North–South research collaboration and the Sustainable Development Goals: Challenges and opportunities for academics

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North–South research collaboration has a long history and is celebrated for enhancing knowledge transfer between academics and higher education institutions in the two geographic regions. Knowledge transfer between the North and South presents an opportunity for academics and institutions to contribute towards the achievement of the Sustainable Development Goals (SDGs) as set out in the United Nations Agenda for Sustainable Development 2030 (UN 2016). But does North–South collaboration enhance effective knowledge transfer? What geopolitical factors affect these collaborative efforts? And what challenges do the SDGs present for academics?

In this chapter, I offer a short summary of international research and debate about North–South research collaboration. I explore some of the potentials and pitfalls of such collaborations, examining how it can be a catalyst for knowledge transfer in the context of the SDG era. My aim is to contribute to the discourse about ways in which academics and/or institutions in the North can collaborate with those in the South to build research capacity.

The SDGs comprise a list of 17 goals and 169 targets to be achieved by 2030 (UN 2016). Building on the success of the Millennium Development Goals (MDGs), the SDGs are intended to be more inclusive and call for the whole world to be involved in their achievement. Noting this, Mohamedbhai (2015:1) stated that unlike the MDGs, the 'SDGs were crafted by a group of no less than 70 countries, including developing ones'. The SDGs also give higher education institutions a prominent role to play in their implementation. As such, the goals present 'a unique opportunity for universities' (Mohamedbhai 2015: 1). In particular, SDG 17 (on partnerships for achieving the goals) has significance for academic researchers who are active in cross-regional research networks (UN 2016).

Higher education institutions have a prominent role to play in accomplishing the SDGs by 2030 (Van der Valk 2015). As they are already part of international networks and research collaborations, these institutions should therefore be able to play a leading role in extending and consolidating global partnerships (Halvorsen 2016), which is one of the five transformative shifts identified in the SDGs. Discussion in this regard has already begun. For example, the theme of the International Association of Universities' 15th General Conference held in Thailand in November 2016 was 'The role of higher education as a catalyst for innovative and sustainable societies'. As a follow-up, the University of Bergen (2017) organised a workshop to discuss the role of universities in the implementation of the SDGs.

In university efforts to contribute to the achievement of the SDGs, cooperation among academics will be crucial. Since academics contribute to the production of new knowledge (Bradley 2008; Halvorsen 2016), collaboration has the potential to enhance knowledge sharing to the benefit of all parties. Although research institutions in the South have capable human resources, that is, academics and professionals, they are based in countries with limited public funding for research (Breidlid 2013; Ishengoma 2016b). North—South collaboration may assist in the transfer of essential financial resources from North to South. For example, as Ishengoma (2016a) pointed out, the University of Dar es Salaam in Tanzania has benefitted significantly from collaborative arrangements with several Northern donor countries and institutions.

On the other hand, a number of challenges limit the capacity of Southern academics to participate in collaborative research. For example, South Africa is the only southern African country with advanced research facilities. The country's National Research Foundation (NRF) has helped academics and institutions to make reasonable strides in research. Academics in universities and other research institutions receive financial support through a number of NRF-sponsored research programmes. However, the majority of African countries lack similar funding bodies, hence the need for research capacity building.

In this chapter, I have three aims:

- To review some of the debates around North–South research collaboration and knowledge sharing among scholars and/or institutions.
- To reflect on the geopolitics of research collaboration between the two regions.
- To identify particular challenges facing academics from the South.

To achieve these objectives, I used 'literature research methodology', defined as 'to read through, analyse and sort literatures in order to identify the essential

attribute of materials' (Lin 2009: 179). I conducted an extensive internet search using the following keywords and phrases: 'North–South collaboration', 'South–South collaboration', 'partnerships', 'knowledge sharing', 'geopolitics of research', 'academic institutions', 'sustainable development goals' and 'SDGs'. I selected literature using Wang's literature selection principles (cited in Lin 2009), namely: purpose (whether the literature is valuable), authority (whether it was written by respected authors in the field of North–South research collaboration), effectiveness (in explaining the problem under discussion) and reliability (for example, articles published in respected journals). I used a qualitative approach to summarise the debates.

Debates about North-South research collaboration

Partnership as a concept refers to a relationship between institutions or individuals based on two principles: equity (fairness) and mutual benefit (Ashman 2001). Collaboration theorists have noted six critical factors that lead to an effective partnership or collaboration: trust, co-operative relationships, mutual influence, commitment, active communication and joint learning (Ashman 2001). Based on partnerships between the Netherlands and various Southern countries, Baud (2002) has argued that North–South partnerships can create effective systems for knowledge production. Hassan (2006) has stated that collaboration is a critical driver for knowledge sharing that is global and fruitful: 'It's a trend that benefits not just the developing world, but the entire world' (Hassan 2006: 79). Further, North–South collaboration may contribute to reducing the North–South research divide, illustrated by gaps in authorship, numbers of full-time researchers and research expenditure as a percentage of GDP (Blicharska et al. 2017).¹

While Engelhard and Box (1999) have argued that development dynamics have the potential to widen the research divide between the North and South, strengthening North–South research capacities may help to close this gap through the pooling of resources and knowledge sharing. According to Hassan (2006), North–South research collaboration could eliminate the 'research monopoly' that Northern nations enjoyed in the past. The monopoly has the effect of skewing research agendas to benefit the North more than the South. Indeed, given the North's hegemonic position in educational discourse, Breidlid (2013: 358–359) pointed out that North–South collaboration 'may be perceived as an attempt to entrench the huge disparities between the North and the South'.

To some extent, these geopolitical dynamics in education and research are shifting. Organisations, such as the Southern African–Nordic Centre (SANORD) and Nuffic (a Dutch organisation focused on educational and

research support) are strengthening cross-regional research collaboration by bringing scholars together at conferences and promoting collaborative research partnerships between member universities in the North and South. Similarly, many international donor organisations now give preference to funding collaborative research projects and programmes between scholars or institutions, thus encouraging North–South research collaboration. SANORD, for example, gives preferential financial support to North–South collaborative presentations. In addition, donors such as Nuffic run training programmes for doctoral candidates and their supervisors to strengthen doctoral programmes in southern Africa. The five-year Development Research Uptake in Sub-Saharan Africa (DRUSSA) project is another example. Funded by the Department for International Development (DFID) from 2011 to 2016, the project aimed to strengthen research through increasing research uptake in twenty-two African universities.

Meanwhile, several scholars have questioned the integrity of North–South partnerships for a range of reasons. Institutions located in the North often have more power due to their generally wealthier economies. In this context, North-based institutions 'bring in funds, expertise and resources to conduct research in low-income countries' (Van der Veken et al. 2017: 1), leading to a situation where Southern partners are viewed as 'receivers', while Northern partners are viewed as 'givers' in research collaboration arrangements (Binka 2005). Such a scenario empowers institutions based in the North at the expense of those in the South. Here, Andre Gunder Frank's (1970) thesis of 'dependency theory' seems relevant, and the risk of creating a 'dependency syndrome' among Southern researchers is certainly a real one. In this regard, Carbonnier and Kontinen (2014, cited in Ishengoma 2016b: 153) compare the capacity-building objectives of North-South research collaborations to '...the colonial enterprise of "civilising" the South'. Similarly, Breidlid (2013) has criticised the North, citing Norwegian scholars and institutions in particular for having a 'what's in it for me?' mentality. Ishengoma (2016b: 149) also observed that:

The neocolonial structure within which North–South research collaborations operate, limits their potential to impact on capacity building. In practice, Southern researchers are often the weaker partners as a result of their nations' weaker economic bases.

To enhance North–South collaboration, South–South research collaboration constitutes a potential mitigating factor in terms of power relations. Governments in the South have realised the importance of investing in research (Blicharska et al. 2017), in growing the research capacities of

Southern researchers and, empowering Southern institutions to pursue 'true partnerships' (Binka 2005) with other researchers.

The foregoing illuminates the geopolitical context in which North–South research collaborations take place. Donors, governments and other stakeholders should play a central role in promoting North–South research networks and achieving balanced relationships. The concept of 'netweaving' may be useful here. An alternative to networking (Stevenson 1998), netweaving proposes to create a stronger and sustainable social fabric for effective relationships. The idea is to avoid the creation of new boundaries; rather, netweaving aims to extend and strengthen existing networks (Krebs and Holley 2006). According to Monesson (2007), this form of networking 'transfers the focus from "What's in it for me?" to "What's in it for them?" (Monesson 2007: 12). Thus, as partners help others to achieve their goals, with the anticipation of receiving benefits in the long run, they create stronger collaborations and partnerships.

Research, academics and the Sustainable Development Goals

The SDG framework is built on five key themes, namely: people, planet, prosperity, peace and partnerships (SDSN 2015). This model, as noted by Holden et al. (2016), 'is in conflict with the popular three-pillar model of sustainable development, which seeks to balance social, environmental, and economic targets.' The 17 goals include, among other things, the elimination of poverty, promotion of decent work and economic growth, and reduction of inequalities. Specific areas cover: agriculture, gender, health, education, equality, climate, water and sanitation, industry and innovation, energy efficiencies, sustainable cities, poverty, peace and justice, and partnerships. Further, the SDGs are expected to perform better than the MDGs, given the new goals' 'SMART target approach'. Targets from the 2030 Agenda are specific, measurable, attainable, relevant and time bound (SDSN 2014: 4).

Higher education institutions are positioned to contribute to almost all areas of the SDGs through teaching, research and community engagement (Mohamedbhai 2015). In addition, the wide acceptance of the SDGs by higher education institutions makes academics and researchers key actors in their achievement (Mohamedbhai 2015). First, higher education institutions have an active role to play in ensuring that the concept of sustainable development is well understood, through research and dissemination of information.²

Second, higher education institutions are positioned to receive national and international support to work towards the achievement of the SDGs. For example, in South Africa, Green Campus Initiatives (GCIs) were established at the University of Cape Town (in 2007), Nelson Mandela Metropolitan

University (in 2011) and Durban University of Technology (in 2011) in response to climate change; the GCIs were extended in support of the SDGs. GCIs involve university students and academics in the achievement of environmentally friendly institutions in response to Goal 13 (climate action) and Goal 15 (life on land). South Africa's Department of Higher Education and Training pledged to support green initiatives in the country during the launch of the extended GCI at the University of Cape Town in 2012 (BuaNews 2012). The government's pledge created a good foundation for SDG achievement.

Third, university partnerships have the potential to leverage SDG 17 (partnerships for the goals). The response of higher education institutions to the SDGs and their implementation is an important component in the development of knowledge and the achievement of knowledge sharing through partnerships. Clarke et al. (2016) argued that co-production relationships (collaborations) promote the achievement of SDGs through knowledge sharing. At the same time, universities that produce evidence-based research can contribute to the achievement of the goals. This raises the question of what specific strategies higher education institutions can put in place to contribute to the SDGs in effective and meaningful ways?

Strategies for higher education institutions

Higher education institutions can implement several strategies to enhance SDG achievement, including research and innovation, a co-ordinated institutional approach, staff and student training, and the establishment of associations.

Research and innovation

The Sustainable Development Solutions Network (SDSN 2015: 16) pointed out that:

Through research and development (R&D) they can create and incubate new technologies, they can identify strategic priorities and best practices in strategy and innovation, and they can help to monitor the agenda through the collection, analysis, and interpretation of primary data.

At a conference on research and innovation held by Universities South Africa (USAf) in April 2016, delegates established that 'research and innovation is a key determinant in performance on the UN's Sustainable Development Goals 2030' (USAf 2016: 1). The conference's keynote session noted the importance of an integrated and transdisciplinary research approach towards meeting the SDGs, so as to widen the scope of knowledge and its accessibility. According

to Halvorsen (2016: 293), 'Knowledge is everywhere and potentially accessible to anyone who seeks it out.' Multidisciplinary research is likely to increase accessibility, thus promoting the success of the SDGs.

The establishment of multidisciplinary research involves co-ordinated research activities that attempt to promote wide and deep investigations, which can potentially cover all aspects of the SDGs. Such research collaborations broaden opportunities for knowledge sharing among academics and institutions. North–South collaboration in multidisciplinary research facilitates the achievement of solid research outputs (Engel and Keijzer 2006). By addressing multiple areas of the SDGs, collaborative research relationships have the potential to promote their achievement.

Co-ordinated institutional approach

The SDGs must be incorporated into universities' strategic plans (Mohamedbhai 2015). Budgets should also be set aside to financially boost efforts towards achieving the SDGs through collaborative research. An institutionalised approach to the SDGs is the only way to ensure academics and students in higher education institutions embrace their implementation. Mohamedbhai (2015) proposed that higher education institutions could establish research units or institutes that focus on the SDGs so as to realise lasting results. Governments of the respective countries could fund such arrangements, or resources could be mobilised through collaborative programmes. For example, through its NRF, the South African government encourages universities to establish research chairs, which could be established with the aim of addressing issues around the SDGs.

Staff and student training

Academics need to be trained on the integration of SDG-related issues in curricula. The United Nations has developed PhD and master's programmes on the Sustainable Development Goals in an effort to produce graduates with a comprehensive understanding of the SDGs. These graduates may provide critical analysis of the SDGs (SDSN 2015; UN 2016). Universities also have a role to play in this regard, as 'the key nodes of higher education, training a new generation of sustainable development leaders, and playing a key role in public awareness and education as well' (SDSN 2015: 16).

Establishing associations

Associations to support collaborative research and the achievement of the SDGs should be supported at local, national, regional and international levels. At a regional level, the Association of African Universities and the

Association of Universities of Latin America and the Caribbean are two examples (Mohamedbhai 2015). Internationally, the Global Universities Partnership on Environment for Sustainability has a membership of more than six hundred universities. Such initiatives are likely to have an impact on research and the achievement of the SDGs.

Challenges for Southern academics in the SDG era

Academics based at institutions in the South face a myriad of challenges that need to be addressed to enhance success in collaborative research for the advancement of the SDGs. For South-based academics to improve prospects for North–South research collaboration, they need to embrace e-learning technologies to facilitate effective communication. The advancement of information and communications technology (ICT) has had a positive impact on collaboration and knowledge sharing. It is now easier for researchers in the North to work effectively with those in the South and vice versa.

As mentioned earlier, South–South co-operation plays a prominent role in promoting North–South co-operation. However, South–South collaboration is challenged by a lack of research funds, as South-based institutions are often limited by weak economies. Competition for resources is not helping global collaborative efforts. Halvorsen (2016: 280) lamented that the 'focus on competition between higher education institutions and their managements has been a dangerously destructive phase in the evolution of universities'. Instead, universities should collaborate in both resource mobilisation and research programming. Jostling for 'rich' research partners only creates cleavages, new boundaries and exclusions, leading to destructive forces against academic co-operation.

The absence of democracy and good governance in developing countries also impedes collaboration activities. Freedom of speech translates into freedom of research. Academics should have the freedom to research in their areas of interest and disseminate information without fear. According to Halvorsen and Skauge (2004: 141), 'students can contribute to the social capital necessary for the construction of healthy civil societies and socially cohesive cultures, achieving good governance, and building democratic political systems'. The same applies to academic researchers.

Fragmentation, which inhibits regional co-operation, is another challenge that limits research collaboration. Regional integration in Africa has created a competition for the best grouping, leading to what has been termed the 'spaghetti bowl'effect,³ whereby countries belong to a complex and overlapping web of regional blocs (Fergin 2011; Sorgho 2016). One country can become a member of several regional blocs. For example, Kenya, Uganda, Niger

and Burkina Faso are each members of four regional groupings. It can be argued that competition for membership of regional blocs weakens regional integration in Africa and weakens collaboration. Multiple memberships create multiple and complex sets of agreements that can lead to conflicts (Fergin 2011; Sorgho 2016).

Conclusion

In this chapter, I discussed the debates around effective North-South research collaboration and knowledge sharing among academics and institutions. I made an effort to illuminate the geopolitics of North-South research collaboration and the problem of imbalances created by different positions of power. I concluded that, despite such concerns, North-South collaboration can be mutually beneficial for all parties if managed well. I then discussed the potential of research collaboration to advance the achievement of the SDGs through evidence-based academic research. I examined some strategies that higher education institutions could use to support the implementation of SDGs, namely: research and innovation, a co-ordinated institutional approach, staff and student training, and establishing associations. Lastly, I briefly explored some of the challenges faced by academics in conducting collaborative research in the SDG era. I identified the following key areas of focus: the need to embrace e-learning; the need to advance South-South collaboration; the need for democracy and good governance; and the advancement of regional co-operation, which is a precursor for research collaboration. From the foregone analysis, it is clear that North-South collaboration and partnerships will not be a 'magic bullet' for the achievement of the SDGs.

Notes

- 1 'The World Bank's data shows that the national average number of scientific and technical journal articles produced in 2011 by researchers from Northern countries was 10 442, compared to 1 323 from Southern countries; full-time equivalent researchers per million people was 3 220 in the North and 393 in the South for the period 2005–2014; expenditure on research and development was 1.44 per cent and 0.38 per cent of gross domestic product (GDP) in Northern and Southern countries respectively for the period 2005–2014' (Blicharska et al. 2017: 22).
- 2 The 2015 SANORD conference in Namibia, where the SDGs were intensively discussed, was a good example of this.
- 3 The spaghetti bowl concept has also been used to refer to the continent's web of overlapping trade agreements, which presents an obstacle to successful regional integration and trade in Africa.

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