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ADVANCING SOUTH-SOUTH COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT: LESSONS FROM THE FIELD



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TABLE OF CONTENTS

Acknowledgements	6
Acronyms and abbreviations	7
Executive Summary	9
Introduction	10
I. Bridging education, skills development and inclusive sustainable growth	14
Addressing the education and skills gap in the Millennium Development Agenda	15
SSC contribution to the implementation of the Sustainable Development Goals in education and skills development	18
II. Lessons from Africa-Brazil-India cooperation in education and skills development	19
Brazilian cooperation in education and skills development in Africa	20
Indian cooperation in education and skills development in Africa	28
Lessons from the field	37
Enablers of Africa-Brazil-India cooperation in education and skills development	38
III. Advancing SSC in education and skills development	40
What is needed to implement the SDGs in education and skills development?	40
Final considerations for M&E and Southern-led coalitions	41
References	45

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ACRONYMS AND ABBREVIATIONS

ABC	Brazilian Cooperation Agency
BRICS	Brazil, Russia, India, China and South Africa
CAP	Common African Position
CDAC	Centre for Development of Advanced Computing
CII	Confederation of Indian Industry
FICCI	Federation of Indian Chambers of Commerce and Industry
GDP	Gross Domestic Product
ICT	Information and Communications Technology
ILO	International Labour Organization
INEFOP	National Institute of Employment and Vocational Training of Angola
ITEC	Indian Technical and Economic Program
LoCs	Lines of Credits
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MEC	Ministry of Education
MICs	Middle-Income Countries
MoFA	Ministry of Foreign Affairs
MPLA	People's Movement for the Liberation of Angola
NDB	New Development Bank
NEPAD	New Partnership for Africa's Development
NeST	Network of Southern Think Tanks
NSDC	National Skills Development Corporation
PEC-G	Program of Undergraduate Students Exchange
PEC-PG	Program for Partner Graduate Students
PIDA	Program for Infrastructure Development in Africa
PPP	Public-Private Partnerships
SCAAP	Special Commonwealth Assistance for Africa Program

ACRONYMS AND ABBREVIATIONS

SDGs	Sustainable Development Goals
SDWG	Skills Development Working Group
SENAI	Brazilian National Service for Industrial Training
SSC	South-South Cooperation
SSC & TrC	South-South and Triangular Cooperation
STISA	Science, Technology and Innovation Strategy for Africa
TVET	Technical and Vocational Education and Training
UN	United Nations
UNDP	United Nations Development Programme
UNITA	National Union for the Total Independence of Angola

EXECUTIVE SUMMARY

Recognizing the transformations in the world economy and the priorities of developing countries, education and skills development were placed at the core of the 2030 Development Agenda. In Africa, the African Union's 'Agenda 2063, the Africa we want,' clearly articulates the need for an education and skills revolution. The importance of education and skills development is again expressed in the Common African Position on the Post-2015 Development Agenda and the Program for Infrastructure Development in Africa.

The experience of other countries from the South can help Africa, in particular Middle-Income Countries (MICs) and other countries transitioning to middle-income status, to implement the Sustainable Development Goals (SDGs) in education and skills development. Like these countries, Brazil and India are also striving to narrow the skills gap and enhance links among education and skills development, industries and labour markets. Building on their domestic experience, Brazil and India can offer locally relevant approaches to advancing education and skills development in the African continent. The study examines the enabling factors and lessons learned by Brazilian and Indian cooperation in Africa to implement the SDGs in education and skills development.

By looking at two case studies, one focusing on Brazil's engagement in Angola through the Cazenga Vocational Centre and the other considering India's approach to education and skills development in Africa, the study argues that some of the main distinguishing features of SSC lie in the practices, processes and relations that are built during development partnerships. Horizontality and capacity development were found to be the main enablers of Brazilian and Indian cooperation in education and skills development in Africa. The experiences further offer innovative approaches to capacity development and some of the first examples of public-private partnerships in South-South cooperation.

Looking ahead, the study highlights that the following additional enablers of Brazilian and Indian cooperation in education and skills development in Africa should be enhanced: national ownership, inclusive partnerships, and citizens' protection and empowerment. The study further clarifies the need to explore complementarities between initiatives targeted at education and skills development as well as to establish national certification systems for deepening links with local industries and labour markets.

Finally, the study stresses that the more South-South cooperation (SSC) experiences in different development sectors are systematized based on common frameworks of analysis, the more that societies and policymakers can learn from the different approaches and instruments used to scale up efforts and implement the SDGs. Southern-led policy coalitions like the BRICS (through the New Development Bank) and the African Union (AU) also have an important role to play in advancing the implementation of the SDGs, by creating specific knowledge exchange and financing mechanisms to address the intersectoral nature of the post-2030 sustainable development agenda.

INTRODUCTION

Brazil and India have made increasing and significant contributions to transforming the world map of education and skills development, by bringing millions into school, establishing centres of world-class secondary vocational learning and sharing these experiences abroad. These experiences have become even more relevant as BRICS (Brazil, Russia, India, China and South Africa) and other developing countries strive to raise education and skills levels to transform their economies¹. During the sixth annual BRICS Summit², those leaders affirmed the strategic importance of education and skills development for sustainable development and inclusive economic growth³. They also pledged to strengthen cooperation, including through a new funding mechanism and technical cooperation platform under the New Development Bank (NDB), for sharing knowledge and lessons learned on improving systems and responses to evolving demands on technical and vocational education and training⁴ in both emerging and developing countries⁵.

Education and skills development are also important for Africa. The African Union's 'Agenda 2063, the Africa we want,' clearly articulates the need for an education and skills revolution. In addition, it cites the need to "actively promote science, technology, research and innovation, to build knowledge, human resources, capabilities and skills for the African century."⁶ This includes building technical and vocational training centres in Africa, developing an African Accreditation Agency to monitor and develop African education standards and strengthening the Pan African University. The importance of education and skills development is again expressed in the Common African Position (CAP) on the Post-2015 Development Agenda and in the Consensus Statement that was used for the intergovernmental process of the post-2015 development agenda⁷, leading to the Rio+20 Outcome Document 'The Future We Want.'⁸ The Program for Infrastructure Development in Africa (PIDA) further states that a lack of local skills is one of the main bottlenecks preventing Africa from fully unlocking private investments for key infrastructure development.

The experience of other countries from the South can help improve education systems and skills development in Africa. Defined as "a process whereby two or more developing countries pursue their individual and/or shared national capacity development objectives through exchanges of knowledge, skills, resources and technical know-

¹ UNESCO (2014) BRICS: Building education for the future. Priorities for National Development and International Cooperation. UNESCO.

² Brazil, July 2014

³ <http://brics.itamaraty.gov.br/media2/press-releases/214-sixth-brics-summit-fortaleza-declaration>

⁴ According to UNESCO, Technical and Vocational Education and Training (TVET) is concerned with the acquisition of knowledge and skills for the world of work. Throughout the course of history, various terms have been used to describe elements of the field that are now conceived as comprising TVET. These include: Apprenticeship Training, Vocational Education, Technical Education, Technical-Vocational Education (TVE), Occupational Education (OE), Vocational Education and Training (VET), Professional and Vocational Education (PVE), Career and Technical Education (CTE), Workforce Education (WE), Workplace Education (WE), etc.

⁵ BRICS Skills Development Fund Concept Note, 2015.

⁶ African Union, Agenda 2063: The Africa We Want, August 2014, http://agenda2063.au.int/en/sites/default/files/agenda2063_popular_version_05092014_EN.pdf

⁷ African Union, Common African Position on the Post-2015 Development Agenda, 31 January 2014, http://www.uneca.org/sites/default/files/uploaded-documents/Macroeconomy/post2015/cap-post2015_en.pdf

⁸ Office of the Special Adviser on Africa, Sustainable Development Goals (SDGs), <http://www.un.org/en/africa/osaa/peace/sdgs.shtml>

how, and through regional and interregional collective actions,”⁹ SSC can enable countries to build their human, institutional and systemic capacities and devise solutions for their self-development.

SSC is based on the premise that developing countries are better positioned to mutually contribute to solving their development challenges for often having similar factor endowments. Knowledge and technology from the South would therefore be more adaptable to partners’ level of development and institutional capacities, appropriate to the size and conditions of local markets, and affordable to low-income consumers. Yet, SSC experiences have not been systematized and little is known about how they can best support the implementation of the SDG in education and skills development. This is particularly true for private-sector engagement in development cooperation directly or through public-private partnerships (PPP).

Both India and Brazil have made strides to systematize and develop their development cooperation. Brazil set up the Brazilian Cooperation Agency (ABC) in 1987 but is continuously reviewing its model. Similarly, India has also gone through a continuous process of adapting its development cooperation architecture.¹⁰ However, both countries have placed a premium on education and skills development in their model of development cooperation. Brazil and India also retain an important focus on Africa. India’s search for new markets directed its focus towards Africa due to its growing market size and rising rate of private consumption.¹¹ The contemporary drivers behind Brazil’s foreign policy shift towards Africa include a broad political goal of contributing to a greater say by the global South in the new world order, a narrower political goal of securing a key position within this emerging international architecture and, lastly, a more pragmatic goal of promoting the expansion of Brazil’s economic interests in Africa.¹²

Against this backdrop, the study seeks to understand the enabling factors and lessons learned by Brazilian and Indian cooperation in Africa to implement the SDGs in education and skills development. Specifically, the study aims to inform policymakers and development cooperation practitioners on the different approaches and instruments used to replicate and scale up SSC in education and skills development by:

- Assessing the enablers of Brazilian and Indian cooperation in education and skills development in Africa and the lessons for the implementation of the SDGs;
- Identifying imperatives for monitoring and evaluation (M&E) of SSC and opportunities to incorporate lessons learned in the design and implementation of future initiatives in education and skills development;
- Providing initial reflections on how Southern-led policy platforms can further advance the implementation of the SDGs in education and skills development.

⁹ The Framework of Operational Guidelines on the United Nations Support to South-South and Triangular Cooperation (SSC/17/3 2012) further defines Triangular Cooperation (TrC) as a typically Southern-driven initiative that might include an element of SSC supported by a developed country, multilateral organization or any other third party. In line with the principles of national sovereignty and ownership, developing countries themselves initiate, organize and manage SSC. Developed countries and international organizations play a facilitation role and do not take the lead in executing South-South operational activities, which remain solely the domain of developing countries themselves.

¹⁰ SIRIDOPOULOS, E.; CHATURVEDI, S., FUES, T. and PINEDA, J.A.P. (2015) Introduction: Institutional Architecture and Development In: Institutional Architecture and Development: Responses from Emerging Powers, Johannesburg: SAIIA, 2015.

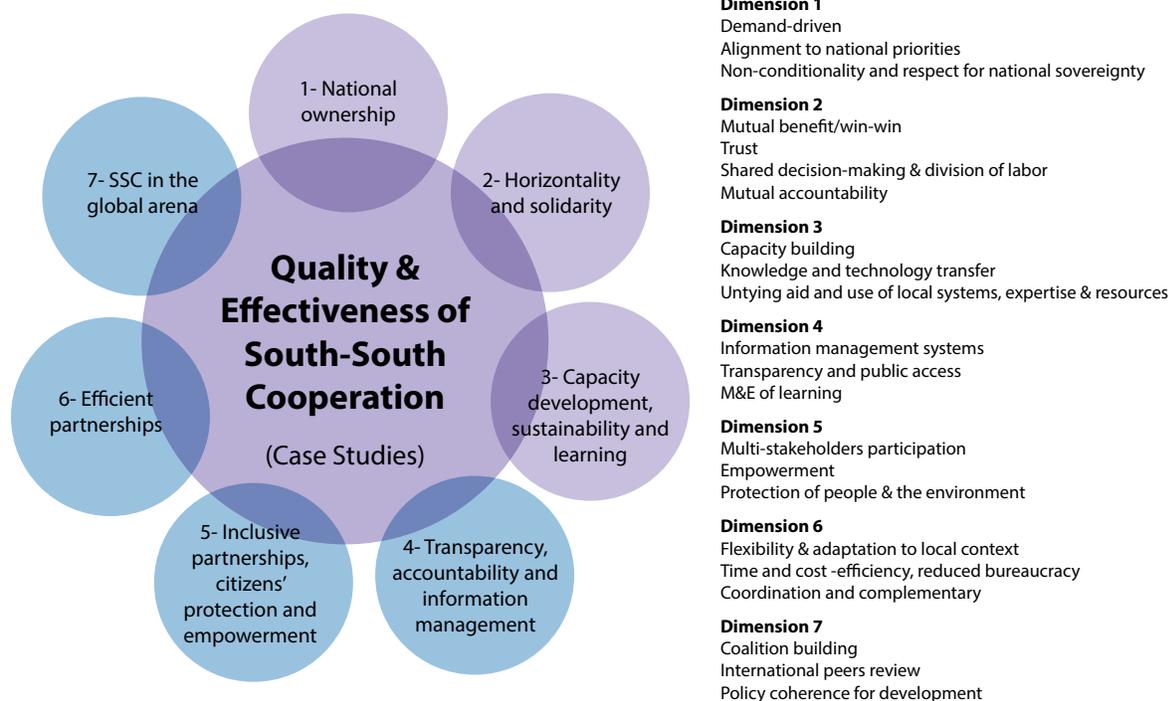
¹¹ LUCEY, A., SCHOEMAN, M. and MAKOKERA, C. (2015) India-Africa relations: The role of the private sector. ISS, October 2015.

¹² ALVES, A. (2013) Brazil in Africa: Achievements and Challenges. In: Emerging Powers in Africa- Special Report, Edition: LSE IDEAS, Editors: Nicholas Kitchen, pp.37-44.

INTRODUCTION

The study field-tests the analytical framework for assessing the quality and effectiveness of SSC, developed by the Network of Southern Think Tanks (NeST). The NeST framework is one of the first systematic initiatives of the South to assess the quality and effectiveness of SSC. It comprises 7 dimensions and 22 sub-dimensions based on the principles that guide SSC and their corresponding indicators and guiding questions.¹³

NeST seven dimensions of South-South Cooperation



The first section introduces the 'education - skills development - inclusive sustainable growth nexus' and how these complex and dynamic interactions were recognized in the Millennium Development Agenda (MDG). The section then discusses how this gap was addressed by the 2030 development agenda and SSC potential contribution to the implementation of the SDG in education and skills development, including through partnerships with the private sector.

In the second section, the approaches of Brazil and India to cooperation in education and skills development are analysed in two cases studies. One focuses on Brazil's engagement in Angola through the Brazil-Angola Vocational Training Centre in Cazenga. The other considers India's country-level approach to education and skills development in Africa. The experiences offer innovative approaches to development cooperation and some of the first examples of public-private partnerships. The models also provide lessons for the replication and scaling up of such practices in the context of the SDGs.

¹³ The NeST framework was developed by Southern experts during two workshops held in March and October 2015 in South Africa. The framework is being voluntarily tested in pilot case studies like this one. The findings were presented and discussed in a NeST Meeting in Mexico City on 26-28 September 2016 and further enhanced the framework. The revision of the NeST framework based on the feedback received from this and other case studies was still ongoing at the time of final submission of this study to UNDP and the interim framework available at 'BEISHARATI, N.; MOILWA, M., KHUNOU, K.; and GARELLI RIOS, O. (2015) Developing a Conceptual South-South Cooperation' was included here for reference.

<http://www.saiia.org.za/news/nest-dialogue-emerging-partners-in-africas-development>

The third section identifies some of the policies and actions required to enhance SSC in education and skills development, based on the two case studies. The section concludes with initial reflections for M&E of SSC and how Southern-led institutions can help advance the implementation of the SDGs in education and skills development.

The research is qualitative, based on primary¹⁴ and secondary¹⁵ sources. The methodology includes an in-depth literature review of South-South and triangular cooperation (SSC and TrC) in education and skills development and preparation of an inception report. It also includes participation in the design and review of the NeST framework for assessing the quality and effectiveness of SSC and TrC;¹⁶ assessment of data needs and collection methods through fieldwork in Angola, Brazil and India; and drafting the case studies and application of the NeST methodology at the programme-level (Brazil-Angola) and country-level (India-Africa).¹⁷ Finally, peer-review and validation of the interim and final reports through consultations were held in closed and public meetings in Brazil and India. The lessons learned from the study and the application of the framework will feed back into the NeST process as well.

¹⁴ Semi-structured interviews in Brazil, Angola, India and South Africa were held between November 2015 and February 2016.

¹⁵ Official documents and communications like project documents, progress reports and unclassified diplomatic cables between 1999 and 2005 provided by SENAI and the Brazilian Ministry of Foreign Affairs, publications and online databases.

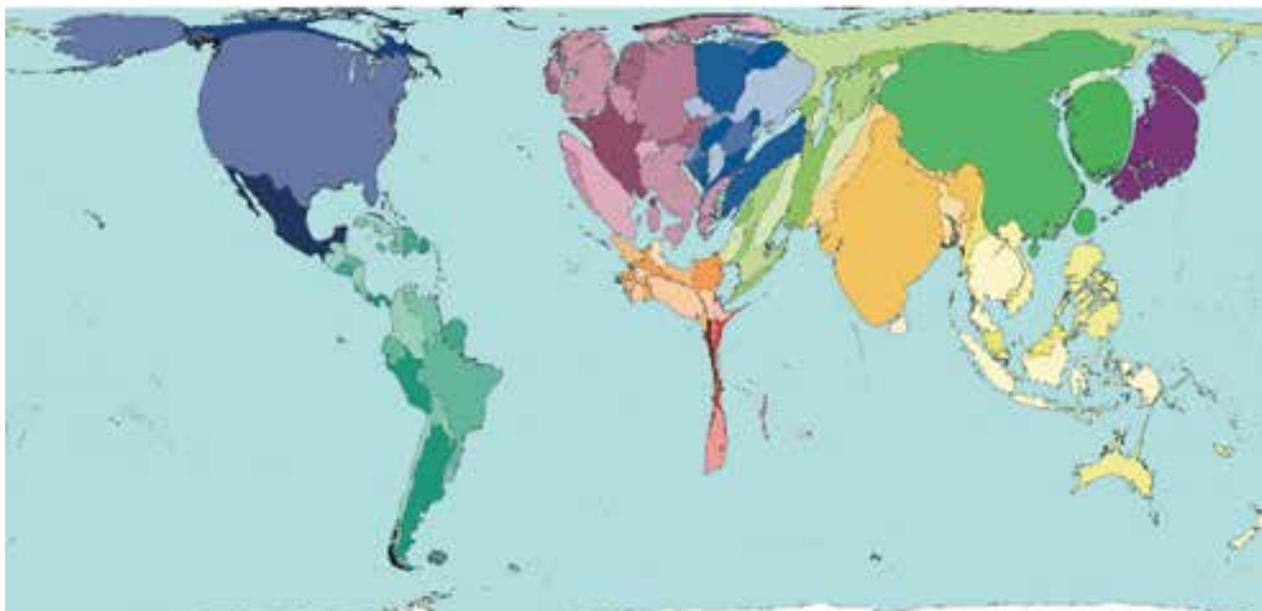
¹⁶ The review considered the specificities of the sector studied, the development cooperation modalities adopted and the public-private nature of the initiatives analyzed.

¹⁷ Specific sub-dimensions might not have been assessed due to lack of sufficient information, the nature of the case study and the relevance of the sub-dimension to the case study. This is indicated with a 'n/a' in the summary table at the end of each case study.

I. BRIDGING EDUCATION, SKILLS DEVELOPMENT AND INCLUSIVE SUSTAINABLE GROWTH

During the past decade, transformations in the world economy were led by fast changes in technology and greater reliance on intellectual abilities than on physical inputs or natural resources. Positive impacts include the creation of 900 million non-farm jobs in developing countries.¹⁸ At the same time, emerging imbalances are resulting in skills shortages in the largest world economies, while developing countries are facing increasing unemployment rates, especially among the youth. Employers worldwide also face growing shortages of skilled workers that are required to raise productivity and sustain gross domestic product (GDP) growth.¹⁹

Territory size shows the proportion of people worldwide enrolled in post-secondary technical education, vocational training and tertiary education



Source: www.worldmapper.org, Map n.203

African countries face challenges related to shortages of a qualified labour force and institutional capacity. Job creation in the non-agricultural sector has become crucial for policymakers as African countries continue to urbanize²⁰ and to achieve middle-income status.²¹ Of the 10 countries with the highest urbanization rates in the world in 2013, six are in sub-Saharan Africa.²² Urban population in sub-Saharan Africa accounted for about 40 percent in 2014 and

¹⁸ McKinsey Global Institute, 2012.

¹⁹ UNDP (2015) Human Development Report 2015: Work for Human Development. UNDP.

²⁰ BIAVASCHI, C., PIETERS J., EICHHORST, W. et al (2012) Youth Unemployment and Vocational Training, IZA DP 6890.

²¹ In the World Bank's definition, middle-income countries (MIC) are nations with a per-capita gross national income in 2012 between USD\$1,036 and \$12,615.

²² <http://blogs.worldbank.org/opendata/africa-s-urban-population-growth-trends-and-projections>

BRIDGING EDUCATION, SKILLS DEVELOPMENT AND INCLUSIVE SUSTAINABLE GROWTH

is projected to increase to 56 percent by 2050.²³ If current trends continue, most African countries will have reached middle-income status by 2025. Only about 13 countries will remain low-income, most of them fragile states.²⁴ Yet, the progressive transformation of Africa is occurring amid low levels of human capital.²⁵ The scarcity of skills further translates into poor labour market outcomes and a problematic school-to-work transition.²⁶ This not only hurts young people, but also the economy as a whole, as the lack of skilled workers is critical for a country's productivity, growth and international competitiveness.

ADDRESSING THE EDUCATION AND SKILLS GAP IN THE MILLENNIUM DEVELOPMENT AGENDA

Nevertheless, these issues were not given prominence or have been inadequately captured in the global Millennium Development Goals framework.²⁷ In pursuit of the MDGs, most African countries have significantly increased the likelihood that children will enter primary school and gain access to secondary education. Yet today, less than 8 percent of the university-age cohort in Africa has entered university.²⁸ By the time graduate programmes began regionally, education institutions in Africa had to contend with economies in crisis, shortages of faculty members with advanced degrees and drastic reductions in funding. In addition, overall weak university-industry partnership and insufficient investments in technical and vocational education and training have also created problems for youth employment.²⁹

Inclusive sustainable development requires the implementation of long-term, intersectoral education and skills development strategies. According to the International Labour Organization (ILO)³⁰ and United Nations Development Programme (UNDP) 2015 Human Development Report,³¹ the cornerstones of a policy framework for developing a suitably skilled workforce are the "broad availability of good-quality education as a foundation for future training; a close matching of skills supply to the needs of enterprises and labour markets; enabling workers and enterprises to adjust to changes in technology and markets; and anticipating and preparing for the skills needs of the future."

The AU's 'Agenda 2063, the Africa we want' also views education and skills development as a prerequisite for inclusive growth and sustainable development. In particular, it emphasizes science, technology and innovation as "the bedrock for its inclusive education systems"³² and notes that for education and skills development to take place, the following are necessary:

- Expand universal access to early childhood, primary and secondary education;

²³ UNDESA (2014) World Urbanization prospects: the 2014 revision <http://esa.un.org/unpd/wup/Publications/Files/WUP2014-Highlights.pdf>

²⁴ <http://blogs.worldbank.org/opendata/africa-s-urban-population-growth-trends-and-projections>

²⁵ GARCIA, M. and FARES, J. (2008) Why is it important for Africa to invest in youth? In: Garcia, M. and Fares, J. (eds) Youth in Africa's Labor market. Washington DC, World Bank

²⁶ GARCIA, M. and FARES, J. (2008) The three pillars of policy: Lessons from international experience. In: Garcia, M. and Fares, J. (eds) Youth in Africa's Labor market. Washington DC, World Bank

²⁷ UN System Task Team on the Post 2015 UN Development Agenda, 2012.

²⁸ World Bank (2014) Applying Science, Engineering and Technology for African Competitiveness and Development. Policy Brief.

²⁹ BIAVASCHI, C. et al (2013) Youth unemployment and vocational training. World Bank. Background paper for the World Development Report 2013.

³⁰ International Labour Organization <http://ilo.org/global/topics/skills-knowledge-and-employability/lang--en/index.htm>

³¹ UNDP (2015) Human Development Report 2015: Work for Human Development. UNDP

³² African Union, Agenda 2063: The Vision for 2063 <http://agenda2063.au.int/en/documents/agenda-2063-vision-2063>

BRIDGING EDUCATION, SKILLS DEVELOPMENT AND INCLUSIVE SUSTAINABLE GROWTH

- Expand and consolidate gender parity in education;
- Strengthen the technical and vocational education and training through scaled-up investments, the establishment of a pool of high-quality Technical and Vocational Education and Training (TVET) centres across Africa, greater links with industry and alignment to labour markets, with a view to improve the skills profile, employability and entrepreneurship of especially youth and women, and closing the skills gap across the continent;
- Build and expand an African knowledge society through transformation and investments in universities, science, technology, research and innovation; and through the harmonization of education standards and mutual recognition of academic and professional qualifications. Establish an African Accreditation Agency to develop and monitor educational quality standards across the continent;
- Strengthen the Pan African University, build the Pan African Virtual University, and elevate Africa's role in global research, technology development and transfer, innovation and knowledge production.³³

The importance of education and skills development in Africa is again expressed in the CAP on the Post-2015 Development Agenda³⁴ and in the Consensus Statement that was used for the intergovernmental process of the post-2015 development agenda, leading to the Rio+20 Outcome Document 'The Future We Want.'³⁵ The CAP notes that in education, progress has been made in the attainment of the MDGs, namely in net primary school enrolment and gender parity in primary education. However, it notes that quality of education and outcome of learning remain a challenge.³⁶ In addition, in the last two decades, the state of higher education in most African countries has deteriorated substantially. One reason is lack of funds and severe cuts in government spending.³⁷ Universities that once thrived, such as those in Ibadan in Nigeria, Dakar in Senegal, Dar-es-Salaam in Tanzania, are underserved and lack adequate resources.³⁸

In order to improve education and skills development, the CAP specifies that Africa must achieve excellence in human-resources capacity development through an improvement in the quality of education and training by investing in learning infrastructure, increasing the use of information and communications technology (ICT), ensuring higher completion rates, promoting pre-schooling, integrated adult education and tertiary education, and improving the quality and conditions of service of educators and trainers. The CAP further notes the need to enhance equity by improving and sustaining progress on gender parity at all levels of education, with special emphasis on secondary and tertiary education, creating a positive environment for girls and boys at school, increasing the representation of female teachers, especially in science and technology, and eliminating human trafficking and child labour, thus allowing children to benefit from educational facilities for their full development. Lastly, in order to strengthen the school curriculum, the CAP notes the need to consider basic rights and responsibilities of citizens, quality education

³³ African Union, 'Agenda 2063: The Africa We Want,' August 2014 http://www.agenda2063.au.int/en/sites/default/files/agenda2063_popular_version_05092014_EN.pdf

³⁴ African Union, Common African Position on the Post-2015 Development Agenda, 31 January 2014 - uneca.org/sites/default/files/uploaded-documents/Macroeconomy/post2015/cap-post2015_en.pdf

³⁵ Office of the Special Adviser on Africa, Sustainable Development Goals (SDGs), <http://www.un.org/en/africa/osaa/peace/sdgs.shtml>

³⁶ African Union, 'Common African Position on the Post-2015 Development Agenda,' 31 January 2014, http://www.uneca.org/sites/default/files/uploaded-documents/Macroeconomy/post2015/cap-post2015_en.pdf

³⁷ Mohamed H.A. Hassan, Promoting South-South and North-South Cooperation in Education and Research: A question of responsibility, <http://www.pass.va/content/dam/scienze-sociali/pdf/es7/es7-hassan.pdf>

³⁸ Ibid

BRIDGING EDUCATION, SKILLS DEVELOPMENT AND INCLUSIVE SUSTAINABLE GROWTH

beyond primary schooling, the development of entrepreneurship skills, life skills and vocational and technical training to respond to labour market demands, the provision of information and technology skills, and the introduction of age-appropriate and comprehensive sexual and reproductive health education for all.³⁹

Recognizing the transformations in the world economy and the priorities of developing countries, education and skills development lie at the core of the 2030 Agenda.⁴⁰ Evidence suggests that a combination of education and high-quality training relevant to the labour market empowers people to develop their full capacities and to seize employment and social opportunities; raises workers' and enterprises' productivity; contributes to boosting future innovation and development; encourages both domestic and foreign investment, and thus job growth and lowering unemployment and underemployment; leads to higher wages; and expands labour market opportunities and reduces social inequalities.

The benefits of investment in education and skills development can now be felt across the 17 SDGs and 169 targets in the years to come.⁴¹ The new development framework underscores the notion that a sustainable development for all countries is possible through comprehensive cross-sector efforts that begin with education.⁴² An important step in this direction was taken in the outcome document of the Open Working Group on Sustainable Development Goals, which reiterated that education is not only an end in itself but also a means to achieving a broad global development agenda.⁴³

Within the new development framework, SDG 4 ("Ensure and equitable quality education and promote life-long learning opportunities for all")⁴⁴, SDG 8 ("Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all"), and SDG 9 ("Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation") best reflect the complex and dynamic interactions among education, skills development and inclusive sustainable growth.

The PIDA illustrates the interactions among education, skills development and inclusive sustainable growth in practice. According to the program, \$360 billion between 2011 and 2040 is required to close Africa's infrastructure gap - with significant investments required by 2020 and additional resources for sustainable infrastructure projects.⁴⁵ Attracting private-sector participation is essential to complementing current financing capacities. Yet a lack of local skills and the absence of enabling legislation and regulations are bottlenecks currently preventing Africa from fully unlocking private-sector investment. The program stresses that "soft" and "hard" infrastructure alike are critical to realizing efficiency gains and putting in place an enabling environment.

³⁹ African Union, 'Common African Position on the Post-2015 Development Agenda,' 31 January 2014, http://www.uneca.org/sites/default/files/uploaded-documents/Macroeconomy/post2015/cap-post2015_en.pdf, p. 10

⁴⁰ United Nations Resolution A/RES/70/1 of 25 September 2015.

⁴¹ Mainly SDGs 4, 8 and 9. <https://sustainabledevelopment.un.org/focussdgs.html>

⁴² <http://unesdoc.unesco.org/images/0023/002305/230508e.pdf>

⁴³ <https://sustainabledevelopment.un.org/content/documents/1579SDGs%20Proposal.pdf>

⁴⁴ In particular target 4.3 "By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university" and target 4.4 "By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship"

⁴⁵ The world needs to find \$7.7 trillion annually over the next 15 years, up from \$3 trillion today, to pay not only for additional infrastructure but also for sustainable projects, which are typically more expensive than traditional ones. This sustainability "premium" could add \$14 trillion to overall infrastructure costs between 2015 and 2030. BIELEMBERG, A.; KERLIN, M.; OPPENHEIM, J. and ROBERTS, M. (2016) Financing change: how to mobilize private sector financing for sustainable infrastructure. McKinsey Center for Business and Environment, January 2016.

SSC CONTRIBUTION TO THE IMPLEMENTATION OF THE SDGS IN EDUCATION AND SKILLS DEVELOPMENT

SSC can provide an avenue for implementing the SDGs in education and skills development in Africa. Examples span bilateral, regional and multilateral South-South initiatives. Through the Science, Technology and Innovation Strategy for Africa (STISA) 2024,⁴⁶ institutions such as The New Partnership for Africa's Development (NEPAD) and the AU have already decided to support capacity-building efforts in education and research across Africa through the creation of scientific centres and networks of excellence and the upgrading of both research and teaching at universities. While there have been follow-up meetings by African stakeholders in seeking to implement STISA 2024,⁴⁷ no concrete steps have yet been undertaken.

Similarly, intraregional cooperation will play an integral role in further advancing SSC in education and skills development. Among the activities to be undertaken by the BRICS Business Council⁴⁸ through its Skills Development Working Group (SDWG) are “promoting cooperation on skills development and technology transfer” as well as “support skills development in Africa.”⁴⁹ During recent meetings of the SDWG, consensus was reached on the need to establish a funding mechanism under the NDB, to promote investments in BRICS countries for improving the quality and access to technical, vocational education and training, and to strengthen projects implemented with support from the NDB. This funding mechanism would provide a technical cooperation platform for sharing of knowledge and lessons learned on improving systems and responses to evolving demands on education and skills development in BRICS and other emerging as well as developing economies.

The African continent, in particular MICs and other countries transitioning to middle-income status, is also aware that to achieve its goals, it needs to prioritize domestic resource mobilization. One way in which these countries aims to strengthen domestic resource mobilization is through public-private partnerships, in recognition of how public-private partnerships between vocational training centres and industries of the South can make education more relevant to labour market needs. In particular, “Governments benefit from public private partnerships by gaining access to corporate expertise and experience in management, strategic planning, innovative problem solving, labour market expertise, skills development, efficient delivery of goods and services, product development, and logistical support.”⁵⁰ Businesses can benefit by partnering with government to influence the use of public resources and policy; education expertise, gain access to national and community leaders; enhance corporate visibility; and deliver on social responsibility commitments.

⁴⁶ African Union, Workshop on Science, Technology and Innovation Strategy for Africa (STISA-2024) Priority One RUFORUM Implementation Plan, <http://hrst.au.int/en/content/workshop-science-technology-and-innovation-strategy-africa-stisa-2024-priority-one-ruforum> and <http://hrst.au.int/en/sites/default/files/STISA-Published%20Book.pdf>

⁴⁷ Ibid

⁴⁸ The BRICS Business Council was established during the fifth BRICS Summit held on March 2013 in Durban, South Africa. The objective of creating the council was to constitute a platform that will promote and strengthen business, trade and investment ties among the business communities of the five BRICS countries; ensure that there is regular dialogue between the business communities of the BRICS nations and the Governments of the BRICS countries; and identify problems and bottlenecks to ensure greater economic, trade and investment ties among the BRICS countries and recommend solutions accordingly.

⁴⁹ BRICS Business Council, <http://www.bricsbusinesscouncil.in/>

⁵⁰ Academy for Educational Development, 'The Untapped Opportunity: How public-private partnerships can advance education for all', p. 44. <http://unpan1.un.org/intradoc/groups/public/documents/unpan/unpan037304.pdf>

II. LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

Like Africa, Brazil and India are also striving to narrow the skills gap and enhance links among education and skills development, industries and labour markets. In Brazil, a wide range of independent private institutions for vocational training (“S-system”)⁵¹ started to emerge in the 1940s. With the surge towards an import-substituting industrialization strategy in Brazil, the scarcity of skilled workers became patent. So did the need for a vocational education model in the country. Given the poor performance of the government in promoting and improving the school system, the private sector took the lead in the establishment of the nascent vocational education system. Employers’ associations thus provided the training, funded by a 1 percent levy on payroll. The first institution of the forthcoming S-system is the Brazilian National Service for Industrial Training (SENAI), inspired by the German and Swiss apprenticeship model. SENAI evolved into a highly regarded model for private-sector support to vocational education and training for industrial development. On the back of its domestic success, SENAI started to share this expertise through technical cooperation projects for the establishment of vocational training centres worldwide.

In India, it is estimated that nearly 400 million workers will need to be skilled by 2022 if the country is to become a leading manufacturing economy.⁵² Yet, education and skills development efforts have been highly fragmented, with more than 20 Ministries and Departments in charge of more than 70 schemes for such development nationwide. In 2014, the Ministry of Skill Development and Entrepreneurship was created to consolidate and coordinate skills efforts and expedite decision-making. A National Policy for Skills Development and Entrepreneurship was launched the following year to enhance synergy among the different skills development initiatives. The policy contains a dedicated section on global partnerships and international collaborations, highlighting exchange of knowledge and best practices between India and other countries. The national policy also highlights the importance of an “ecosystem” approach to skills where partnerships among key stakeholders, particularly the private sector, is essential. To foster private-sector engagement in skills development and catalyse the creation of high-quality and large-scale training providers, India established the National Skills Development Corporation (NSDC) to offer financing to private training providers as well as other ecosystem-level support measures like training of trainers, incubating sector skills councils and advocacy.⁵³

Building on the experience in dealing with similar challenges domestically, Brazil and India offer locally relevant approaches to advancing education and skills development in Africa. Different internal and external policies, structures and practices underpin Brazilian and Indian SSC in education and skills development, despite the common principles that unite them. The following sections discuss concrete examples, their enabling factors and lessons learned by Brazilian and Indian cooperation in Africa to the implementation of the SDGs in education and skills development.

⁵¹ Group of nine entities established by the Brazilian Constitution and whose mission is to develop the capacity of different sectors (industry, small- and medium-size enterprises, agriculture, rural development) through professional and vocational training and education services to private and public institutions in Brazil and overseas.

⁵² India launches mission to teach skills to 400 million by 2022, http://www.business-standard.com/article/economy-policy/india-launches-mission-to-skill-400-million-by-2022-115071600035_1.html

⁵³ NSDC website, <http://www.nsdcindia.org/our-role>

BRAZILIAN COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT IN AFRICA

Brazil and Africa are natural partners, with at one point a shared geography and later a shared history. About 200 million years ago, Africa and Brazil were parts of the landmass of Gondwana. Between the 16th and early-19th centuries, the transatlantic slave trade united the two regions until slavery's abolition. A hiatus in relations developed until African countries gained political independence, when a new relationship began to develop between Brazil and especially the Lusophone African countries. In the current reconfiguration of the global economy, Brazil has been promoting a policy of diversification of international integration, engaging more actively with developing countries worldwide. The relationship between Brazil and Africa continues to burgeon, even beyond Lusophone African countries to others on the continent, spanning trade, investment and cooperation for development.

Education and skills development are among the top sectors of Brazilian cooperation in Africa.⁵⁴ Most of Brazilian technical cooperation activities in education and skills development are related to training, capacity-building, public management and technology transfer in these fields: formal (tertiary) and non-formal education, vocational education, adult and youth literacy projects, and special-needs education. In 2007, 22.4 percent of ABC's total disbursements were dedicated to vocational education, and SENAI was a key partner. In terms of number of activities implemented and funded by ABC between 1995 and 2005, vocational education represented 6.11 percent of them,⁵⁵ with Angola, Guinea-Bissau and São Tomé and Príncipe being some of the main beneficiaries of this cooperation in Africa.

Two major scholarship programs are available to nationals of developing countries with which Brazil maintains educational, cultural and science and technology cooperation agreements.⁵⁶ Since 1964, the Program of Undergraduate Students Exchange (PEC-G) jointly implemented by the Ministry of Foreign Affairs (MoFA) and the Ministry of Education (MEC) offers scholarships to foreign undergraduate students who are selected in their own countries, according to procedures designed by the respective national ministry of education and the local Brazilian embassy. In turn, the Program for Partner Graduate Students (PEC-PG) offers scholarships to graduate foreign students willing to take their master's degree and Ph.D. courses in Brazil. Since 2000, PEC-G is run by MoFA, MEC and the Ministry of Science and Technology and has selected more than 6,000 students in 18 African countries. Two Lusophone African countries had the largest number of selected students: Cape Verde, with approximately 2,657 (44%) students, and Guinea-Bissau, with approximately 1,336 (22%) students. The PEC-PG, in turn, has selected more than 464 students from 13 countries since 2000. Two Lusophone African countries also had the largest number of selected students: Mozambique, with approximately 189 (40%) students, and Cape Verde, with approximately 125 (26%) students.

Brazil's contribution to education and skills development in Africa is also carried out through private-sector firms' corporate social responsibility programs and business strategies.⁵⁷ The low level of skilled and semi-skilled labour force in Africa has been a major factor for these companies' operations in the continent. Brazilian companies with long-term investment strategies in Africa have embedded technical capacity and skills development of local employees

⁵⁴ IPEA (2013) *Cooperação Brasileira para o Desenvolvimento Internacional: 2010*, Brasília: IPEA/ABC

⁵⁵ Milani, C. (2014) *International Development Cooperation in the Education Sector: the role of Brazil*. UNESCO

⁵⁶ Division of International Agreements, Brazilian Ministry of Foreign Affairs, <http://dai-mre.serpro.gov.br/>

⁵⁷ VAZQUEZ, K.C. and CARRILLO, S. (2014) 'Sustaining the Benefits of Brazilian Direct Investment in Sub-Saharan Africa: Skills and Capacity Development.' Rio de Janeiro: CEBRI

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

in their operations. These offerings are developed mostly through corporate learning and training programs and scholarships provided directly by the company or indirectly through partnerships with Brazilian and local training institutions. Three of the largest Brazilian conglomerates in the mining and civil construction sectors, Vale, Odebrecht and Andrade Gutierrez, as well as small and medium enterprises like the Pinesso Group, in agricultural equipment and machinery, share this vision. In 2013, Odebrecht alone invested \$3 million in professional qualification programs, benefiting 1,521 young people in Africa in engineering and construction.⁵⁸

Yet, these private investments in education and skills development are not counted as official Brazilian cooperation for development. Different from South-South providers like India and China, Brazil does not consider loans, credit exports and debt relief as part of its cooperation.⁵⁹ Divergence on whether economic and commercial benefits should be considered as possible medium- and long-term consequences of development cooperation versus a means for establishing closer ties and subsequent market-penetration backing to Brazilian business reflects the unresolved association among trade, investments and development cooperation in the country.⁶⁰

The Brazil-Angola Vocational Training Centre in Cazenga

One such avenue for bridging cooperation, trade and investment in Brazil is through partnerships between public and private institutions for the creation of vocational training centres based on SENAI expertise. The Brazil-Angola cooperation program for the establishment of the Vocational Training Centre in Cazenga, Angola, is the first example of such partnership in Brazilian cooperation.

Angola entered a major civil war immediately after the country became independent from Portugal in November 1975. The war was essentially a power struggle between two former liberation movements that emerged from the Angolan War of Independence (1961-1974) - the People's Movement for the Liberation of Angola (MPLA) and the National Union for the Total Independence of Angola (UNITA) - and continued, with some interludes, until 2002.

The war devastated the infrastructure of Angola and seriously damaged the public administration and economic developments in the country. One of the most developed in Africa in the 60s, Angolan industry had virtually disappeared in the following decades. Compared with 1974 (index 100), in 1990 the industrial activity index was only seven. Among the difficulties was the lack of skilled workers to fill the jobs left by the Portuguese. With the peace process, many of the four million demobilized people (one-third of the national population at the time of the war) also faced challenges reintegrating into the job market.

In the aftermath of the conflict, education and skills development became priorities in the Angolan national reconstruction endeavour. Through investments in education and skills development, the government expected to strengthen citizenship and promote social inclusion and stabilization. In 2001, this vision came into practice with the promulgation of the Law on Education System Basis. The same year, the Council of Ministers introduced the Integrated Strategy for the Improvement of the Educational System in Angola (2001-2015) to guide the long-term efforts of the government to provide quality public education for all.

⁵⁸ Ibid

⁵⁹ Despite the absence of an official definition, Brazilian development cooperation is broadly described as “the total funds invested by the Brazilian federal government, entirely as non-repayable grants, in governments of other countries, in nationals of other countries in Brazilian territory or in international organizations with the purpose of contributing to international development, understood as the strengthening of the capacities of international organizations and groups or populations of other countries to improve their socioeconomic conditions” (IPEA, 2010).

⁶⁰ VAZQUEZ, Karin; MAO Xiaojing; YAO Shuai (2016) ‘Mix and Match? How Countries Deliver Development Cooperation and Lessons for China.’ UNDP/CAITEC

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

Vocational training was at the core of this strategy through the creation and revitalization of vocational training centres across the country. Concurrently, the Ministry of Industry launched the Technological Update Program of the Angolan Industry, establishing a master plan of reindustrialization of Angola. Among other provisions, the plan provided the introduction of equipment that should not present a technical complexity that hinders the maintenance or involving the dependence of skilled foreign workers.

Established in 1972 under the colonial period in the outskirts of the capital, Luanda, the Vocational Training Centre in Cazenga was looted and partly destroyed during the civil war. The decision to rebuild the center was part of the national reconstruction project and counted on Brazilian support. Odebrecht was hired by the government of Angola to rebuild the physical infrastructure. This work was complemented by a technical cooperation project funded by the Brazilian government to transfer teaching methodologies, materials and equipment as well as to build the technical and management capacity of the trainers and the leaders of the centre. The project pioneered Brazilian efforts in support of Angola's reconstruction process, based on the experience of the S-System and SENAI.

Brazil was a natural partner for Angola, especially in a scenario where traditional donors downplayed their engagement.⁶¹ Brazil and Angola not only share a colonial history under the Portuguese Empire; Brazil was also the first country to recognize the independence of Angola. Strong economic connections have also emerged between Brazil and Angola over the past decade. Between 2006 and 2015, Angola hosted the largest concentration of Brazilian foreign direct investment (FDI) in Africa, especially in the civil construction, energy (oil and biofuels) and mining industries.⁶² Odebrecht has been the only company operating in Angola for 32 years uninterruptedly. The company built many of the strategic projects for the reconstruction of Angola and has become the largest private employer in the country, with over 12,000 local employees (around 90 percent of Odebrecht's total number of employees in the country).⁶³ In 2015, the Angolan government invested \$15 billion in infrastructure, from which \$1.5 billion were contracted from Odebrecht.

For the Brazilian government, the initiative was an opportunity to resume bilateral relations in post-war Angola. Increasing the country's soft power or 'diffuse reciprocity' through technical cooperation programs was a viable alternative for the Ministry of Foreign Affairs. The reconstruction of the centre and related vocational training activities would scale up previous efforts and showcase Brazilian know-how. This would provide more tangible results and visibility for Brazil compared with cooperation in other areas at that time. In addition, the efforts would indirectly support Brazilian companies in Angola, a natural market for businesses in the aftermath of the civil war.

For SENAI, institution-building benefits were likely to accrue over the long run. The expertise and network gained by managing a complex technical cooperation project would open new avenues for SENAI to support Brazilian companies' competitiveness, in line with the organization's mandate. The experience would also increase SENAI's international reputation. This was proved years later through the creation of new businesses opportunities, mainly

⁶¹ After the end of the Angolan civil war, a donors' conference aimed at raising and aligning funds as well establishing commitments for the reconstruction of Angola's infrastructure and economy was organized. Yet, traditional donors and the government of Angola were unable to reach agreement over issues related to governance and transparency, creating obstacles to the realization of the conference. The government of Angola never got the "seal of approval that could then make them eligible for debt rescheduling through the 'Paris Club' and many senior officials still show resentment against Northern donors for "not helping Angola when it needed it." FONSECA, J.M.; ESTEVES, P.; and GOMES, G. Z, (2015) Brazilian Health and Agricultural Cooperation in Angola: An overview. BPC Papers - V. 3 N. 02 February, 2015

⁶² Africa has not been a major destination for foreign investment from private Brazilian firms over the past decade. It is possible that some funds get to Africa through a "triangular diversion" via countries such as the Bahamas and the Cayman Islands, but the data cannot confirm this. Sources: Central Bank of Brazil website and WORLD BANK/IPEA (2011) Bridging the Atlantic, Washington, DC. World Bank Brazil and Sub-Saharan Africa: South-South Partnering for Growth The World Bank the Ipea/Brasília.

⁶³ Interview

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

through trilateral cooperation with countries like Germany and Japan and the provision of direct services to Brazilian companies abroad. The experience has further strengthened SENAI institutional capacity, as the staff that participated in the project acquired better capacity to understand and deal with complex problems than staff without international exposure. This benefit also reverted to the individual through better and more career opportunities.

The initiative was the result of two years of planning missions and negotiations between ABC and the Angolan Ministry of Public Administration, Labour and Social Security (MAPTESS), in partnership with the National Industrial Apprenticeship Service⁶⁴ and the National Institute of Employment and Vocational Training of Angola (INEFOP). The revamped infrastructure of the Centre was presented to the Brazilian and Angolan authorities in a ceremony on July 9, 1999 in São Paulo with former President Fernando Henrique Cardoso present, and opening in Angola on November 30, 1999. That year, Brazil and Angola signed a Technical and Scientific Cooperation Agreement in vocational training. The agreement formalized the Angolan government's request for Brazilian cooperation, stated the overall objectives and outlined Angola's training needs. A project validation mission from ABC and SENAI to Angola to specify its needs ensued.

The government of Angola provided the physical infrastructure of the Centre (rebuilt by Odebrecht with Angolan funding) and all related running costs. INEFOP provided the human resources for the courses and the future management of the centre. For the first two years, SENAI was fully responsible for the management and delivery of the hard (physical infrastructure, materials and equipment) and soft (methodology, course design and train-the-trainer programs) components of the project.⁶⁵ Six Brazilian experts were dispatched to work full time (coordinator and adjunct coordinator) and part time (four trainers) on the project. This division of labour and responsibilities would secure the basic conditions for the project to pass its early stages, gradually build the management and technical capacity in Angola, and lay the foundation for the future transfer of the Centre to full Angolan leadership and management. Brazilian presence was decreased as Angolan leadership and trainers were trained, assessed and trained other staff.

The project was originally conceived to build a mobile centre that would offer training courses to far-reaching communities. Due to the persisting political instability and security threats in Angola, partners revised the original plan and decided to build a permanent centre in the capital. The mobile units were adapted to the new permanent structure, and a train-the-trainer program was created to reach people outside Luanda. According to ABC⁶⁶, the project is an early example of the 'structuring impact' approach of Brazilian cooperation. First, the project focused on human-capital development through train-the-trainers' programs in the disciplines offered by the centre. Second, the project included initiatives to build the larger institutional capacity of the centre through management and leadership trainings to INEFOP staff. Third, the project contributed to enabling the environment through regular engagements with the Angolan government and private sector to ensure ownership of the project. This was a major shift from one-off, isolated technical assistance to solution-oriented technical cooperation based on the exchange of 'hard' and 'soft' forms of knowledge and technology.

⁶⁴ Created in 1942, SENAI is a network of 809 not-for-profit professional and skills development schools affiliated with the Brazilian Confederation of Industries. SENAI promotes professional and technological education, innovation and transfer of industrial technology to increase Brazilian industrial competitiveness. Among all the organizations of the "S System," SENAI has the largest presence in sub-Saharan Africa with seven projects in Angola, Cape Verde, Guinea-Bissau, Mozambique, São Tomé and Príncipe, and Zambia totaling \$10.25 million. SENAI also provides services to Brazilian companies in Angola, Equatorial Guinea, Mozambique and Tanzania, totaling more than \$2.6 million.

⁶⁵ Interview

⁶⁶ ABC website, <http://www.abc.gov.br/Gestao/ProjetosEstruturantes>

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

According to an interviewee, initially the Brazilian Ministry of Foreign Affairs proposed that SENAI would continuously run the project following the government's interest to expand a Brazilian presence and visibility in Angola. Yet, this approach would not be sustainable from the perspective of SENAI and Angola.⁶⁷ First, it would require SENAI to permanently relocate its own staff to Angola or hire dedicated staff to the project – which would not prove strategically or financially feasible in the long run. Second, it would undermine Angola's own capacity to take leadership of the initiative as knowledge and technology were transferred and domestic capacities strengthened.

In the first two years, the project was fully executed by SENAI to ensure results in the early stages and make a case for local government and private sector 'ownership' of it.⁶⁸ The Brazilian presence was decreased as Angolan leadership and trainers were formed and new staff trained. This was not a linear process, requiring regular capacity assessments and revision of project activities. The SENAI coordinator and the adjunct coordinator remained in the country until Angola had full capacity to take over the management of the centre. A similar approach was used to fund the project. Angola co-funding would increase 10-20 percent periodically, until Brazil had no longer financial responsibility for the project. By the time the centre was transferred to Angola, the government had assumed 100 percent of its costs and was funded through its national budget. Angolan industry was not developed to the point of taking up (partly or fully) the costs of maintaining the centre, as in the Brazilian model, and this problem persists today.⁶⁹ Cooperation activities relied on donated goods, materials and human resources by Brazil. Local systems were not used in the early stages of the project.

The project followed a phased approach. The first phase (1999-2000) mainly consisted of rebuilding the infrastructure of the centre, including installations, equipment and machinery, as well as training the trainers of the courses to be offered. The second phase (2001-2002) focused on the review and expansion of the courses, training of the trainers, design of the new curricula and adaptation of teaching materials. It also included the expansion of the infrastructure and services offered by the centre through the creation of a new documentation and knowledge management department. The third phase (2003-2004) focused on institutional strengthening in preparation for the transfer of the centre to the Angolan government. This phase included courses for the leaders and managers of the centre on curricula design, development and validation of teaching materials, orientation and employability of alumni, and planning management and evaluation of TVET programs and institutions. In 2005, the management of the centre was fully transferred to the Government of Angola.

Between 1999 and 2005, the centre offered training courses in mechanics, civil construction, IT (hardware and software), masonry, electricity, crafts, sewing, plumbing, carpentry, blacksmithing and cooling, among other areas. These were determined after consultation with the Angolan government and the private sector, based on the needs of the local industry. The number of trained students per training cycle (10 months) has increased from 144 in 2000 to 2,000 in more recent years. In 2014, this number peaked at 3,400 students. The sharp decline in the number of students in the following year was a result of the decrease in international oil prices, the economic crisis in Angola and budget cuts across the government. Since 2015, the centre has been operating at minimum capacity, with 30 instructors and 1,200 students.⁷⁰

⁶⁷ Interview

⁶⁸ Interview

⁶⁹ Maintaining a vocational training center can be three to four times more expensive than a normal school as 70% of its courses are focused on practice, which require materials that cannot be reused or recycled, machinery, energy, etc. Equipment and materials donated are preferably Brazilian but can be from other countries if more appropriate to the local weather conditions, metric system, etc.

⁷⁰ Interview

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

Unlike other similar projects taken by traditional donors in Luanda, the fact that training of INEFOP staff on the use and maintenance of the equipment donated was an integral part of the project might have contributed to the decrease of medium- and long-term costs.⁷¹ UNDP conducted the procurement of goods and materials for the project following partners' request to waive (Angolan and Brazilian) import/export taxes and reduce other related costs.

The number of instructors and the number of courses offered have also expanded. The latter has increased from five in the original project to 10 by 2005. Today, approximately 15 courses are being offered.⁷² Some courses have also been updated or substituted for others to better respond to the demand and requirements of the local industry (e.g. AUTOCAD, communication networks and programming). The courses would provide an important contribution to the process of economic and social integration and reconstruction of the country. The large number of applications received each year and the functioning of the centre under Angolan leadership 10 years after project completion further indicate project results and sustainability.

However, student employability has been historically as low as 20 percent.⁷³ Recruitment of students takes place through two main channels, INEFOP Employability Centres and the Vocational Training Centre in Cazenga directly. Only six companies hire students through the Vocational Training Center in Cazenga directly, most of which are public Angolan enterprises, like the Transportes Coletivos Urbanos de Luanda (TCUL) and programs (e.g. the centre has partnered with MAPTESS to employ its civil construction alumni in government habitation and urbanization projects). Often, foreign companies operating in Angola are either not aware of the work of these centres or sceptical about the quality of the training and the students. As such, many companies, in particular the larger ones, prefer to invest in their own on-the-job training programs or other skills development programs and initiatives, like scholarships and exchange programs.

The relatively low engagement of the centre with local industry is also a reflection of the institutional structure of the centre and the environment in which it operates. Another important aspect is the public-private nature of SENAI model of vocational training centres. A combination of public and private funding would not be possible to reproduce in Angola given the relatively small size and diversification of the local industry. Angolan industry was not developed to the point of taking up (partly or fully) the costs of maintaining the centre, as in the Brazilian model, and this persists today.

Student drop-out rates have been another concern, particularly in the current Angola economic downturn. Several factors contribute to a relatively high student turnover. Transportation costs can be as high as \$6 per day and many students cannot afford to go to the centre. Road conditions are very poor and reaching the centre can take hours. The cost of taking courses is especially critical for students who live far from the centre and/or need to combine the training with other (paid) activities.

Project documents do not point to any frameworks or mechanism to evaluate the initiatives at the outcome and impact levels. Project documents made provision for financial and human resources for M&E at the output level. No evaluation framework with clear targets and indicators or M&E plan was identified. The following table summarizes the findings, according to the NeST seven dimensions to assess the quality and effectiveness of SSC.

⁷¹ Interview

⁷² Interview

⁷³ Interview. The Angolan labour market is highly informal. As such, employability rates might increase if informal jobs are included in the statistics. This might be true given the fact that demand for courses and the number of students that complete the courses each year are historically high. Demand would probably not be this high if trainings were not helping these people increase their incomes somehow.

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

Assessing the quality and effectiveness of the Brazil-Angola vocational training centre in Cazenga

1. National Ownership	
Demand-driven	In 1999, Brazil and Angola signed a Technical and Scientific Cooperation Agreement in the area of vocational training. The agreement defined the overall objectives of the project and underpinned the Angolan government's request for Brazilian support for the construction of the Vocational Training Centre.
Alignment to national priorities	The project was in line with the Angolan national reconstruction project. The Technical and Scientific Cooperation agreement signed by Brazil and Angola contained the four priority areas for the Angolan government. A project validation mission was conducted to further detail Angola's demand. A SENAI Coordinator and manager lived in the country during the entire project execution to review project progress and liaise with the counterparts in Angola.
Non-conditionality and respect for national sovereignty	Non-conditionality means that the Brazilian government respects other sovereign developing nations, and does not impose any political conditionality related to democracy or human rights attached to its programs. ⁷⁴ No violations to this principle were identified in the example.
2. Horizontality and solidarity	
Mutual benefit-win-win	For SENAI, the experience would open new avenues for the organization to support Brazilian companies' competitiveness, increase SENAI international reputation, create new businesses opportunities and further strengthen SENAI institutional capacity. For the Brazilian government, it was an opportunity to resume bilateral relations and businesses and increase the country's soft power based on the principle of 'diffuse reciprocity'.
Trust	Brazil has actively participated in Angolan history, including in vocational training. The project not only continued the trust relationship created throughout recent bilateral relations but also built on it by shifting from one-off, technical assistance to a more holistic, solution-oriented type of cooperation.
Shared decision-making, resources and division of labour	The government of Angola provided the physical infrastructure and running costs. INEFOP provided the human resources for the courses and the future management of the centre. For the first two years, SENAI was fully responsible for the management and delivery of the hard and soft components of the project. SENAI also provided full-time personnel to coordinate the project on the ground. Brazilian presence was decreased as Angolan leadership and trainers were trained and trained other staff.
Mutual accountability	See above.
3. Capacity development, sustainability and learning	
Capacity-building	The project focused on human capital development through specific train-the-trainer programs. It also included initiatives to build the institutional capacity of the centre and enabling environment under which it would operate. The project was the first example of the structuring impact approach of Brazilian cooperation.
Knowledge and technology transfer	Most of the project activities included hard and soft forms of knowledge and technology sharing; for instance, the donation of equipment and machines, the adaptation and transfer of SENAI teaching methodology to INEFOP, and the technical advisory provided by SENAI until the transfer of the centre to Angola. Incentives for technology innovation were provided through management and leadership trainings to INEFOP staff.

⁷⁴ The international debate on whether political non-conditionality should include human rights obligations as per the international and national law must be acknowledged—i.e. can give a blind eye to human rights standards and commitments that the country itself has signed onto. Yet, this seems not to have been the case in the particular project studied.

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

Untying aid and use of local systems, expertise and resources	In the first two years, the project was fully funded by Brazil. In the subsequent years, Angola co-funding would increase 10-20%, until Brazil no longer had financial responsibility for the project. By the time the centre was transferred to Angola, the government had assumed 100% of its costs and was funded through national budget. Angolan industry was not developed to the point of taking up the costs of maintaining the centre and this persists today. Cooperation activities relied on donated goods, materials and human resources by Brazil. Local systems were not used in the early stages of the project.
4. Transparency, accountability and information management	
Information management systems	A SENAI project coordinator was based in Luanda during the entire project and among his responsibilities was to compile, analyse and report project-related information to the partners in Brazil and Angola.
Transparency and public access	n/a
M&E of learning	Project documents do not point to any frameworks or mechanism to evaluate initiatives at the outcome and impact levels. These documents make provision for financial and human resources for project monitoring at the output level. Few project progress reports were available and no evaluation plan or report was identified. The large number of applications received each year might be indicative of a successful program.
5. Inclusive partnerships, citizens' protection and empowerment	
Multi-stakeholder participation	The centre aims to contribute to the social rehabilitation and national reconstruction of Angola through training of demobilized workforce, including youth and women. Yet, no clear strategy was identified or numbers of women vs. men trained were provided.
Empowerment	See above.
Protection of people and the environment	Most of the trainings provided aim to develop skills for industries with high social and environmental footprints. Considering that vocational training centres respond to the needs of the local job market and these needs are directed by the market and government incentives, it is not reasonable to expect major contributions of the project to this sub-indicator.
6. Efficient partnerships	
Flexibility and adaptation to local context	The centre was originally conceived as a mobile unit that would take training courses to far-reaching communities. Persisting political instability and security threats in Angola led partners to revise the plan and build a permanent centre in the capital. The mobile unit was adapted to the new permanent structure and a train-the-trainer program was created to reach people outside Luanda.
Time and cost-efficiency, reduced bureaucracy	The structuring impact approach of Brazilian cooperation contributed to the decrease of medium- and long-term costs. SENAI ensured training of INEFOP staff on the use and maintenance of the equipment donated were an integral part of the project. UNDP conducted the procurement of goods and materials for the project following partners' request to waive (Angolan and Brazilian) import/export taxes and reduce other related costs.
Coordination and complementary	The relatively low engagement of the centre with the local industry reflects the institutional structure of the centre and the environment in which it operates.
7. SSC in the global arena	
Coalition building	n/a
International peer review	n/a
Policy coherence for development	n/a

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

INDIAN COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT IN AFRICA

Three major issues unite India's and Africa's economic and political futures. The first is the common historical experience of colonization and decolonization. In the process of fighting for independence, India and most of Africa developed a common narrative and set of political norms that stressed sovereignty, territorial integrity, non-intervention and a desire for an independent foreign policy. Second, Africa remains vital for India's emergence as a global actor in the international institutional arena. Both India and Africa are keen to reform the existing global governance structures, especially the United Nations (UN) Security Council, and shape the emerging global regimes, particularly those related to energy, climate, cybersecurity and use of outer space for development purposes. Third, the exponential increase in India-Africa trade has also driven India's development cooperation and has been the key approach for engagement with Africa since 2003. Africa's importance in the Indian development cooperation strategy is evident in the promise of lines of credit worth over \$8 billion made to African countries between 2008 and 2011.⁷⁵

India claims that its cooperation with Africa is based on a partnership of mutual benefit and therefore is closely tied to trade and investments. Partnerships with Indian businesses are central to Indian cooperation in Africa.⁷⁶ In its engagements with Africa, the Indian government has played the role of a facilitator. For example, in 2002, India set up its 'Focus Africa program,' operating in 24 African countries.⁷⁷ This program was aimed at enhancing business-business relations. The Indian government also engages with organized business structures, such as the Confederation of Indian Industry (CII) and the Federation of Indian Chambers of Commerce and Industry (FICCI), to hold specific events, business summits and trade fairs. Conversely, this is not the case with African countries, who generally lack representative organized business structures and whose linkages to government are generally constrained.⁷⁸

Education and skills development are central to Indian cooperation in Africa. By advancing skills and technologies, it is expected that "the resultant industrial growth will create new jobs and attract foreign direct investment. Continued cooperation will open up favourable prospects for mutually beneficial, collaborative business ventures between the developing country and Indian enterprises."⁷⁹ The share of education and skills development in India's development cooperation was estimated at 30 percent in 2011. That year, approximately 65 percent of Indian cooperation to Africa was channelled to education and skills development initiatives.⁸⁰

Most of Indian cooperation in education and skills development is related to information technology, rural development, management, finance, environment, renewable energy, business administration, international

⁷⁵ SIDHU, W.P.S. (2015) 'Africa, the indispensable continent for India?' Brookings India blog post, <http://www.brookings.edu/blogs/africa-in-focus/posts/2015/11/03-africa-indispensable-india-sidhu#.VkHTmY7ZtHl.twitter>

⁷⁶ Presentation by senior official of MEA, Forum for Indian Development Cooperation (FIDC) meeting, Kolkata, 23 March 2015. As cited in SAIIA, Indian Foreign Policy and India-Africa Relations, 23 October 2015, <http://www.saiia.org.za/news/new-working-paper-indian-foreign-policy-and-india-africa-relations>

⁷⁷ Ibid

⁷⁸ Ibid

⁷⁹ Email from Abhinav Dixit, CDAC, on 15 January 2016

⁸⁰ UNESCO (2014) 'BRICS, building education for the future. Priorities for national development and international cooperation.' Paris, UNESCO.

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

business, tourism, computer science and medical disciplines.⁸¹ The Ministry of External Affairs coordinates the majority of these projects with implementation often left to specialized government agencies, research and training institutes, and Indian companies. Within the Ministry of Foreign Affairs, the Department of Political Affairs coordinates India's development cooperation. The formulation of India's development cooperation policies towards specific countries remains the domain of individual directors within the Ministry of External Affairs, reflecting the inter and intra-ministerial rivalries that have plagued the government's efforts to set up a centralized development assistance coordinating structure.⁸²

India's cooperation in education and skills development has been primarily operated through three modalities: scholarships granted through the Indian Technical and Economic Program (ITEC), grants and loans under the Pan Africa e-Network Program, and technical assistance projects in partnership with Indian companies.

Government-led initiatives: the Indian Technical and Economic Cooperation

India administers most of its cooperation in education and skills development through its Indian Technical and Economic Cooperation (ITEC) and its Africa-specific corollary Special Commonwealth Assistance for Africa Program (SCAAP), which offers various short-, medium- and long-term training programs for African civilians and military to enhance their qualification and skills.

Created in 1964 as a bilateral program of assistance of the Indian government, ITEC now coordinates training to students, government officials and professionals from 161 partner countries. ITEC has expanded rapidly in recent years, from 1,959 participants in 1999-2000 to 5,000 in 2009-2010. In 2013-14, over 10,000 scholarship slots were offered under the ITEC/SCAAP program. With Africa having a special place in India's development assistance program, nearly half of the ITEC slots, some 4,300 annually, are allotted to this continent.⁸³ In 2015, an additional 50,000 slots for African students over the next five years were announced during the Third India-Africa Forum Summit.⁸⁴

ITEC resources have also been used for cooperation programs conceived in regional and inter-regional context such as the Economic Commission for Africa, Industrial Development Unit of Commonwealth Secretariat, UNIDO, the Group of 77 (G-77) and the Group of 15 (G-15). In more recent years, its activities have also been associated with regional and multilateral organizations and cooperation groupings like Association of South East Asian Nations (ASEAN), Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), Mekong-Ganga Cooperation (MGC), AU, Afro-Asian Rural Development Organization (AARDO), Pan African Parliament, Caribbean Community (CARICOM), World Trade Organization (WTO) and Indian Ocean Rim - Association for Regional Cooperation (IOR-ARC) and India-Africa Forum Summit.

More than 47 training institutions in India run more than 280 training courses ranging from IT, textile designing and

⁸¹ Assistance for Africa Programme (SCAAP) and TCS of Colombo Plan at NIIT, <http://www.indianembassy.hu/embassy/wp-content/uploads/2012/05/Brochure-NIIT-2015-16.pdf>

⁸² MULLEN, R. (2013) 'India's Development Assistance: will it change the global development finance paradigm?' Prepared for the Workshop on Innovation in Governance of Development Finance: Causes, Consequences & the Role of Law Conference, April 8-9 2013, Giesen and New York University School of Law, p. 9

⁸³ Benefits for Africa as India expands ITEC program. The Economic Times (30 November 2015), http://articles.economictimes.indiatimes.com/2015-11-30/news/68661778_1_south-africans-itec-programme-african-countries

⁸⁴ OPEYEMI, D. (2015) This is what India's USD 10 billion loans means for Africa, <http://venturesafrica.com/this-is-what-indias-10-billion-loan-means-for-africa-2/>

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

foreign affairs to commerce, science and media under the ITEC.⁸⁵ Indian research and training institutes like the Indian Institute of Technology (IIT), the National Institute of Training and Standardization, and the Energy & Research Institute (TERI), to name a few, are chosen by India's Ministry of External Affairs to take part in the program.⁸⁶ In the IT sector, the Centre for Development of Advanced Computing (CDAC) used by the Indian government's Department of Electronics and Information Technology within the Ministry of Communications & Information Technology (MCIT), also carries out trainings. The courses offered under this program broadly cover IT & telecommunications, management, small & medium enterprises and rural development. Courses on English language and other specialized and technical fields are also being offered.

Some innovative courses are offered under ITEC, including one on solar technology for semi-literate and illiterate grandmothers from the least developed countries at Barefoot College, Tilonia, Rajasthan. Every six months, approximately 40 women from over 50 countries take ITEC courses at Barefoot College. Between 2008-2013, over 300 women were trained and 20,000 houses have been solar-electrified by these women in 160 villages all over the world.⁸⁷

In addition to training in India, ITEC also offer projects and project-related activities, such as feasibility studies and consultancy services, deputation of Indian experts abroad, study tours, donation of equipment at the request of ITEC partner countries and aid for disaster relief. Since the launch of the ITEC program in 1964, India has provided nearly \$2.5 billion worth of technical assistance to developing countries from which \$1 billion was directed to ITEC-related activities involving African countries.⁸⁸ Project-related activities account for 40 percent of the annual ITEC budget. Some key projects executed under the ITEC program in Africa include the computerization of the office of the Prime Minister of Senegal and assistance in the transformation of the educational system of South Africa. Agriculture remains a major focus of ITEC's project assistance. The ITEC program has provided Ghana, Senegal, Burkina Faso and Mali equipment and expertise for enhancing agricultural productivity and generated goodwill for India among African countries. In the set-up of IT centres, for example, the Indian government liaised with CDAC to not only assist with the infrastructure needed for the IT centre, but also carried out training of trainers in India and in the respective countries for managing the IT Centre and Infrastructure. Experts from the ITEC program are also deputed to respective countries and collaborative workshops have been held.

The Indian Ministry of External Affairs roughly determines the allocations for the ITEC program, based on the availability and expertise of the participating domestic institutions. The partner country determines its development assistance needs and approaches the Indian embassy in their country to discuss this further. The request is passed on from the embassy to the Ministry of External Affairs, to determine the project specifics.⁸⁹ According to Mullen, "India shares technology that is appropriate for the African context" (in other words, industry relevant employability skills):

⁸⁵ Ministry of External Affairs, Indian Technical and Economic Program, http://mea.gov.in/Uploads/PublicationDocs/24148_REVISIED_50_yrs_of_ITEC_brochure.pdf

⁸⁶ Ibid

⁸⁷ Barefoot Project, mea.gov.in/press-releases.htm?dtl/21325/Media+Briefing+on+Barefoot+Solar+Grandmothers+from+Least+Developed+Countries+Undergoing+Training+in+India+under+ITEC+Programme#

⁸⁸ CHAND, M. (2015) Skill development: the ITEC way, indiafrica.in/FViewsManishChand.html

⁸⁹ Rani Mullen, 'India's Development Assistance: will it change the global development finance paradigm?' Prepared for the Workshop on Innovation in Governance of Development Finance: Causes, Consequences & the Role of Law Conference, April 8-9 2013, Giesen and New York University School of Law

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

which have the twin advantages of affordability and accessibility. She further suggests that Indian development cooperation is cost-effective due to differences in purchasing parity. She notes that the process of nominating ITEC candidates from countries is often a lengthy process and could be streamlined.⁹⁰

Besides empowering students with life-sustaining skills, the ITEC program also gives them a taste of the multicultural and pluralistic ethos of India. The ITEC has become a powerful instrument of projecting India's soft power and its cultural diplomacy as most of these students retain a life-long association with India after their brief stay in the country. Networking and bonding among students during and after the course is incentivized through official events like the ITEC alumni day, organized each year by the Indian embassy in the participating countries as well as other informal networks using social media.

Many of the students who attended ITEC courses have risen to top positions in their respective fields, and some have become ministers. In Botswana, officers in the defence establishment have been trained under this program. In Tanzania, over 24 percent of senior government officials have been through the ITEC experience. Mullen notes that the large number of requests for participation is another indication of a successful program.⁹¹ It is not just students from foreign countries that have benefitted from ITEC program. Several Indian public-sector undertakings have also acquired a distinctive brand identity in developing countries, especially in Africa. The National Small Industries Corporation (NSIC), Hindustan Machine Tools International Ltd. HMT (I), Water and Power Consultancy Services Ltd. (WAPCOS) and Rail India Technical & Economic Services (RITES) have capitalized on their ITEC association. They now bid for development projects in these countries on their own.

Data on ITEC in the public domain remains limited, including with regards to transparency of information on the number of slots and courses offered and utilized under the ITEC program.⁹² Researchers have stated that government officials are in some instances unwilling to share information, allegedly due to a fear that this could jeopardize bilateral relationships.⁹³ It also remains unclear how Indian institutions are selected and contracts are awarded to stakeholders. There is no M&E framework in place and no formal M&E study of India's development cooperation.⁹⁴ Yet, the Indian government does monitor feedback on the ITEC program. The following table summarizes the findings according to the NeST seven dimensions to assess the quality and effectiveness of SSC.

⁹⁰ Ibid. For example, the process in Myanmar presently involves three organizations in Myanmar, in addition to the Indian mission in Yangon, the ITEC institute in India, and the Development Partnership Administration (DPA-II) at the Indian Ministry of External Affairs. See ICDR, 50 Years of Indian Technical and Economic Cooperation, p. 18

⁹¹ Ibid

⁹² ICDR, 50 Years of Indian Technical and Economic Cooperation

⁹³ Interview with anonymous stakeholder

⁹⁴ Rani Mullen, 'India's Development Assistance: will it change the global development finance paradigm?' Prepared for the Workshop on Innovation in Governance of Development Finance: Causes, Consequences & the Role of Law Conference, April 8-9 2013, Giesen and New York University School of Law

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

Assessing the quality and effectiveness of the ITEC Program

1. National Ownership	
Demand-driven	MEA roughly determines the allocations for the ITEC program based on the availability and expertise of the participating domestic institutions. The partner country determines its development assistance needs and approaches the Indian embassy in their country to discuss this further. The request is passed on from the embassy to MEA to determine the project specifics. India shares affordable and accessible technologies that are appropriate for the African context.
Alignment to national priorities	ITEC offers a wide range of programs, allowing partner countries to identify priority areas and utilize the slots according to their capacity and relevance to their needs. At IAFS 2015, India and African countries recognized the importance of cooperation in education and skills development and the need to expand training slots in existing and new areas in line with Agenda 2063.
Non-conditionality and respect for national sovereignty	No policy conditionalities were found in the provision of ITEC assistance.
2. Horizontality and solidarity	
Mutual benefit-win-win	ITEC-trained individuals tend to have good perceptions/will towards India, which will assist if India later seeks stronger bilateral relations with the country. Technical cooperation in turn contributes to advancing technologies and building institutional capacities. This might lead to industrial growth, job creation and inward FDI. Continued cooperation might also open up favourable prospects for business ventures between the developing country and Indian enterprises.
Trust	n/a
Shared decision-making, resources and division of labour	As part of the ITEC initiative there have been 'Hole-in-the-Wall' projects, which are aimed at educating children in rural and urban slums in Namibia, Zambia and Uganda. In these projects, "the AU will determine the location of the institutes, the host country will provide the land and construct the buildings and India will run the centres for three years, after which they are intended to be self-sustaining." ⁹⁵
Mutual accountability	n/a
3. Capacity development, sustainability and learning	
Capacity- building	SCAAP offers various short-term training programs for African scholars to enhance their qualification and skills. In the set-up of IT centres, for example, the Indian government liaised with CDAC to not only assist with the infrastructure needed for the IT centre, but also carried out training of trainers in India and in the respective countries for managing the IT centre and infrastructure. Experts from the ITEC program are also deputed to respective countries and collaborative workshops have been held.
Knowledge and technology transfer	A number of IT centres and IT-related infrastructure have been set up around Africa. CDAC has setup the International Cooperation Division (ICD) in New Delhi, India to promote its products and technologies. ICD collaborates with various countries in the field of Information & Commercialization Technologies.
Untying aid and use of local systems, expertise and resources	n/a
4. Transparency, accountability and information management	
Information management systems	n/a

⁹⁵ SUBHASH, A. (2012) 'Technical training, curriculum support & education initiatives: an assessment of India's overseas aid in skills development.' Background paper prepared for the Education for all global monitoring report 2012, Youth and skills: putting education to work

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

Transparency and public access	Data on ITEC in the public domain remains limited, including with regards to transparency of information on the number of slots and courses offered and utilized under the ITEC program. Some researchers have stated that government officials are in some instances unwilling to share information, allegedly due to a fear that this could jeopardize bilateral relationships. It is unclear how contracts are awarded to other stakeholders, with some claims that this is not done fairly.
M&E of learning	There is no M&E framework currently in place and no formal M&E study of India's development cooperation. However, the Indian government does monitor feedback on the ITEC program. Yet, the large number of requests for participation might be indicative of a successful program.
5. Inclusive partnerships, citizens' protection and empowerment	
Multi-stakeholder participation	Implementation is left to specialized government agencies, research and training institutes and Indian companies. It is not clear how these other stakeholders were identified.
Empowerment	n/a
Protection of people and the environment	n/a
6. Efficient partnerships	
Flexibility and adaptation to local context	n/a
Time and cost-efficiency, reduced bureaucracy	Indian development cooperation is cost-effective due to differences in purchasing parity. However, it is not always time-efficient. The process of nominating ITEC candidates from countries is often lengthy and could be streamlined.
Coordination and complementary	DPA coordinates India's development assistance in the MEA. Although India is trying to centralize its development assistance through DPA, it has been noted that it still lacks the wherewithal to coordinate, monitor and even centralize and collate historical information on Indian development assistance among the different ministries. The formulation of India's development assistance policies towards specific countries remains the domain of individual directors within MEA, reflecting inter- and intra-ministerial rivalries.
7. SSC in the global arena	
Coalition building	A sense of an ITEC community is fostered through the use of social media and websites to help ITEC alumni keep in touch with each other as well as events directed to alumni and new participants.
International peer review	n/a
Policy coherence for development	n/a

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

Public-private partnerships: the Pan Africa e-Network

This includes lines of credits (LoCs) from the Indian government to companies; LoCs for education infrastructure and grants for TA projects (e.g. construction of vocational training centres, curriculum design and training for the trainers). For example, the Ministry of External Affairs, Government of India, has entrusted the National Institute of Information Technology (NIIT) to impart quality IT training. The Ghana-India Kofi Annan Centre of Excellence in ICT (AITI-KACE), Ghana's first advanced information technology institute, has also been instrumental in skills development in technology.⁹⁶

The Pan Africa e-Network project has also been actively involved in education and skills development. The e-network was launched by the Indian government in 2009 to provide Indian education and medical support to African countries via satellite technology. Specifically, teleconsultations are conducted between Indian and African hospitals as well as consultations by Indian medical institutions to African hospitals. This technology was provided by an Indian public-sector company, Telecommunications Consultants India Limited (TCIL), which was awarded \$125 million to implement the project. By 2013, 12 Indian hospitals were connected to 48 African hospitals and 460 teleconsultations and over 2,500 Continuing Medical Education (CME) sessions were held. In addition, 47 learning centres were connected to five Indian universities. Approximately 10,000 students had registered for courses and over 3,500 tele-education sessions had been carried out.⁹⁷ The ITEC has been involved with the Pan Africa e-Network.⁹⁸

Pan Africa envisages setting up an e-network connecting Indian institutions with 53 countries of Africa through satellite and fibre-optic links and providing tele-education and telemedicine services. The objective is to assist Africa in capacity-building by imparting quality education to 10,000 students in Africa over a five-year period in various disciplines from some of the best Indian universities/educational institutions. The project is also equipped to support e-governance, e-commerce, infotainment, resource mapping and meteorological and other services in African countries.⁹⁹ The Pan African e-Network uses a blend of public-private initiatives; for example, with major IT companies that have an interest in the African market, sponsoring events in Africa, or engaging in specific project initiatives.¹⁰⁰

The Pan African e-Network initiative was initially coordinated in 2005 by the Ministry of External Affairs (MEA), with technical experts drawn from the President's office, the Department of Space and Telecommunications Consultants India Limited (TCIL). The projects embraced principles of SSC through a multi-stakeholder demand-driven approach: the MEA extensively engaged with AU and member countries in this period.¹⁰¹ It was innovative in using ICT to promote VIP networks between heads of state across Africa and was cost-effective.¹⁰²

⁹⁶ Ibid

⁹⁷ Indian Development Cooperation Research, Centre for Policy Research, The Asia Foundation, IDCR Report: The State of Indian Development Cooperation, 2014, http://www.cprindia.org/sites/default/files/policy-briefs/Spring_2014_IDCR_Report_the_State_of_Indian_Development_Cooperation.pdf, p. 5

⁹⁸ Government of India, Indian Technical and Economic Cooperation Program, About ITEC, <http://itec.mea.gov.in/?1320?000>

⁹⁹ Pan-Africa E-network, Inauguration of pan-African e-network, <http://www.panafricanenetwork.com/index.jsp>

¹⁰⁰ The Observatory on borderless Higher Education, Best of both worlds? Indian government launches the Pan-African E-network in Ethiopia in the name of philanthropy and profit, http://www.obhe.ac.uk/documents/view_details?id=235

¹⁰¹ FIDC, RIS, India Africa Partnership: Towards Sustainable Development, 2015, p. 26

¹⁰² Ibid

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

TCIL, an Indian publicly owned telecommunications company, is the implementation partner for the Pan-African e-Network. Some have interpreted its development as support from the Government of India to expanding the Indian telecom industry in Africa, which in turn also expands the education services in Indian universities.¹⁰³ However, as noted in a case study on Senegal, “the technological transfer of the project to Senegalese or African counterparts is certainly weak, although three years have passed since the start of the project; the interest in the project shown by the Senegalese authorities is weak for the moment.”¹⁰⁴

The idea of mutual benefit for India and Africa is nicely summed up by the provision of telemedicine to hospitals in Africa, including those situated in remote areas through mobile clinics, providing much-needed access to medical expertise in rural Africa through Indian hospitals. African countries can branch out from their nodal connections and network with other rural or distant educational or medical centres to cut costs and time on travel for beneficiaries. The project might further reduce social spending, including those under the structural adjustment programs. On the Indian side, the good will created from these projects might help advance the country’s economic and strategic interests and counterbalance the engagements of China in Africa.¹⁰⁵

However, it has also been warned that the AU will need to adapt the project to the needs of users, to monitor and evaluate how the project is going and to eventually claim ownership of this engagement.¹⁰⁶ A central information sharing system, a website, has been set up in order to allow for information to be disseminated to various countries in Africa and other relate stakeholders.¹⁰⁷ The division of labour will be adjusted on the basis of a memorandum of understanding (MOU’s) signed between Indian universities and participating African countries.¹⁰⁸

Private-led initiatives: CSR programs, operational strategy of the companies

The Indian private sector has been engaged in skills development domestically. There is a large skilling market in India mainly stemming from the establishment of the Ministry of Skill Development and Entrepreneurship in 2014 and the National Policy for Skills Development and Entrepreneurship in 2015. Through the National Skill Development Corporation, private training providers are offering employability skills at a scale. Indian companies are now required by law to set aside 2 percent of their average net profits to meet corporate social responsibility (CSR) spending requirements.

The Confederation of Indian Industry (CII) has engaged with the Indian government on legislation and frameworks, in writing reports on demand and supply of the workforce and in setting up skills hubs and skills councils.¹⁰⁹ It also engaged in education through two committees – School Education Committee and the Higher Education Committee. CII has worked on policy recommendations on public-private partnerships in higher education, the

¹⁰³ Gemma Cairó-i-Céspedes&Artur Colom-Jaén, A political economy approach of India in Senegal.A “win-win” partnership? 2014, Canadian Journal of Development Studies

¹⁰⁴ Ibid

¹⁰⁵ Fahamu, Africa: Pan Africa e-Network: a model of ‘South- South cooperation,’ 24 April 2009, <http://www.pambazuka.net/en/category.php/media/55920>

¹⁰⁶ Ibid

¹⁰⁷ www.televital.com/downloads/Pilot_Proj.pdf

¹⁰⁸ Fahamu, Pan Africa e- Network: a model of ‘South-South cooperation,’ 2009, <http://www.pambazuka.net/en/category.php/media/55920>

¹⁰⁹ CII, Skills development, <http://www.cii.in/sectors.aspx?enc=prvePUJ2bdMtgTmvPwwisYH+5EnGjyGXO9hLECVTuNttP/oGsVu5A70LTxgbaQRW>

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

right to education and accreditation of schools.¹¹⁰ While not a big consideration in the past, Indian business is now beginning to recognize its ability to export some of its skills to Africa.¹¹¹ Private companies, such as Kirloskar Brothers Limited, have contributed to capacity-building in agriculture.¹¹² Private training providers from India, like Centum Learning, are also investing in Africa.¹¹³ It should be noted that these initiatives are generally led by the private sector as part of their corporate social responsibility programs. Allegedly, the Indian government only encourages businesses that have been invited by African governments.¹¹⁴

Looking ahead, India and Africa will continue to expand their cooperation in skills and education. On 26-29 October 2015, 41 heads of state and government from the African continent attended the Third India-Africa Forum Summit and signed the India-Africa Framework for the Strategic Cooperation. These outcome documents cover key priority areas for cooperation, such as economic development; trade and industry; agriculture; energy; the blue-ocean economy; infrastructure; education and skills development; health; and peace and security.¹¹⁵ As part of the India-Africa Framework for the Strategic Cooperation, the Indian government and its African partners agreed to prioritize education and skills development, namely:¹¹⁶

- Provide and facilitate the access and enrolment of African students and academicians to India's premier institutions of higher learning to boost Africa's human resource capacity, including in such areas as engineering, medical technology and agriculture;
- Collaborate in capacity-building and the use of remote sensing technologies for natural resource mapping, including agriculture, water, forest cover, mineral and marine resources, disaster management and disaster risk reduction, including early warning of natural disasters;
- Foster cooperation among scientific and research centres in Africa and India to make use of ICT and modern technologies and geographic information systems;
- Cooperate in making technology and digital networks become effective tools in our fight against poverty, and ensure it benefits the needy, improves delivery of services, catalyses development and increases citizen participation in governance, as well as promotes financial inclusion and empowerment through access to banks, credit and social insurance against diseases and accidents;
- Promote joint coordination and cooperation to improve the future of youth through programs for capacity-building and knowledge exchange among youths on the two sides and strengthen their capacities to meet the challenges of globalization and its repercussions;
- Continue to provide the necessary support for the establishment and operationalization of the institutions agreed by the two sides.

¹¹⁰ CII, Education, <http://www.cii.in/sectors.aspx?enc=prvePUj2bdMtgTmvPwwisYH+5EnGjyGXO9hLECVtUNsJKom60HRHReZ5/udUByhH>

¹¹¹ McKinsey Asia Centre, Joining Hands to unlock Africa's potential, 15 May 2014, <http://www.cii.in/PublicationDetail.aspx?enc=oVklNqY3Rk4yv n8xSJLxaY7rDgTn1jXDnYKTj34PEA=>

¹¹² African Farming and Food Processing, Kirloskar brothers build on African business, <http://www.africanfarming.net/technology/water-irrigation/kirloskar-brothers-build-on-african-business>

¹¹³ Centum Learning, <http://www.centumlearning.com/centum-learning-africa.html>

¹¹⁴ Renu Modi, Partnering for Food Security, <http://www.indiafrica.in/FViewsRenuModi.html>

¹¹⁵ SA News, India, Africa agree on areas of cooperation. <http://www.sanews.gov.za/world/india-africa-agree-areas-cooperation>

¹¹⁶ Third India-Africa Forum Summit 2015, New Delhi, http://mea.gov.in/Uploads/PublicationDocs/25980_declaration.pdf

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

LESSONS FROM THE FIELD

Brazilian and Indian cooperation in Africa offers lessons for advancing SSC in education and skills development. First and foremost, it is important to note that education and skills development were a priority for developing countries under both the MDGs and remain a priority under the SDGs. These priorities were defined based on specific and different contexts: from the need to reintegrate demobilized populations during Angolan post-war reconstruction to the need to expand economic and commercial opportunities for Brazilian and Indian industries and promote sustainable inclusive growth. Nevertheless, the SDGs better capture the intersectoral nature of development challenges, including education and skills development.

Brazilian and Indian cooperation recognized early on the need for long-term, intersectoral education and skills development strategies through solution-oriented, structuring initiatives. In developing and less-developed countries, it is observed that the absence of soft skills hampers the employability of individuals, particularly the disadvantaged. In addition to hard and technical skills, both countries have invested in activities that also promote soft and life skills development. Training providers in India, for instance, started to offer modules on topics such as language, basic IT, communication and teamwork to overcome this challenge. In Brazil, other initiatives like adult and youth literacy projects, non-formal education and special-needs education, in addition to vocational training initiatives, have also given focus to both hard and soft skills.

Brazilian and Indian cooperation in education and skills development in Africa has placed capacity development at its core. Overall, the efforts promoted by these countries recognize the importance of human-capacity enhancement in the attainment of socio-development objectives. They also show commitment to assist in the development of technical vocational and education training programs aligned with labour market demands.¹¹⁷ This will be further discussed in the next section.

Experiences also reflect the relevance of skills training for the job market. Under the SENAI model, the private sector takes the lead in managing skills development, which ensures better alignment of supply and demand of skills. SENAI determines the training programs to be offered and the number of students to be admitted, based on industry demand. This model is being exported through Brazilian SSC in an attempt to secure better alignment with the local job market.

Yet, private-sector management of education and skills development initiatives must consider the enabling environment and capacities of the partner country. Unlike in many African countries, in Brazil, the training levy (a tax on private firms by government for the purpose of training) is managed by a private sector non-profit organization. A similar model is being introduced in India to incentivize CSR initiatives. In most developing countries, however, the levy and the training provided from it are managed by the public sector. In Angola, industry is not ready to take up the costs of maintaining vocational training centres and the project had to be adapted to this reality.

Finally, complementarity between education and skills development needs to be fostered. On the one hand, vocational training can reduce incentives to further human capital accumulation and constrain equal opportunity and social mobility. On the other hand, arguments favouring vocational education are based on the decoupling that tends to occur between the academic curricula and the practical skills demanded by companies, which would

¹¹⁷ Second Africa-India Forum Summit 2011, Addis Ababa: Plan of Action of the Framework for Cooperation on the India-Africa Forum Summit

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

allow them to participate in competitive international markets, and allow economies to transit towards a diversified production with high added value. While development priorities are ultimately defined by partner countries, complementarities should be explored in the conception of SSC initiatives as seen in the two case studies.

Lessons from the field

- Recognize long-term, intersectoral strategies at early stages of cooperation
- Focus on capacity-development aspects
- Align cooperation with skills training for the job market
- Consider the enabling environment and capacities of the partner country
- Foster complementarity between education and skills development needs

ENABLERS OF AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

As seen in the case studies, one of the main features of SSC lies in the practices, processes and relations that are built during development partnerships. The enablers of Brazilian and Indian cooperation in education and skills development, in particular the two examples studied, can be observed through the NeST seven dimensions to assess the quality and effectiveness of SSC as follow.¹¹⁸

Enablers of Africa-Brazil-India cooperation in education and skills development		
National ownership	✓	?
Horizontality and solidarity	✓	
Capacity development, sustainability and learning	✓	
Transparency, accountability and information management		?
Inclusive partnerships, citizens' protection and empowerment	✓	?
Efficient partnerships	✓	?
SSC in the global arena		?

Horizontality and solidarity: In the Brazilian experience, horizontality is evidenced through the division of labour and lack of hierarchical relationships in terms of decision-making and project implementation. While Angola was responsible for providing permanent human resources, physical infrastructure and running costs, SENAI took

¹¹⁸ Refer to the NeST framework for a detailed description of the seven dimensions. The lessons apply mainly to the cases studied and may not be generalized to the whole of Brazilian and Indian cooperation in Africa. The check mark indicates that the dimension was clearly observed in the two cases studied. The question mark next to the check mark or alone indicate that some dimensions were not clearly observed or there were no sufficient elements to assess them, respectively.

LESSONS FROM AFRICA-BRAZIL-INDIA COOPERATION IN EDUCATION AND SKILLS DEVELOPMENT

leadership of the management and delivery of the hard and soft components of the project. Angolan readiness to take full leadership of the center was regularly assessed by both partners, and Brazilian presence was decreased as human and institutional capacities were installed in Angola.

In the Indian case, horizontality is equivalent to mutual benefits (win-win) and the idea of 'development compact' comprising various forms of peer-to-peer exchanges as well as finance, trade and investments. This approach openly and clearly defines India's focus on economic diplomacy and is particularly relevant for countries like Brazil, attempting to frame trade, investments and cooperation under the solidarity discourse. For example, in addition to resuming bilateral relations and businesses, another direct benefit of the Brazil-Angola Vocational Training Centre in Cazenga for Brazil could be to provide skilled labour for Brazilian and other companies in the country. Yet, the prevailing perception that economic and commercial benefits should not be seen as a direct benefits of development cooperation prevent Brazilian cooperation to further explore engagement with the private sector – provided partners' interests are met in first place and engagement with the private sector does not create unbalanced relationships.

Capacity development, sustainability and learning: As previously discussed, interactions among education, skills development and inclusive sustainable growth are complex and dynamic, and sectoral issues cannot be looked at in isolation from one another. The underlying theory of change of Brazilian cooperation reflects these complexities by prioritizing interdependent and sequential initiatives that build long-term human, institutional and systemic capacities (also called 'structuring impact' approach of Brazilian cooperation).

In the Brazil-Angola Vocational Training Centre, this was observed through the sequencing of train-the-trainer programs, initiatives to build the institutional capacity of the centre and enabling environment under which it would operate. It is not a matter of project size, but of how the initiatives look at the set of solutions to a development challenge and are conceived interdependently.

In India, the ITEC/SCAAP program not only provides the infrastructure for development, but also equips partner countries with the skills to ensure that they know how to manage this technical infrastructure. India combines the establishment of IT centres in Africa with a training of trainers. The African centres then offer further courses on related issues.

Another enabler of Brazilian and Indian SSC in education and skills development is the transfer of knowledge and technology. These technologies can be in 'hard' (e.g. physical infrastructure, equipment) or 'soft' (e.g. trainings, teaching methodologies, technical advisory) forms and are usually based on previously tested experiences (e.g. public policies that had a certain degree of success in these countries). These two forms of technology are increasingly being combined with one another in more integrated cooperation approaches to knowledge sharing and technology transfer.

The capacity of the partner countries to absorb knowledge and technology and adapt it to local conditions is directly related to the effectiveness and functionality of these integrated cooperation approaches. In particular, countries that come from similar developmental backgrounds are best placed to carry out activities, using simplified methodologies that are adaptable to the local context. For example, there are instances of India training illiterate people. Based on experiences like the Barefoot College under ITEC, these experiences can be exported abroad.

III. ADVANCING SSC IN EDUCATION AND SKILLS DEVELOPMENT

WHAT IS NEEDED TO IMPLEMENT THE SDGS IN EDUCATION AND SKILLS DEVELOPMENT?

Looking ahead, exploring complementarities between education and skills development - including through the STISA strategy - and supporting the establishment of national certification systems will be key for enhancing SSC contribution to the implementation of the SDGs. While development priorities are ultimately defined by partner countries under their own efforts to implement the SDGs, complementarities between education and skills development should be explored in the conception of SSC initiatives and in view of regional initiatives. As such, there would be incentives to further human capital accumulation, equal opportunity and social mobility as well economic diversification with higher added value. Defining competency standards and establishing a certification system of vocational training in accordance with national and international standards, in turn, could further enhance credibility of the courses in the industry and the school-to-work transition.

Based on the case studies and lessons learned, the following additional NeST dimensions to assess the quality and effectiveness of SSC also need to be considered:

National ownership: Brazil and India have experienced their own socio-economic development and industrial growth, with each country leading in certain sectors regionally and globally. The transfer of these experiences to other developing countries therefore presents an important form of South–South learning. African countries like Angola have tried to maximize each country's strengths to meet their development objectives and have been developing mechanisms to enable their separate initiatives to feed into one another. While India features prominently in the creation of e-learning systems, Brazil would be more suited to providing training and institutional capacities. A greater focus on competitive advantages and complementarities would not only enhance the demand-driven facet of SSC, but also opportunities for better addressing national priorities.

Inclusive partnerships, citizens' protection and empowerment: Brazilian and Indian cooperation mobilize several national partners, including ministries, departments, foundations, universities, research centres, companies and NGOs. Delivering technical cooperation, through civil servants from ministries and public agencies, is one of the main characteristics of Brazilian cooperation. Particularly since the 1988 Constitution and through the re-democratization years, civil servants have developed sectoral expertise and gained first-hand experience on the actual functioning of the domestic politics and the complex interplay among interest groups. Their participation in Brazilian cooperation has so far contributed to hindering the increase of an "aid industry" in Brazil.¹¹⁹ As a result, many civil society organizations end up being excluded from cooperation projects and programs.

The resulting impact on cooperation initiatives lies in the relatively feeble mechanisms for people and environment protection (e.g. project segmentation and management of externalities affecting local communities, minorities, vulnerable groups, etc). Several Brazilian human rights NGOs criticize the Brazilian government for what they label a "participation deficit." In the case of education and skills development, this may affect cooperative contribution to the training needs of women and disadvantaged groups and improving their participation in the labour force.

¹¹⁹ Milani, 2014

Creating a network where policymakers and other interested parties can examine policies and programs that make education and skills development available to excluded groups would help enhance gender and social equity, reduce unemployment and improve economic productivity. Issues that could be addressed include how to make apprenticeships and workplace training more attractive, relevant and accessible to women across different sets of occupations and better support women's transition into the labor market.

Opportunities to forge formal links with the private sector should also be explored throughout the project life cycle. For example, scoping missions should consult industries to understand companies' demand. Cooperating entities should maintain an open channel with local businesses to understand industry needs, adapt the content and methods of the courses accordingly, and encourage companies to consider this trained manpower in their recruitment process.

Efficient partnerships: In the case of India, outsourcing projects to universities and research centres have enabled the government to gather extra capacity to fulfil activities, without overstressing its human resources. One caveat to this is the need for baseline standards across these organizations and the need for monitoring and evaluation. Activities that are carried out on behalf of the government, if not done well, risk impacting negatively on a country's reputation. For this reason, countries must develop the ability to reflect on how successful trainings have been across different organizations, and find ways to continuously improve on this.

FINAL CONSIDERATIONS FOR M&E AND SOUTHERN-LED COALITIONS

The theory and practice of SSC provides new meanings to development cooperation and accounts for changes in policy ideas, discourses and approaches. If the past decades saw the emergence, revitalization and institutionalization of SSC, in the future, there needs to be growing complementarity among South-South initiatives and between SSC and other forms of development cooperation in delivering internationally agreed development goals.¹²⁰

This section concludes with general reflections on two important aspects for advancing SSC in education and skills development and contributing towards the implementation of the SDGs: M&E and the role of Southern-led coalitions. The former refers to the 'transparency, accountability and information management' dimension of the NeST framework, while the latter refers to the dimension 'SSC in the global arena.' Both dimensions were less observed in the two case studies and deserve closer analysis.

The case studies found that monitoring and evaluation of SSC remains concentrated in the development cooperation agencies or their equivalents and largely focused on process (the timely and adequate completion of project steps and of the project as a whole), rather than results. When existent, M&E generally covers two aspects: the degree to which objectives and goals are met within the proposed timeframe and the efficiency of the executing partner in coordinating the administration of the project. M&E activities take place alongside the development of each project through periodic meetings and progress reports by the executing partner and the partner country. There is a lack of instruments to measure SSC at the outcome and impact levels as well as mechanisms to enhance partners' learning process. Looking ahead, the following aspects could be considered:

¹²⁰ VAZQUEZ, K.C. 'What Future for South-South Cooperation?' background paper for the conference International Development Cooperation: Trends and Emerging Opportunities – perspectives of the new actors, organized by UNDP and the Government of Turkey (Istanbul 19-20 June, 2014).

- Reviewing existing methodologies for SSC M&E and agreeing on common minimum standards upon which SSC is to be assessed;¹²¹
- Testing/applying these common minimum standards in case studies across regions, development sectors and country typologies;¹²²
- Crowd-sourcing the systematization and sharing of development solutions from the South (case studies), based on common minimum standards and in collaboration with development agencies, executing entities and other relevant stakeholders;¹²³
- Analysing SSC knowledge base and drawing global lessons for the design of future initiatives; value-adding partnerships; innovative financing and management mechanisms; and SSC contribution to the SDGs¹²⁴ in support to the preparatory process of the Buenos Aires +40 conference;
- Strengthening institutional capacities, systems and incentives for SSC M&E and knowledge exchange in national governments, regional organizations and the UN system.¹²⁵

SSC partnerships are unique and framed around different objectives. As such, bottom-up approaches, whereby partners initiate and jointly assess outcomes, is a possible starting point for SSC M&E.¹²⁶ Frameworks and forums like NeST can support and build on this bottom-up process, aggregating experience and sharing good practices. The following aspects could be considered when applying and further enhancing the NeST framework:

- NeST seven dimensions as ‘enablers’ of quality/effectiveness of South-South partnerships (process): incentives for good behavior rather than regulators/harmonizers of SSC initiatives;
- Complementing NeST framework with assessments of SSC outcomes and impact (development change);¹²⁷
- NeST framework as a flexible and concise tool that is relevant to / can be easily implemented in different country typologies, regions and development sectors;

¹²¹ The Nairobi Outcome Document of the High-level United Nations Conference on SSC (A/RES/64/222) defines five normative principles (respect for national sovereignty and ownership, partnership among equals, non-conditionality, non-interference in domestic affairs, mutual benefit) and four operational principles (mutual accountability and transparency, development effectiveness, coordination of evidence- and results-based initiatives, multi-stakeholder approach) of SSC. However, little is known about how Southern partners conceive these principles and apply them in practice and important elements like inclusive participation were not contemplated in SSC conferences.

¹²² Initial efforts to define the SSC principles have been undertaken by the UN Office for SSC, the Iberoamerican Program for SSC, NeST and other governmental and non-governmental actors. These initiatives could be enhanced by the testing/application of existing M&E frameworks in other case studies similar to the ones in this study; the exchange of experiences and further perfecting of these frameworks; and the subsequent update of relevant UN policy and M&E frameworks in the run up to the Buenos Aires +40 conference.

¹²³ For example, the seven dimensions of the quality and effectiveness of SSC in the NeST framework could provide a common ground to this effort.

¹²⁴ Mainly aspects like added value, quality of partnerships and development results. See discussion on NeST in the following paragraph for details.

¹²⁵ For example, the three level impact analysis model of ILO could be one useful framework to take the discussion on M&E of SSC in education and skills development forward: <http://guia.oitcinterfor.org/sites/default/files/guia/skills-development-impact-evaluation.pdf>

¹²⁶ Interview

¹²⁷ NeST framework might be complemented by methodologies that look at the substantive contribution of SSC and lessons for replication and scaling up. These methodologies were discussed in the NeST meeting in Mexico City (27-28 September 2016) based on the lessons emerging from five pilot case studies, including this one. They will be further developed by NeST members and included in a guide book on using the NeST framework.

- Adoption of inclusive approaches that seek the views of all partners in different levels and capacities within and outside governments,¹²⁸ and identification of (proxy) targets and indicators;¹²⁹
- Consider private sector engagement more clearly in the sub-dimensions and indicators of the NeST framework;¹³⁰
- Quantitative methodologies for ranking SSC initiatives' adherence to the different dimensions could allow for comparison between SSC initiatives. Yet, the end purpose of assessing SSC initiatives should rely on mutual learning, considering the different approaches, modalities and national contexts;
- Linking SSC M&E to the monitoring process of the 2030 Development Agenda, with a particular focus on SDG 17 and how SSC contributes to the other SDGs.

Aside from contributions to national development, SSC can support the development and strengthening of international relations.¹³¹ When the leaders of the BRICS met for the sixth BRICS Summit in the Brazilian city of Fortaleza to discuss sustainable solutions for inclusive sustainable growth, the agenda was dominated by talk on the creation of the NDB. As infrastructure and sustainable inclusive development were emphasized and linked one with another, the strategic importance of education and skills development was highlighted. BRICS leaders pledged to strengthen cooperation, including through a new funding mechanism and technical cooperation platform under the NDB, for sharing knowledge and lessons on improving systems and responses to demands for education and skills development in developing countries. Yet, the fund did not find a place in the leaders' declaration that year. Looking ahead, the following aspects could be considered:

- National governments' commitment to the implementation of the AU STISA's, including through funding and engagement with all stakeholders;¹³²
- The AU African Solidarity Initiative as the framework through which SSC should be enhanced in Africa, particularly in countries emerging from conflicts;
- Define how NDB-financed projects will be rooted in sustainable practices;¹³³
- NDB building long-term synergy among SDGs, project financing and operations as part of discussions leading to the 8th BRICS Summit and beyond.

¹²⁸ The seven dimensions of the NeST framework require evaluators to consider and triangulate the views of project stakeholders in different capacities, countries and levels of participation in the SSC initiative studied. Fieldwork is critical also for this purpose.

¹²⁹ As previously discussed, there is a lack of instruments to measure SSC (ex. project documents do not specify baselines and targets, progress reports are usually not available, M&E focuses on inputs and outputs only). In these cases, applying the NeST framework will require partners to agree on 'proxy' targets and indicators.

¹³⁰ Among the partnerships in skills development, cooperation with the private sector and the industry is perhaps the most important one. Private sector involvement is crucial for integrating labor market signals as inputs for market-driven trainings, development of occupational standards and qualifications, delivery of practical and industry-relevant skills, and so forth. Thus, it is linked to quality and effectiveness of SSC in education and skills development

¹³¹ BEISHARATI, N.; MOILWA, M., KHUNOU, K.; and GARELLI RIOS, O. (2015) Developing a Conceptual South-South Cooperation <http://www.saiia.org.za/news/nest-dialogue-emerging-partners-in-africas-development>

¹³² Currently it has been suggested that STISA has only included governments, research organizations and universities, and that more mid- and lower level actors should also be engaged. Wilson Centre, STISA-2024: Another Opportunity for Africa's Transformation, <https://africaupclose.wilsoncenter.org/stisa-2024-another-opportunity-for-africas-transformation/>

¹³³ ROYCHOUDHURY, S. and VAZQUEZ, K.C. What is new about the BRICS-led New Development Bank? (Devex 9, May 2016), <https://www.devex.com/news/what-is-new-about-the-brics-led-new-development-bank-88126>

Recognizing the transformations in the world economy and the priorities of developing countries, education and skills development were placed at the core of the 2030 Development Agenda. Through the exchange of knowledge, skills, resources and technical know-how, countries from the South can support each other in advancing education and skills development globally.

Brazil and India can support an education and skills revolution in Africa. If on the one hand, Brazil and India strive to narrow the skills gap and enhance links among education and skills development, industries and labour markets domestically; on the other, they are building on their domestic experience to support MICs and other countries transitioning to middle income status in Africa to implement the SDGs in education and skills development.

Brazilian and Indian cooperation experiences in Africa offer innovative approaches to capacity development and some of the first examples of public-private partnerships in SSC. These experiences further demonstrate that some of the main distinguishing features of SSC lie in the practices, processes and relations that are built during development partnerships. The more that SSC experiences in different development sectors are systematized, based on common frameworks of analysis, the more that societies and policymakers can learn from the different approaches taken and instruments used to scale up efforts and implement the SDGs.

Solid monitoring and evaluation can help South-South partners to incorporate lessons learned in the design and implementation of future initiatives in education and skills development. Southern-led policy coalitions like the BRICS (through the New Development Bank) and the AU also have an important role to play in advancing the implementation of the SDGs in education and skills development through the creation of knowledge exchange and financing mechanisms to address the post-2030 sustainable development agenda.

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United Nations Development Programme

Bureau for Development Policy

One United Nations Plaza

New York, NY, 10017 USA

Tel: +1 212 906 5081

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