of multilateral structures. The United Nations, the World Trade Organisation (WTO) and the global financial and political architecture may well be experiencing the opportune moment in history where we can drive a new version of humanity in a relevant global architecture. Connectivity, is directly linked to SDG 9 and this must be treated as such by all states.

Every thought leader has been clear, the world is due for a reset, we can no longer continue on the tradition of growth led economic models, the time for a rethink is upon us and we should choose the path that serves the interests of humanity and not just growth.

During the 4 May 2020 Virtual NAM,¹⁵ PM Modi called for a *“new template for globalisation, and international institutions that are more representative of the world today.”* PM Modi reaffirmed that *“During this crisis we have shown how democracy, discipline and decisiveness can come together to create a genuine people’s movement,”* He also highlighted the need to *“promote human welfare and not focus on economic growth alone.”*

These reflections are not dissimilar to the collective, consistent view that we cannot continue as we have, and we must earnestly begin to seek new methods of economic and social development. In the pursuit of solutions in our existing environment, we must be willing to accept that change is the only real means to ensure and enhance connectivity in the 21st Century. Education, health, tourism, commerce, development and many other important sectors cannot be the victims of weak connectivity the human cost will be devastating. The COVID Pandemic has indeed given us a disaster, the question is how do we respond to that disaster?

¹⁵ 4 May 2020 Virtual NAM Summit

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