

# ► **Developing Skills for a Resilient Recovery**

Paper prepared for the 1<sup>st</sup> BRICS Employment Working Group meeting under China's Presidency



## Contents

Contents	2
1. The current crisis affects the labour market and lifelong learning	3
2. Priority Issues for Consideration	5
a) Upskilling and reskilling in response to digitization and technological innovation	5
b) Improving governance and coordination in skill systems	8
c) Improving quality in skills development	11
d) Strengthening skills development in rural and disadvantaged areas	14
e) Harnessing the potential of skills competitions	16
f) Enhancing cooperation on skills development in BRICS	19
3. Policy Recommendations	21
a) Recommendations on how to strengthen skills systems to promote LLL and enable up-skilling and re-skilling of workers	21
b) Recommendations on how to increase the participation of social partners in skills systems and improve governance and coordination	21
c) Recommendations on how to improve program quality in skills systems	22
d) Recommendations on how to improve access to skills development in rural and disadvantaged areas	22
e) Recommendations on how to maximise the value of skills competitions	23
f) Recommendations on how to strengthen cooperation on skills development among BRICS countries	23
4. Conclusions	24
References	25

# 1. The current crisis affects the labour market and lifelong learning

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Technological change (including digitalization), demographic shifts, globalization, environmental and climate change, and other global drivers are transforming societies and the world of work. While this transformation can benefit both workers and enterprises, it can also be disruptive, leading to increasing unemployment, underemployment, skills mismatches, labour market inequalities.

The COVID-19 pandemic has exacerbated existing disparities in the world of work and plunged the global economy into the worst recession since World War II. The immediate impacts have been profound and catastrophic. 144 million jobs, 8.8 per cent of working hours, US\$3.7 trillion worth of labour income and 3.5 per cent of annual GDP growth rate were lost within a year.<sup>1</sup> The impacts have been felt disproportionately among already vulnerable populations, such as women, youth, informal economy workers and lower skilled workers, migrants, refugees, and persons with disabilities. Businesses of all sizes, particularly micro, small and medium-sized enterprises (MSMEs), have also suffered from demand-side declines in consumer spending, and supply-side disruptions to supply chains and limited access to finance. As a result, up to 124 million women and men were pushed into poverty in 2020 alone.<sup>2</sup>

The COVID-19 crisis has also threatened to jeopardize progress on gender equality. Women's employment declined by 5 per cent in 2020 compared with 3.9 per cent for men. Additionally, 90 per cent of women who lost their jobs in 2020 exited the labour force, which suggests that their working lives are likely to be disrupted over an extended period unless appropriate measures are adopted.<sup>3</sup>

At the same time, while an estimated 220 million people (84 million women and 136 million men) worldwide are unemployed<sup>4</sup>, skills mismatch remains a central issue, with 69 per cent of employers reporting they cannot find the right set of skills for the wages they are ready or willing to pay.<sup>5</sup> However, more than 40 per cent of college graduates in the United States of America work in jobs that do not require a college degree and the NEET rate amongst tertiary-educated is on the rise in sub-Saharan Africa, Arab States, Eastern Europe and Central Asia. As such, the capacity of education and training systems to suitably prepare learners for the new and emerging world of work remains under question, placing further pressure on systems to reform and adapt.

The long-lasting impacts of COVID-19 on economies and societies, now exacerbated by the conflict in Ukraine, present substantial economic and social challenges that will impact education and training systems around the world.

The current economic and security crisis has exacerbated the emerging learning crisis where today, despite the improving global pandemic situation, millions of women and men remain unable to attend face-to-face training. The COVID-19 crisis exposed deep inequalities between those who could continue their studies online and those without access to computers and internet, with teachers and trainers reporting negative impacts on learning, despite the ongoing shift to remote and blended learning.<sup>6</sup> These disruptions to learning have generated skills loss that will have future scarring effects on employability, productivity and growth, and could lead to increased inequality, fuel cycles of poverty, unfulfilled social contracts and even social unrest.

The lost learning due to school closures puts this generation of students at risk of losing \$17 trillion in lifetime earnings in present value, or the equivalent of 14 percent of today's global GDP. In low- and middle-income countries, the share of children living in "learning poverty" is projected to rise sharply, potentially up to 70 per cent.<sup>7</sup>

<sup>1</sup> ILO (2021b). [ILO Monitor: COVID-19 and the World of Work. 7th edition](#)

<sup>2</sup> World Bank (2021). [Updated estimates of the impact of COVID-19 on global poverty](#)

<sup>3</sup> ILO (2021c). [World Employment and Social Outlook: Trends 2021](#)

<sup>4</sup> Manpower Group (2021). [The Talent Shortage](#)

<sup>5</sup> *ibid*

<sup>6</sup> WEF (2021). [Most teachers think remote learning is a poor substitute for the classroom, survey shows](#)

<sup>7</sup> OECD (2020) [The Economic Impact of Learning Losses](#)

Even before the pandemic, more than half of the world's children and adolescents failed to reach the minimum education proficiency level by the age of 10<sup>8</sup> and one in five young women and men (aged 15-24) were not in employment, education or training (NEET).<sup>9</sup> With inadequate primary and secondary education, more than 60 per cent of the world population take up low-skilled jobs in the informal economy, often without access to social protection, rights at work and decent pay or working conditions.<sup>10</sup> Unless actions are taken now, the global loss of learning will have long-lasting impacts on women and men, businesses, and societies in a way that will be felt far into the future.

This situation requires innovative policies to address these challenges in a clear and sustained manner. Increased investment in skills development and lifelong learning should not be seen as a cost but as an investment in the future. It is key to facilitating a human-centred approach that is inclusive, sustainable and resilient, and will enable a just transition to a future of work that contributes to sustainable development in its economic, social and environmental dimensions.

The 2030 Agenda for Sustainable Development and the ILO Global Call to Action for a Human-Centred Recovery from the COVID-19 Crisis, have highlighted the renewed importance of skills development and lifelong learning as key enablers of human development; full, productive and freely chosen employment and decent work; productivity improvement and sustainable development.

<sup>8</sup> UNESCO (2018) [SDG 4 Data Digest 2018 Data to Nurture Learning](#)

<sup>9</sup> ILO (2020), Global Employment Trends for Youth 2020: Technology and the future of jobs

<sup>10</sup> ILO (2018), Women and men in the informal economy: A statistical picture: Third edition

## 2. Priority Issues for Consideration

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The meeting of Employment and Labour Ministers for the 2022 BRICS meeting have identified six priority areas for discussion which are addressed in this section.

### a) Upskilling and reskilling in response to digitization and technological innovation

Research indicates that job losses due to technological change, including digitalization, have been concentrated mainly in manufacturing and parts of the services sectors. They primarily concern routine jobs, such as machine operating, bookkeeping, data entry, jobs in processing and logistics.<sup>11</sup> Experts in digitalization and robotization agree that the risk of digital displacement is highest for tasks that can easily be performed by software-driven robots, including in many service sectors, where digitalization and artificial intelligence are now playing a bigger role.<sup>12</sup>

The higher the digital content in job tasks, the lower the risk of job automation. For that reason, the economies where digitalization has already penetrated in job tasks of all economic sectors, have lower risks of job losses due to automation.<sup>13</sup> By contrast, economies whose jobs have low digital content and with a high share of routine jobs in manufacturing, including in BRICS countries, must ready themselves for a higher degree of automation in coming years. However, the likelihood of automation is not limited to jobs with routine tasks. Recent advances in machine learning, AI and big data are also increasing the likelihood of automation for formerly sheltered jobs with non-routine cognitive and manual tasks.<sup>14</sup>

While the net employment effects of digitalization and technological transformation are likely to be positive in the long run, the transition in short and medium term may turn out to be painful. Regardless of the overall employment effects, the remaining jobs will have to be transformed. The challenge, thus, is the ease with which workers will be able to transition from old to new jobs and perform new tasks within old jobs.<sup>15</sup>

Reskilling and upskilling workers can help workers move from one occupation to another or adapt to new job requirements in the context of rapid technological transformation. Surveys of large companies suggest that up to 40 per cent of workers will require reskilling of up to six months' duration with 94 per cent of firms expecting employees to develop new skills on the job.<sup>16</sup> Yet, participation in job-related training is lowest among those whose occupations are most likely to be transformed as a result of digitalization.<sup>17</sup>

According to the survey run by the Organisation for Economic Co-operation and Development (OECD) Programme for the International Assessment of Adult Competencies (PIAAC), while 67 per cent of people in jobs within the lowest decile of automatability report taking part in at least one type of job-related training in the last 12 months, only 31 per cent of workers in the highest decile of automatability report having attended the relevant training.<sup>18</sup>

This reskilling challenge demands integrated policy and program responses. The integration of education and training strategies with active labour market policies to facilitate skilling, reskilling and upskilling can ensure successful and equitable labour market transitions and access to decent work. Central to such responses are coordinated lifelong career counselling, vocational guidance and post-training support involving public and private employment services and other institutions that support people of all ages through the provision of appropriate information, advice and guidance to access learning and decent work opportunities. Similarly, the integration of skills development with social protection and, where appropriate, paid educational leave, including for the unemployed and those with reduced working capacity in case of sickness and disability, provides opportunities for all for formal, non-formal and informal lifelong learning.<sup>19</sup>

<sup>11</sup> ILO (2021d). Changing Demand for Skills in Digital Economies and Societies

<sup>12</sup> ILO (2018). [The impact of technology on the quality and quantity of jobs](#)

<sup>13</sup> OECD (2019). [Getting Skills Right: Future-ready adult learning systems](#)

<sup>14</sup> Eurofound (2018). [Automation, digitisation and platforms: Implications for work and employment](#)

<sup>15</sup> ILO (2021d). *op cit*

<sup>16</sup> WEF (2020). The Future of Jobs Report 2020

<sup>17</sup> Orlik et al. (2018). Digital Frontrunners: Designing inclusive skills policy for the digital age

<sup>18</sup> Nedelkoska & Quintini (2018). Automation, Skills Use and Training

<sup>19</sup> ILO (2021e). Financing and Incentives for Skills Development: Making LLL a Reality?

The COVID-19 pandemic has highlighted the importance of skills for fast crisis response and longer-term recovery. In both cases, many people need to upskill to keep their jobs, acquire new skills in the same working environment or move to new jobs in the same or in a different sector of the economy. Rapid labour market changes imply multiple school/training-to-work and work-to-work transitions. Acquiring a single lifetime qualification through initial training is no longer sufficient as jobs continue to change and one job for life is no longer valid for many occupations and in many sectors. Despite the global recognition of the importance of lifelong learning through the Education 2030 Framework for Action, the development of LLL systems remains weak due to ongoing conceptual clarity and a lack of operational and practical guidelines. Some 750 million adults – two thirds of them women – remained illiterate in 2016. Half of the global illiterate population live in South Asia and a quarter in sub-Saharan Africa.<sup>20</sup>

While data for BRICS countries is not available, among the countries covered by the OECD PIAAC Survey of Adult Skills, the share of adults participating in training ranges from 67 per cent in New Zealand to just 18.2 per cent in Kazakhstan. However, even in the best-performing countries for which data is available, the level of participation in training of low-skilled workers is extremely low.<sup>21</sup>

Despite the growing impetus for increased participation in upskilling and reskilling, questions remain as to how to best increase participation. Whilst removing barriers to participation remains an important element of any upskilling and reskilling strategy, the issue of financial incentives for individuals and firms is increasingly being considered as part of the policy mix. Although the use of incentives carries the risk of ‘deadweight loss’, where training would have occurred regardless of incentives being available, well-designed and targeted incentive schemes can increase participation in reskilling and upskilling.<sup>22</sup>

Demand-side instruments, such as grants and vouchers are particularly important for adult learning and normally aim at sharing both the direct costs of participation in training, such as fees and travel costs, and indirect costs such as foregone wages. If well designed, they help increase coherence between formal and non-formal learning offer for adults, as well as support the offer of integrated learning pathways leading to qualifications.

In that sense, they should also accommodate aspects linked to recognition of prior learning and career development support for adults.<sup>23</sup>

Subsidies to train or retrain employees can either target the development of specific groups of skills or have an occupational or sectoral scope. Typical examples of the former are incentives to encourage enterprises to develop digital skills, marketing skills or enhance the transferable skills of their employees. The second type will be frequently associated with policies to enhance sector competitiveness or support industry or territorial restructuring efforts. Subsidies may, for example, be aimed at supporting diversification of products and processes, encouraging retraining of employees to assume new roles or to create qualitative leaps in staff skills, by easing up liquidity pressure over smaller enterprises. This type of subsidy can be made more effective by appropriate support to enterprises in assessing their skills needs and planning appropriate training.

The online and remote modes of working and learning that emerged during the COVID-19 pandemic have drawn fresh attention to the issue of digital skills – from digital literacy for learners, teachers and workers to study and work online to digital proficiency for emerging jobs linked to the accelerated shift online. The pandemic has also underscored the importance of certain core skills, such as communication, learning to learn, teamwork, problem-solving and decision-making, critical and innovative thinking, planning and organizing, negotiation and conflict resolution and self-management, which can help individuals overcome career disruptions and manage labour market transitions more effectively.<sup>24</sup>

Box 1 highlights various elements of such approaches to address digitalisation in BRICS countries.

<sup>20</sup> Eurofound (2018). Automation, digitisation and platforms: Implications for work and employment

<sup>21</sup> OECD (2019a) Skills Matter: Additional Results from the Survey of Adult Skills

<sup>22</sup> ILO (2021e). Financing and Incentives for Skills Development: Making LLL a Reality?

<sup>23</sup> ILO (2021e) Shaping Skills and Lifelong learning for the Future of Work

<sup>24</sup> ILO (2021f) Shaping Skills and Lifelong learning for the Future of Work

► **Box 1: Selected BRICS examples of digital skilling initiatives****The e-Skill India portal<sup>25</sup>**

The National Skill Development Corporation (NSDC) of India has led the development of an e-learning aggregator that consolidates existing B2C e-learning portals operating over the internet. These portals create and source e-learning content in a hub and spoke manner, enabling multiple e-learning providers, with expertise in different industry sectors, to share their programs through the aggregation process. The aggregator portal provides advanced search and filter options across multiple industry sectors and levels of courses. It links users with multi-lingual formal and non-formal courses, interactive video based learning and tailored courses. Learning opportunities available through the aggregator may be free or fee based. In case of paid courses, the payment collection is done by each participating knowledge partner directly. Student progress in e-learning courses across aggregated portals is tracked by NSDC's aggregator.

**Digital Skills Development in China<sup>26</sup>**

In April 2021, Ministry of Human Resources and Social Security of China promulgated 'Working Plan for National Digital Skills Development' with a focus on big data, AI, cloud computing etc. The Working Plan has six policy measures, including developing curricula of digital skills for workers and general public and organizing digital skill competitions. Digital skills development is also included in China's 14th Five-year Plan on Vocational Skill Development in 2022.

**Digital Skills for Decent Jobs for Youth NEET project in South Africa<sup>27</sup>**

To create decent employment and enhance skills for youth in Africa's digital economy, the International Labour Organization (ILO) and the International Telecommunication Union (ITU), with the support of the African Union (AU), have initiated a program with continental reach. The Joint Programme in South Africa brings together the Department of Communications and Digital Technologies (DCDT), the ILO, ITU and UNDP. The objective of the joint program is to respond to the needs of young people NEET in ways that enable and facilitate their access to learning and decent employment opportunities by strengthening the effectiveness of the digital skills development and labour market ecosystem.

**Analysing Technological Skills 2030 Foresight in the Russian Federation<sup>28</sup>**

With the support of the Ministry of Education and Science, Skills 2030 Foresight exercises have been conducted for a number of high-technology sectors and technology-driven industries. The focus is to assess how key trends and new technologies change the nature of work tasks and in turn how these change the demand for skills. A "map of the future" for these sectors and industries is being designed in a series of foresight sessions. WorldSkills Russia also convenes national and international experts and conducts skills foresight and projection exercise in order to gain insight into impact of technological changes and digitalization of the economy on skills demand and job market. It then tests the research outcomes in skills competition and training. The organization sees itself as a laboratory of future skills with capacity of turning research into practices – developing and testing of new skill profiles and incorporating them into short educational programs as well as training of professionals and experts.

**Supporting Digital Transformation in Brazilian Firms<sup>29</sup>**

The Brasil Mais Program is a Federal Government initiative that aims to improve the managerial and digital capabilities of Brazilian companies, promote rapid improvements at low cost for entrepreneurs and increase productivity and competitiveness. Brasil Mais is coordinated by special office for productivity and competitiveness of the ministry of

<sup>25</sup> See <https://eskillindia.org/>

<sup>26</sup> See [http://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/buneiyaowen/rsxw/202104/t20210419\\_413047.html](http://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/buneiyaowen/rsxw/202104/t20210419_413047.html)

<sup>27</sup> See [https://www.ilo.org/employment/areas/youth-employment/WCMS\\_557881/lang--en/index.htm](https://www.ilo.org/employment/areas/youth-employment/WCMS_557881/lang--en/index.htm)

<sup>28</sup> See <https://en.worldskills.ru/project/future-skills/>

<sup>29</sup> See <https://brasilmais.economia.gov.br/>

economy. It has management and operational support from the Brazilian Agency for Development, as well as TVET institutions, SENAI and SEBRAE as implementing partners for services to companies. The program's goal is to reach 200,000 companies by 2022. Brasil Mais works through a phased approach which increases the complexity of services as a company progresses. The first phase focuses on optimizing management and production processes; the second focuses on the digital transformation of companies, offering methodologies and tools to assist in the adoption of digital technologies more suited to the reality of each firm; and the third supports the integration of the company in Economy 4.0, with support in the application of more advanced technologies related to the fourth industrial revolution.

The crisis has shown that the development of digital skills should be a priority for societies, especially for older cohorts. Even advanced, European education systems are under-prepared for digitalization, with 40 per cent of EU citizens lacking basic digital skills and less than 40 per cent of teachers and trainers receiving training on educational technologies during their initial teacher education. In order to meet the challenge of translating the demand for digital skills into the required skills for a current and future workforce, the educational and training systems should adhere to the following baseline principles and policy measures:

- Ensuring the correct mix of basic, core work and technical skills as a foundation for the further development of digital skills through lifelong learning;
- Incorporating digital skills as one of the foundational skills into early education, including pre-primary, primary and secondary school curricula;
- Reorienting teaching methods to deliver digital and core work skills;
- Giving the right tools to the teachers;
- Activating digital skills response at the enterprise and industry levels;
- Supporting strategies for effective lifelong learning;
- Carrying out digitalization in skill systems in coordination with other policies.<sup>30</sup>

The current situation presents an opportunity for governments, training institutions, employers' and workers' organizations to collaborate more closely to ensure that opportunities to develop the digital skills are available as formal and non-formal learning options for students and workers alike.

## b) Improving governance and coordination in skill systems

Taking steps to implement lifelong learning demands a broad perspective that sees all learning activities as part of a national skills ecosystem in which lifelong learning provides the organizing principle. This perspective allows stakeholders to analyse the challenges and priorities of diverse users, sectors, and ministries across administrative and geographic levels in a coherent and articulate way. The ultimate goal of well-coordinated lifelong learning is to ensure the availability of quality training for all individuals at all stages of their lives.

Training options need to address the needs and aspirations of individuals, whether they are employed, unemployed or inactive, and potential learners need to be made aware of the opportunities, pathways and outcomes they provide. Enterprises, in turn, need to be able to access clear information about relevant training and appropriate financing, and be supported to participate in social dialogue with workers to increase their participation in training.

Consequently, it is important to take a coordinated whole-of-government approach, with a key government agency taking responsibility for the development and implementation of a skills and LLL strategy as part of the economic and social development agenda of a country.<sup>31</sup>

However, the challenge for governments is to go beyond simple coordination of the relevant actors to ensure an appropriate balance of interests through social dialogue and collaboration. The institutionalization of cooperation (including consultative committees, TVET councils and other national or sectoral committees or coordinating ministries, agencies or regulatory bodies) are preferable to the use of ad hoc consultative mechanisms. Research shows this proactive approach to be particularly relevant in national contexts where new partners may be emerging or there is a lack

<sup>30</sup> ILO (2021d) *Changing Demand for Skills in Digital Economies and Societies*.

<sup>31</sup> ILO & UNESCO (2018). *Taking a Whole of Government Approach to Skills Development*



organizational capacity and technical knowledge.<sup>32</sup> Because of the cross-cutting nature of skills development and LLL, such institutional arrangements should have a clearly stated mandate that moves beyond the narrow responsibilities of a particular policy domain. These bodies can be responsible for monitoring the activities and outcomes of integrated planning frameworks that specify the roles, responsibilities and deliverables of multiple actors across national systems.

At the national level, several countries have established TVET councils and/or other national tripartite bodies that coordinate the whole system of data collection and analysis, policy formation and implementation and help align skills demand and supply. Examples of such an inclusive approach can be found in all regions (e.g. in Costa Rica, Hungary, India, Malawi, the Netherlands and the United Republic of Tanzania).

Box 2 highlights select BRICS examples of approaches to improving governance and coordination in skill systems.

### ► Box 2: Selected BRICS examples of initiatives to improve governance and coordination

#### **The Ministry of Skills Development and Entrepreneurship (MSDE) in India<sup>33</sup>**

MSDE is responsible for co-ordination of all Skill Development efforts across the country, removal of disconnect between demand and supply of skilled manpower, building the vocational and technical training framework, skill up-gradation, building of new skills and innovative thinking not only for existing jobs but also jobs that are to be created. It is aided in these initiatives by its functional arms – Directorate General of Training (DGT), National Skill Development Agency (NSDA), National Council for Vocational Education and Training (NCVT), National Skill Development Corporation (NSDC), National Skill Development Fund (NSDF) and 38 Sector Skill Councils (SSCs) as well as 33 National Skill Training Institutes (NSTIs/NSTI(w)), about 15000 Industrial Training Institutes (ITIs) under DGT and 187 training partners registered with NSDC. The Ministry also intends to work with the existing network of Skill Development centres, universities and other alliances in the field. Further, collaborations with relevant Central Ministries, State governments, international organizations, industry and NGOs have been initiated for multi-level engagement and more impactful implementation of Skill Development efforts.

#### **The National Council for Occupational Qualifications in Russia<sup>34</sup>**

The council was established in accordance with the Decree of the President of the Russian Federation dated April 16, 2014 No. 249. The Chairperson of the National Council is the President of the Russian Union of Industrialists and Entrepreneurs (RSPP). The Council is a tripartite body that has the authority over national professional qualification system and oversees regulations on it. The National Council also improves the quality of vocational education by: aligning the federal vocational education standards with professional skills standards; coordinating accreditation of programmes of vocational education; and forming a system of an independent assessment of professional qualification. It monitors the labor market, the emergence of new professions, and changes in existing professions, and updates professional standards as well as qualification framework and requirements. It also coordinates skills certification.

#### **National Qualification Framework (NQF) in Brazil<sup>35</sup>**

Under the coordination of the Labor Ministry, Brazil is developing an NQF as a key measure to improve the coordination of social partners and other key stakeholders in the development of professional qualification programs. The work will also include a review of the system of occupational classifications to develop an agreed definition of knowledge, skills and attitudes for each occupation. Whilst the NQF will improve the coordinated provision of occupation specific qualifications in Brazil, it will also make the articulation of Brazil's vocational training systems with those of other countries more feasible.

<sup>32</sup> *ibid*

<sup>33</sup> See <https://www.msde.gov.in>

<sup>34</sup> See <https://nspkrf.ru/about.html>

<sup>35</sup> See <http://qbqconsulta.fipec.org.br/>

### Sector Education and Training Authorities (SETAs) in South Africa<sup>36</sup>

In South Africa 21 tripartite SETAs have been established to improve coordination and governance of training in key sectors of the economy. They are funded through a one percent payroll levy on employers with a payroll of more than R500,000 (US\$ 28,198). These funds are collected through the taxation system with 80% of a sector's contribution given to the respective SETA for disbursement through mandatory and discretionary grants. Mandatory grants are paid to employers who present their training plans and are approved by the SETA. Discretionary grants go to training that largely benefits smaller, non-levy paying employers. SETAs also have a key role in the implementation of apprenticeships and learnerships and for providing industry intelligence and coordinating industry inputs to the planning of TVET and skills development in South Africa.

### Governance of TVET and Skills Development in China<sup>37</sup>

In China, the Ministry of Education is mainly responsible for the formal TVET system, while the Ministry of Human Resources and Social Security is responsible for non-formal TVET. However, the Ministry of Education also conducts the non-formal TVET programmes. The TVET governance system was established following the Chinese State Council's Decision on Boosting Vocational Education, adopted in 2005. It gives the State Council the role of coordinating the TVET sector and related efforts at the various levels. The decision also establishes mechanisms for cooperation between the relevant administrative vocational education departments. The National Medium and Long Term Plan for Education Reform and Development (2010-2020) established mechanisms to encourage the participation of other actors, including industry, in the coordination of TVET programmes. For example, under the 'Regulation of Cooperation between Schools and Enterprises of the Ministry of Education', pilot programmes, such as Modern Apprenticeship and TVET Groups, have introduced mechanisms through which different stakeholders share the costs and benefits of TVET programmes.

Strengthening the role of social partners requires tripartite and bipartite social dialogue, at the national, sectoral, regional, local and enterprise levels, to create multiple entry points for developing relevant skills and employability policies and programs, particularly within a rapidly evolving work and business environment. Countries look to establish a dynamic approach that involves tripartite constituents through social dialogue, including through collective bargaining and tripartite cooperation, in the development and revision of skill standards, qualifications and curricula that combine core skills and a broad variety of competencies and provide flexible learning pathways in national and, where appropriate, subnational qualification frameworks that support the portability of skills.<sup>38</sup>

Social dialogue has been found to be central to making skills systems responsive to the needs of industries. Tripartite sector skills bodies in particular are important mechanisms for matching the sector demand for skills training, anticipating future labour market and skills needs, assessing the quality and relevance of training programmes and promoting training in their sectors. BRICS members Brazil, India and South Africa have introduced such arrangements to support the dialogue between the world of work and training, to plan human resources needs for sectors and economies as a whole and to strengthen cooperation with social partners, with increased industry engagement at sectoral levels as a result.<sup>39</sup> The Chinese Government has also established coordination mechanisms to link the education sector and key industry sectors. In the Russian Federation, sectoral agreements and councils are being established and the General Tripartite Agreement includes cooperation with social partners on various issues related to training and labour market measures, including TVET.

National approaches to skills development often do not connect with enterprises and initiatives at local or sectoral levels. Sectoral approaches provide a framework for employers, workers' organizations and other key stakeholders at a sectoral level; they make it easier for stakeholders to jointly identify sectoral challenges from a skills development perspective and take coordinated action to address them. They complement national-level policies to support skills development by providing stronger insight and targeting to training offers and financial incentives, rather than providing a rationale for broad reforms of national education and training systems.

<sup>36</sup> See <https://www.dhet.gov.za/SitePages/SETALinks.aspx>

<sup>37</sup> See <https://unevoc.unesco.org/home/Dynamic+TVET+Country+Profiles/country=CHN>

<sup>38</sup> ILO & OECD (2020). *Social Dialogue, Skills and COVID-19*

<sup>39</sup> ILO (2021). *A Resource Guide for Sector Skills Bodies*

A key entry point for strengthened industry engagement in skills development is through labour market intelligence and information systems that inform planning and priority setting. BRICS countries also recognize that the vocational skills acquired by TVET students often do not match labour market requirements and all five countries have implemented measures to improve the relevance of TVET to labour market needs. Greater private sector involvement has been implemented through different mechanisms of governance: e.g. under the auspices of the National Skill Development Corporation in India; coordinated by the Ministry of Education and Science in the Russian Federation; and through the PRONATEC partnership programme (National Programme for Access to Technical Education and Employment) coordinated by the Ministry of Education in Brazil.

The need to match supply and demand and to strengthen the role of social partners in skills development has led to the evolution of many partnerships between training providers and businesses through different models such as skills centres and academies, assessment centres or regional centres of excellence and innovation hubs, which combine education and training services with business development and research support, strengthening industry engagement and developing local skills and lifelong learning ecosystems at the level of skills demand and supply.<sup>40</sup>

Such partnerships are accessible to a large variety of stakeholders, so that, at a minimum, they pool resources and training expertise to address specific employment and skills issues of a local area, region or cluster. They also improve links between national and local employment and economic development priorities, improve access to enterprises and existing production facilities and enable improved partnerships between the world of work and the world of learning.<sup>41</sup>

Two additional trends have contributed to the emergence of such arrangements: the decentralization of education and training institutional management and the shift towards pooling resources at the local level. The increased autonomy of institutions has created options for enhanced cooperation with business and greater flexibility to accommodate change and respond to local skills demand, issues that have also been recognised and addressed through different policy initiatives in BRICS.

### c) Improving quality in skills development

Governments and social partners have started to rethink the ways they develop, certify and recognize skills in order to improve the functioning of skill systems. These include taking steps to improve the integration between different education and training sectors; increasing the nature and scope of flexible learning pathways; making training programmes and organizations more responsive and updating teaching and learning methods to better develop core skills and learn from the recent experience of online learning during the pandemic.

In the context of both long-standing and recent challenges, there is growing recognition of the need to rethink how well education and training systems actually develop skills rather than only issue qualifications. This issue is at the core of how quality is understood. Skill demands will change significantly in coming years and as a result, many occupational profiles and skill sets need to be updated, with subsequent work to adjust qualifications, programmes and teaching and learning resources. Yet there are structural barriers in most education and training systems across different education and training sectors, which relate to curriculum and certification, delivery and assessment models, learning pathways, financing and governance, and which have an impact on quality.

Many skills systems are constrained by rigid administrative requirements and systems for curriculum and qualifications, often constructed around centralized and fixed sets of occupational or qualification standards that are not sufficiently dynamic and exacerbate skill mismatches. This is one of the main challenges for TVET and skill systems. Nationally developed syllabuses and curricula that fix the content and exact number of classes for a period of four or five years, with inflexible programme entry and exit arrangements and restricted learning pathways are other examples of rigidity. While nationally recognized qualifications will continue to play an important role in provision, mechanisms to ensure a continuous review and updating of more flexible qualifications, modular curriculum and flexible pathways will allow for greater local customization and adaptation to changing jobs and skills needs and can be used to drive quality improvements.

<sup>40</sup> EC (2019). *Mapping of Centres of Vocational Excellence*.

<sup>41</sup> ILO & OECD (2017) *Better Use of Skills in the Workplace. Why It Matters for Productivity and Local Jobs*

Although many education and training systems are geared towards developing qualifications and qualifications frameworks, a recent shift in focus from qualifications to skills and to “micro-learning” characterized by small learning units and short-term learning activities can be observed in some countries. Such reforms address the existing limitations of qualifications to certify the “job-fit” status of learners, better support the development of in-demand skills (such as digital skills and core skills for employability) and enable skills recognition for enhanced workers’ mobility and job transitions.

Balancing such reforms with the need to maintain core educational requirements and the need for quality assurance remains a challenge. Systems need to shift their quality systems from a ‘quality control’ approach with a focus on the inputs to training, to ‘quality assurance’ and ultimately ‘continuous improvement’ where regulators and education and training institutions work together to focus on processes and outcomes and build quality in the system.

Countries need to implement effective national and, where appropriate, subnational quality assurance systems that accredit education and training organizations, recognize the importance of qualified teachers and trainers, and safeguard high-quality delivery, assessment and certification of skills.

However, quality education and training can only be delivered by qualified teachers who have decent working conditions and opportunities for lifelong learning so they can maintain and improve their professional practice. This is even more the case given the dramatic shift to distance and online learning as a result of the pandemic. Teachers, trainers, assessors, workplace instructors, tutors and supervisors play an important role in shaping the next generation of workers and facilitating relationships with business and the wider community.

Managers of education and training institutions need to develop dynamic and beneficial relationships with local employers and other service providers. The skills development system relies on their capacity to respond to new and accelerating demands on individuals, firms and society. Therefore, it is critical to ensure that the education and training workforce is equipped with the competences required to provide quality education and training. Teachers and trainers need to be actively involved in the system as well as the processes of quality assurance so the programs they deliver and the resources they use are fit for purpose.

Relatedly, the capacity of systems to deliver high-quality programs also rests on the standard of facilities and equipment in education and training institutions. Without adequate investment in current technology and equipment, institutions will always face difficulty meeting industry standards and delivering quality programs.

The quality of assessment is key to maintaining industry and program standards. It is also an important factor in systems for the recognition and validation of skills and competencies. Such systems often include arrangements for summative assessments and challenge tests to determine whether candidates can perform at the required level. Involving industry representatives in these assessments by partnering with teachers/trainers/assessors, is a key strategy for not only ensuring quality but also for improving links between industry and education and training institutions.

The goal of such RPL systems is also to recognise partial and full qualifications (including micro-credentials) acquired through all forms of prior formal, non-formal and informal learning. Such systems should be supported by qualified teachers, trainers and assessors and facilitate lifelong learning pathways to enable and enhance the portability of skills and facilitate labour, social and geographical mobility. Such features can also be considered measures of quality in a system.

Box 3 provides select example of efforts in BRICS countries to improve the quality of skills development.

► **Box 3: Selected BRICS examples of approaches to improving quality in skills development****Quality Improvement in Brazil's National Commercial Apprenticeship Service SENAC<sup>42</sup>**

SENAC is the largest skills development institution for the commerce and services sector since 1946, has developed a new pedagogical model for vocational training. The Model qualifies Senac's Professional Education offerings nationwide and represents the consolidation of good pedagogical practices carried out in the institution, for the development of competencies. It includes the "Formative marks" concept. This concept guides all training and seeks to develop with students, characteristics that differentiate them as professionals trained by SENAC and for which they will be recognized in the job market, namely: entrepreneurial attitude, technical-scientific mastery, critical vision, sustainable and collaborative attitudes. The conception of methodology breaks with the traditional division between theory and practice and privileges the development of competencies through active, innovative, integrative, and collaborative pedagogical practices, centered on the student's active engagement.

**The National Council for Occupational Qualifications in Russia<sup>43</sup>**

The national council assures and improves the quality in skills development by developing occupational standards and competency standards which guide skill training and qualification assessments. The council is tasked with overseeing the competency-based skills standards and qualification systems. The Federal Law on Independent Assessment of Qualifications (June 2016) stipulates the bodies involved in and procedures pertaining to qualifications assessment.

**Upgrading Industrial Training Institutes (ITI) in India<sup>44</sup>**

The 'Upgradation of Government ITIs into Model ITI' scheme targets existing Industrial Training Institutes (ITI) in a State with the goal of upgrading them to 'Model ITIs' to showcase best practices in high quality training delivery and sustainable and effective industry relationships. To date, an amount of US\$61M has been allocated to 27 States for upgradation of 29 ITIs so they can:

- become centers for local firms to develop expertise and deliver training on demand;
- strengthen engagement with local firms;
- sign more flexible agreements with firms to conduct training to meet specific skill requirements;
- expand training opportunities for workers in the informal economy.

Under the program, an Institute Management Committees (IMC) will be formed for each ITI with a chairperson from industry and industry members covering all major trades offered by the ITI. The IMC are empowered to implement the changes necessary to maximise the effective functioning of the ITIs.

**A Focus on Quality through National Planning in China<sup>45</sup>**

Over the period of 2019 - 2021, China implemented the National Vocational Skill Development Action Plan which aimed to improve quality by promoting vocational training more tailored to the labour market. Under that initiative, in June 2021, the National 'Skill China' Action Plan was launched in order to increase to a minimum of 40,000,000 skilled workers between 2021 and 2025. The Action Plan focuses on building quality through an enabling skills policy environment, empowering enterprise development through skills, promoting incentives to increase participation and enhancing international cooperation in skills development to improve the quality and relevance of training.

<sup>42</sup> See <https://www.sp.senac.br/jsp/default.jsp?newsID=a13164.htm&testeira=1063>

<sup>43</sup> See <https://nspkrf.ru/about.html>

<sup>44</sup> See [https://dgt.gov.in/MODEL\\_ITI](https://dgt.gov.in/MODEL_ITI)

<sup>45</sup> See [http://www.gov.cn/zhengce/zhengceku/2021-07/06/content\\_5622619.htm](http://www.gov.cn/zhengce/zhengceku/2021-07/06/content_5622619.htm)

### Improving Quality of Apprenticeships in South Africa<sup>46</sup>

In 2021, the South African Quality Council for Trades and Occupations (QCTO) in close collaboration with the Department of Higher Education and Training (DHET), and with the technical support of the ILO and ITCILO, constituted a Technical Working Group on Quality Assurance of dual occupational learning. Throughout monthly working sessions, the Technical Working Group has developed an Occupational Qualification Sub-Framework Quality Assurance Checklist, which supports the quality assurance process of dual occupational learning in South Africa.

## d) Strengthening skills development in rural and disadvantaged areas

Improving the labour market prospects and quality of work for those disadvantaged in the labour market should be a key focus of BRICS skills policies. Concerted and focused efforts are needed to improve outreach, quality and relevance of education and training, and improve the links to the world of work, especially in rural and disadvantaged areas. Given the heterogeneity of disadvantaged groups, such as women, youth, persons with disabilities, workers in rural areas or in the informal economy, migrants or refugees, education and training systems and programmes need to overcome the range of existing barriers through carefully designed policy interventions; respond flexibly to different needs, and address questions of status and challenge social perceptions.

Moreover, targeted initiatives to address challenges faced by particular groups should complement efforts to build inclusive TVET systems. Active labour market programmes (ALMPs) that offer a package of support services including remedial education, core skills, vocational and job readiness training, work experience, awareness of labour rights and occupational safety and health, job-search assistance, career guidance and counselling are more likely to enhance employability and facilitate transitions to decent work.

Barriers to education and training for women are especially evident in rural, informal and traditional economies, where household chores and care work remain the primary responsibility of women. Safety concerns associated with long-distance travel to schools or poor infrastructure, such as the lack of separate washrooms, may restrain girls from attaining even basic levels of literacy and numeracy. Sexual harassment and gender-based violence in education and training institutions still affect learners and teachers worldwide and may have a strong negative impact on attendance and learning levels. The situation has worsened during the current pandemic, exacerbating existing gender inequalities. Women belong to the groups hard hit by the crisis. The decline in employment numbers has generally been greater for women than for men, while the demands on women's unpaid care work has increased, as have incidents of domestic violence.<sup>47</sup>

For workers in rural communities, skills development is among the main interventions to increase productivity and income, both for farming and off-farm activities in support of manufactured products, mechanization and speciality agriculture products and services. Often, the poor foundation skills of both boys and girls in rural areas jeopardize further learning. Providing literacy and numeracy training along with skills training has been a proven measure that gets results. Through community-based training, such as the well-tested ILO Training for Rural Economic Empowerment (TREE) methodology that has benefited about 20 countries globally, local training providers are empowered to deliver relevant training and post-training support in rural and disadvantaged communities, including in fragile and post-conflict settings.

Building local multi-stakeholder platforms for TVET and employment promotion TVET systems is an important strategy for the delivery of skills in rural communities. Community-based training services are participatory and hence have great potential to be needs-based, flexible and inclusive. According to an impact assessment of the TREE programme in Zimbabwe, beneficiaries increased their income by US\$787 compared to non-beneficiaries over the three-year programme period. Child and health expenditures also increased over the same period.<sup>48</sup>

Structural barriers for people, including language barriers, and systemic discrimination affect skills and lifelong learning and are a key cause of exclusion, and increasing inequality within and between societies. These barriers should be addressed to help ensure effective and equitable access to skills, training and lifelong learning for all. Special attention should be paid to older people; women; young people, especially those who are not in education, employment or training; persons with disabilities; informal workers; migrant workers; refugees; people in rural areas; low-skilled workers;

<sup>46</sup> See <https://www.qcto.org.za/>

<sup>47</sup> ILO (2021f) *Shaping Skills and Lifelong learning for the Future of Work*

<sup>48</sup> ILO (2022) *Initial review of community-based vocational training (CBVT) in G20 countries*



indigenous and tribal peoples; and other persons in fragile and vulnerable situations or belonging to disadvantaged groups.

Box 4 highlights BRICS example to strengthen skills systems in rural and disadvantaged areas.

#### ► Box 4: Selected BRICS examples of initiatives to improve access in rural communities

##### **Strengthening Skills Development in the Yakutia region of Russia<sup>49</sup>**

The Republic of Sakha (Yakutia) is a republic of the Russian Federation in the Far East with a population of about one million. The Republic implemented the educational program REGION-PROFI (Managing the changes in the VET system to strengthen regional economy) which was developed by the SKOLKOVO Education Development Center. Managers of leading VET institutions of the Republic benefited from a five-day training to strengthen their capacity in conceiving effective organizational strategies and developing modern educational programmes. The training also served as a communication platform between key regional enterprises and the participating VET schools, facilitating partnerships between VET institutions and businesses in the region.

##### **The National Rural Learning Service (SENAR) of Brazil<sup>50</sup>**

SENAR provides a change in attitude for producers and rural workers, who work hard to guarantee good quality food for Brazilians. It supports rural populations by offering Professional Rural Training, Social Promotion Activities, Medium Level Technical Education, both on-site and remote, and an innovative model of Technical and Managerial Assistance. SENAR is a private law entity linked to the Confederation of Agriculture and Livestock of Brazil - CNA, and managed by a tripartite Deliberative Council. Integrated in the so-called S System of Brazil, its function is to fulfill the mission established by its Board of Directors, composed of representatives from the federal government and from the rural workers and employers. SENAR serves thousands of rural Brazilians every year, free of charge, contributing to their professionalization, their integration into society, the improvement of their quality of life, and to the full exercise of their citizenship. The 27 Regional Administrations promote courses and trainings to develop professional and social skills in approximately 300 rural professions.

##### **Skills for Rural Areas in China<sup>51</sup>**

The National Rural Revitalization Strategy (2018-2022) was developed to ensure improved service provision and rural development in China. The plan includes a strong focus on skills development for rural populations with a focus on employment and livelihoods. Since June 2021, the Ministry of Human Resources and Social Security and the National Rural Revitalization Administration has implemented the National Vocational Skill Development Program for Key Regions in Rural Revitalization, including providing public resources for skill development and improving the relevance of skill development for rural labour markets. This program is also included as a key program in China's 14th Five-year Plan on Vocational Skill Development in 2022.

##### **Skills Development for Districts most Affected by the Effects of Left Wing Extremism in India<sup>52</sup>**

The Indian government has introduced a targeted scheme for those rural and remote districts most affected by the effects of left wing extremism. The scheme targets those districts for new skills development infrastructure in 10 States. The revised cost of the scheme to March 2022 is US\$102M. The scheme aims to create 47 new Industrial Training Institutes (ITIs) (one per district) and 68 new skill development centres (SDCs) (two per district). Funding also provides for the establishment of 47 industry led Institute Management Committees (IMC) in each of the ITIs.

<sup>49</sup> See [https://www.ilo.org/skills/projects/g20ts/russian-federation/WCMS\\_652263/lang-en/index.htm](https://www.ilo.org/skills/projects/g20ts/russian-federation/WCMS_652263/lang-en/index.htm)

<sup>50</sup> See <https://socialprotection.org/connect/stakeholders/servi%C3%A7o-nacional-de-aprendizagem-rural-senar-national-rural-learning-service>

<sup>51</sup> See [http://www.gov.cn/zhengce/zhengceku/2021-07/03/content\\_5622118.htm](http://www.gov.cn/zhengce/zhengceku/2021-07/03/content_5622118.htm)

<sup>52</sup> See <https://msde.gov.in/sites/default/files/2020-08/Skill%20Development%20in%2047%20Districts.pdf>

### Integrated District Development in South Africa<sup>53</sup>

In 2021 the Ministry of Cooperative Governance and Traditional Affairs (COGTA) and the UN in South Africa launched a partnership to support implementation of the District Development Model (DDM). The DDM is an initiative to support local economic development and service delivery, by seeking greater coherence and coordination across the three spheres of government. With inputs from ILO and UNDP, under the Business Solutions Centres mechanism, the agencies focused on supporting digital skills in O.R. Tambo and Waterberg districts under the initiative: Digital Skilling to Enhance Youth Employment in the 4th Industrial Revolution. The objectives of this initiative were to extend digital training to youth not in employment, education or training, covering content that includes basic digital literacy training, as well as an introduction to more advanced digital awareness, such as data science training.

Providing equitable access to quality education for adults including basic literacy, numeracy and digital skills and requisite language skills, is particularly crucial for skills development and lifelong learning in rural and disadvantaged areas. Outreach activities, community training and guidance should be prioritised to improve access to and participation in skills development and lifelong learning for individuals, especially when structural and digital divides exist. The decentralized element in community-based vocational training opens opportunities for more demand-driven skills development through bottom-up approaches and more participatory planning which has the potential to activate disadvantaged groups, including rural women, youth and persons with disabilities.

Key lessons learned from international experience with community-based vocational training include:

- The need to link skills systems and governance to local demand: by balancing centralised processes that meet national policy goals with local autonomy to ensure responsiveness to the needs and aspirations of communities and local skills ecosystems.
- The importance of local networks of key actors: it is essential that skills providers interact with local environment and community institutions to respond to local needs and opportunities to integrate socio-cultural and environmental concerns, rights and post-training support.
- The need to strengthen partnerships, participation and local social dialogue: workers and employers and their organizations are critical for ensuring that dialogue and collaboration with government and civil society partners is effective in addressing community concerns. For community-based vocational training to deliver results for rural and disadvantaged communities, it requires a framework for shared responsibility and commitment to facilitate local economic empowerment through social dialogue.
- The need to improve access and quality: as community-based vocational training often reaches populations that have limited access to decent work, extra effort is required to ensure that “second best” systems of training do not emerge. Mechanisms that increase access should be incorporated, including stipends, flexible delivery, and qualification systems that allow for progression and recognition of prior learning and support the transition to formal employment.
- The need to fully incorporate climate and environmental concerns: community-based vocational training needs to be designed in ways that address the existential crises faced by many of its target populations regarding access to resources such as potable water. At the same time, there is an opportunity for CBVT to focus on skills that advance green jobs and greener economies.<sup>54</sup>

## e) Harnessing the potential of skills competitions

In spite of many efforts amongst BRICS countries, vocational training still reaches only a small proportion of workers, often remaining the last resort due to its poor reputation.<sup>55</sup> The BRICS involvement in organizing the WorldSkills competition is considered by members to have boosted the attractiveness and quality of TVET. For instance, WorldSkills San Pablo 2015 was organized by SENAI, a lead industry sector skills body, with companies and other entities, and with

<sup>53</sup> See <https://www.cogta.gov.za/ddm/>

<sup>54</sup> ILO (2022) *Initial review of community-based vocational training (CBVT) in G20 countries*

<sup>55</sup> MOHRSS (2022) *Developing Skills for a Resilient Recovery*



record high participation, Brazil finished at the top of the competition. The Russian Federation also successfully held WorldSkills in 2019 in Kazan. India and South Africa joined the WorldSkills movement in 2007 and 1990 respectively and in 2022, the competition will be held in Shanghai, China, a further indication of the growing importance of skills competitions to BRICS countries. The WorldSkills Competition is the pinnacle of regional and national skills competitions which are independently managed and organized by members of World Skills. The aim of WorldSkills is to develop and further international cooperation between governments, education, industry, and business to achieve higher standards and status for technical and vocational education and training (TVET) across the world. For over 70 years World Skills International has been working with its members, now numbering 85 countries or regions, principally through a biennial global skills competition, to provide a showcase for demonstrating and rewarding vocational excellence, underpinned since 2013 by the WorldSkills Occupational Standards (WSOS).<sup>56</sup>

Skill competitions are important not only to competitors but also to employers and industry, education and training organizations, national TVET systems and wider society. The UK University of Oxford Centre on Skills, Knowledge and Organisational Performance (SKOPE) concluded that for young people skill competitions provide accelerated technical skills development, transversal skills enhancement, career support, and a pathway to entrepreneurship through developing confidence, self-esteem, and interpersonal skills.<sup>57</sup>

For employers and industry, skills competitions have the fundamental benefit of potentially raising the performance (quality and productivity) of their business and the wider industry. Competition activity can develop vocational skills and enhance capacity in skills and attributes valued by employers, such as quality and excellence, teamwork, prioritization, time management, judgement, and working under pressure. It has the potential to identify the best performer at work, who knows the cost of an error, understands the importance of accuracy, is self-reliant and able to deal positively with challenges and make decisions. Skills competitions also offer employers recruitment opportunities to secure a top-quality workforce which has the potential to innovate and drive their business forward in the future.

For education and training organizations, being involved in skills competitions facilitates higher standards of teaching/training, supports professional development, raises student/trainee aspirations more widely, and puts a positive spotlight on technical and vocational education and training (TVET). By being involved in skills competitions, education and training organizations can test the worth of their own institutions and gain information and intelligence regarding best practice in industry. Involvement also gives access to employer networks and support systems which are essential for driving a successful TVET organization.

Skills competitions are uniquely positioned to provide positive TVET leadership across education and skills systems. Whatever they may look like, all TVET systems must be able to send well educated and trained young people into thriving labour markets that reward talent and do this as efficiently as possible. Well-designed competitions, replicating the demands of quality real work environments, give students, teachers, and trainers a very relevant experience of the skills, knowledge, and behaviours required to be successful in occupations, in particular labour markets. Students are challenged to achieve a level of practice that is professional. This practical approach helps young people in their transition to work and fosters the creation of professional identity, independence, and initiative.

### ► Box 5: Selected BRICS examples of approaches to skills competitions

#### **WorldSkills India Initiative<sup>58</sup>**

Since 2011, under the auspices of the National Skill Development Corporation (NSDC) of the Ministry of Skill Development and Entrepreneurship, the different industry and state led skills competitions have been integrated and coordinated under a common framework developed under the leadership of the NSDC. Since then, the NSDC, through its WorldSkills India initiative, has been leading the country's participation at WorldSkills International competitions. The key objectives of WorldSkills India are to:

- Promulgate skills in society to motivate the youth to pursue vocational education;
- Champion skills and learning for work through local, regional, national and international skills competitions;

<sup>56</sup> WSI (2022). *World Skills International*

<sup>57</sup> Chankseliani, M., James, S., Laczik, A. and Mayhew, K. (2013). *Benefits of Developing Vocational Excellence*.

<sup>58</sup> See <https://www.worldskillsindia.co.in/>

- Create partnership network comprising governments, industry, academic partners, Vocational Education and Training (VET) institutions, trade associations and youth to promote skills;
- Establish long-term association with WorldSkills International and other WorldSkills member countries.

### **Brazil and World Skills Americas<sup>59</sup>**

From 2012, Brazil has supported the organization of World Skills Americas competitions. SENAI was highly involved to promote the values of this event. At present SENAI is on the board of directors. The WorldSkills Americas is a non-governmental organization that brings together Institutions of Professional Education of the countries from Americas and Caribbean with the objective of carrying out Competitions related to Vocational Training, encouraging and promoting the technical and pedagogical exchange between Member Countries, looking for the development and improvement of the Professional Education.

### **Skills Competitions in China**

The Ministry of Human Resources and Social Security of China has used its accession into the WorldSkills International in 2010 to achieve goals of promoting skills development and technician education in China. Under the global brand of WorldSkills, the skills competition system has been further improved at the national, city and enterprise levels. Competitions at these various levels have become a key strategy to promote skills nationwide and increase the attractiveness and recognition of practical skills and vocational education. Competitions champions also provide role models for young people when selecting their careers. The WorldSkills standards, which reflect the global benchmark from industry, have been translated into curriculum to help the students better prepare for their future work and have inspired education and training institutions to develop closer partnership with industries.

Underpinning effective, relevant skill competitions are occupational standards such as those produced by WorldSkills, primarily for their global biennial competition. Embedding skill competitions within the TVET curriculum is one strategy that education and training organisations sometimes adopt either independently or nationally. For example, skill competitions are widespread in both TVET and secondary schools in the Netherlands and Finland. They are an integral part of the curriculum for all students, not just those who are high performing. For all students, competitions boost motivation, provide stretch, often beyond the boundaries of qualifications, and provide exposure to new ways of thinking and working.

Competitions illustrate the importance of relevant TVET and can be a strategic lever for investment in resources within education and training organisations. Skill competitions are one important strand of the strategy to develop strong meaningful partnerships between industry, business, and TVET to ensure sustainable economic and individual success.<sup>60</sup>

World Skills International, with the support of key partners including the Government of Finland and the ILO, is planning to establish a new WorldSkills Occupational Standards Development Centre (WSOSDC), with the formal launch scheduled for the autumn of 2022. The Centre will be working to support WorldSkills Members and partners by undertaking research and development projects to ultimately contribute to the continuous quality improvement of global TVET.

WorldSkills has indicated that it welcomes the opportunity to discuss research opportunities with all Member countries.<sup>61</sup> As such, the new WSOSDC will be a key vehicle to strengthen the role that future skills competitions can play in harnessing the potential of skills competitions.

<sup>59</sup> See <http://wsa.al.senai.br/en/o-que-e-a-wsa/>

<sup>60</sup> WSI (2022). *World Skills International*

<sup>61</sup> *ibid*

## f) Enhancing cooperation on skills development in BRICS

The BRICS nations have much experience to share in identifying key challenges and priorities in skills development, learning from the global debate in policy innovation and sharing good practices through common platforms and peer learning. They can bring many inspiring examples to other countries in the world and in the process help implement viable policy measures and institutional mechanisms to increase the quality and relevance of skills development for inclusive growth and employment.

BRICS countries have explored ways to increase the mobility of students and staff in higher education among the countries and this effort could be extended to higher level, longer duration vocational training, including apprenticeships, similar to efforts now underway in Europe through the expanded Erasmus Program.<sup>62</sup> A platform that allows for an exchange of best practices and peer learning and a funding mechanism may promote these student exchange programmes.

The reform of skills systems in BRICS has included the development of national qualifications systems linking qualification frameworks with quality assurance mechanisms and validation and recognition of prior learning. A better mechanism to compare qualifications and related standards in priority occupations would enable BRICS to find solutions for skills recognition and qualifications and facilitate the mobility of learners across countries.

In recent years, efforts to improve international recognition of skills and qualifications have accelerated. The Association of Southeast Asian Nation countries have concluded eight mutual recognition arrangements covering seven high-skill occupational fields, including the tourism sector, with over 30 occupations and joint standards and curricula, to facilitate the free movement of qualified workers between countries.<sup>63</sup>

Whilst RPL assists individuals to obtain qualifications that reflect their competencies, migrant workers and students often face the additional challenge of not having their qualifications recognized in a new country. Therefore, bilateral and regional mutual recognition arrangements and other innovative approaches, such as the use of online skills profiling tools, block chain and other digital technologies, could be considered for promoting skills mobility and fair migration between BRICS countries.

### ► Box 6: Selected BRICS examples of approaches to strengthen skilled migration

#### India International Skill Centres (IISCs)<sup>64</sup>

With the express purpose of reaping the demographic dividend provided by India's relatively young labour force, the Ministry of Skill Development & Entrepreneurship (MSDE) under the "Skill India Mission" established 14 International Skill Centres (IISC) to provide skill training and certification benchmarked to international standards. In the pilot phase, IISCs were set up through the National Skill Development Corporation (NSDC) for youth seeking global mobility for jobs. Under the IISC Program, both industry specific skill training and pre-departure orientation training is being provided. The IISCs pilots were completed in 2018 and a revised policy is now being implemented. Under the pilot, 14 centres were established with 593 candidates enrolled across 9 job roles in 8 sectors. 459 candidates were assessed for recognition of prior learning with 286 candidates certified and 180 candidates placed in international employment. Key areas of focus for ongoing operations of the IISC include:

- assessment and certification against international standards as recognised in different countries;
- establishment of career guidance and counselling centres to act as resource centres facilitating foreign employment support;
- IISCs are expected to provide only incremental skill training if found lacking in candidates.

Key to enhanced skills migration and mutual recognition is shared labour market intelligence and improved labour market information from both countries of origin and countries of destination. Collecting this intelligence and making it more widely available will be an important precondition of improved skilled migration amongst BRICS countries, improving the ability of individuals and prospective employers to make the most of opportunities.

<sup>62</sup> EC (2022) *Mobility for Learners and Staff in Vocational Education and Training*.

<sup>63</sup> ILO (2020) *Report on Recognition of Prior Learning (RPL) for Migrant workers in Asia*

<sup>64</sup> See <https://nsdcindia.org/iisc-network>

The potential for ongoing collaboration on skills development will be however, contingent on the presence of a skills development working group, secretariat or network of focal points to be in place as part of the BRICS group as there is in ASEAN.

When such coordinating infrastructure is in place there will be considerably enhanced potential for collaboration on skill development amongst BRICS countries. Such collaboration could for example, include:

- Collaboration on training standards development as well capacity development of trainers and key implementers through sister city concept applied to at the level of institutions or localities (see Box below);
- Collaboration and research on skills competitions, including social marketing and advocacy efforts, to maximise their potential value for BRICS Members;
- Collaboration on standardization of qualifications to facilitate mobility of workers through mutual recognition among other measures.

### ► Box 7: Examples of BRICS Collaboration

#### **The BRICS Skills Development & Technology Innovation Competition<sup>65</sup>**

The BRICS Skills Development and Technology Innovation Competition is an initiative of the BRICS Business Council and has been held annually since 2017. The competition is seen as a long-term cooperation mechanism to promote skills development and people-to-people exchanges among BRICS. It is also seen as a mechanism to advance various other platform projects such as China-Russia Digital Economy Center and BRICS Future Skills Development and Technology Innovation Institute.

#### **Smart city collaboration among BRICS countries<sup>66</sup>**

The state of Rajasthan in India is pushing for greater smart city collaboration among BRICS countries. They have emphasized the potential opportunities emerging for fellow BRICS nations to cooperate in developing smart cities and related infrastructure. They also encouraged further information sharing to enhance and accelerate the smart city learning process. The Indian government is supporting the 'smart city transformations of Jaipur, Ajmer, Kota and Udaipur', and reference has been made to the innovative urban environmental management practices currently being developed in such cities as Beijing, Shanghai, Sao Paulo, Rio de Janeiro, Cape Town, Johannesburg and Saint Petersburg. India aims to make its citizens smart and skilled, hence the government has taken skill development as a topmost priority. India has engaged with numerous partners in skilling up its youth in a wide range of trades. ITIs have been taken up by industrial houses to impart skills and all our industry partners are collaborators in creating job and imparting world class training to the Indian youth.

<sup>65</sup> See <http://www.brskills.com/#/index>

<sup>66</sup> See <https://readwrite.com/india-pushes-smart-city-collaboration-among-brics-countries-cl4/>

### 3. Policy Recommendations

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Following the discussion on priority issues, recommendations for action are presented here for consideration.

#### a) Recommendations on how to strengthen skills systems to promote LLL and enable up-skilling and re-skilling of workers

- i. To strengthen LLL systems, countries should develop integrated policy frameworks for lifelong learning that include technical and vocational education, training and skills development and which are drawn up in consultation with the social partners and aligned with employment policy frameworks.
- ii. To promote development of a LLL systems, countries should develop comprehensive and coordinated national strategies to expand opportunities and possibilities for learning and facilitate more effective partnerships across education and training sectors to encourage a culture of lifelong learning.
- iii. To improve systems for reskilling and upskilling, countries should strengthen their systems for the identification and anticipation of skills and learning needs that utilize the full range of tools and latest technologies for the collection, analysis and dissemination of labour market information to improve skills policies, strategies, programmes and service delivery.
- iv. To increase the learning options available, countries should ensure quality digital, mobile and blended informal, non-formal and formal learning, that increases access, especially for groups with low levels of participation in lifelong learning. Such options should be based on a concrete strategy for the universal acquisition of basic and necessary digital skills and include ways to overcome the digital divide.
- v. To address the needs of the informal economy, countries should undertake outreach activities, community training and guidance to improve access to and participation in skills development and lifelong learning for individuals, especially when structural and digital divides exist.
- vi. To ensure informed choices are made by those wishing to upskill or reskill, countries should coordinate lifelong career counselling, vocational guidance and post-training support involving public and private employment services and other institutions to support people of all ages through the provision of appropriate information, advice and guidance to access learning and decent work opportunities.
- vii. To enable successful transitions, countries should integrate skills development with social protection, including for the unemployed and those with reduced working capacity in case of sickness and disability, so that opportunities for formal, non-formal and informal lifelong learning are accessible to all.
- viii. To strengthen coordinated service provision, countries should integrate education and training strategies with active labour market policies to facilitate skilling, reskilling and upskilling to enhance employability and adaptability and ensure successful and equitable labour market transitions and access to decent work.

#### b) Recommendations on how to increase the participation of social partners in skills systems and improve governance and coordination

- i. To promote a whole-of-government approach to effective tripartite governance, countries should strengthen coordination between governmental bodies and enhance cooperation with social partners and other relevant stakeholders, including training providers at the national, sectoral, regional and local levels.
- ii. To develop innovative, transparent, equitable and sustainable financing mechanisms, countries should use social dialogue to design mechanisms that are based on shared responsibilities between governments, employers and workers as appropriate, to incentivize participation in skills development, promote employability, strengthen workers' capacity to benefit from decent work opportunities, and support sustainable enterprises.
- iii. To improve the quality and scope of work-based learning, countries should, in close cooperation with the public and private sectors, expand apprenticeship schemes that support lifelong learning, enable labour market transitions, promote sustainable enterprises and facilitate effective partnerships between governments, workers, employers and training providers.

- iv. To improve the relevance of training, countries should develop dynamic approaches that involve constituents through social dialogue, including collective bargaining and tripartite cooperation, in the development and revision of skills standards, qualifications and curricula that combine core skills and a broad variety of competencies and provide flexible learning pathways in national qualification frameworks that support the portability of skills.
- v. To increase the participation of social partners in skills systems and improve governance and coordination arrangements, countries should strengthen the capacity of social partners at national, sectoral and regional levels to contribute effectively to the skills development and lifelong learning systems, including for the identification and anticipation of skills needed in the labour market.

### **c) Recommendations on how to improve program quality in skills systems**

- i. To improve quality in education and training systems, countries should implement quality assurance and quality improvement systems that accredit both public and private education and training organizations in common standards, recognize and involve qualified teachers and trainers in the process of safeguarding high-quality delivery, assessment and certification of skills.
- ii. To improve the capacity of systems to deliver high quality training, countries should provide sufficient financial and material resources to sustain strong and effective public and private education and training institutions that can establish and maintain strong partnerships with enterprises and the world of work.
- iii. To enhance the attractiveness of careers in the TVET and skills sector, countries should provide effective workforce development and decent work opportunities for personnel in skills development and lifelong learning systems, particularly for teachers and trainers, to ensure quality training and enable the effective functioning of education and training institutions.
- iv. To enhance employability of learners, countries should strengthen emphasis on the development of core skills, including social and emotional skills, cognitive skills, basic digital skills and relevant skills related to environmentally sustainable economies. Along with science, technology, engineering and mathematics (STEM) skills, integrating core skills in education and training promotes innovation and entrepreneurship, and enhances adaptability to changing life, work and societal needs.
- v. To improve the relevance of training, countries should develop dynamic approaches that involve constituents through social dialogue, including collective bargaining and tripartite cooperation, in the development and revision of skills standards, qualifications and curricula that combine core skills and a broad variety of competencies and provide flexible learning pathways in national qualification frameworks that support the portability of skills.
- vi. To improve the quality of programs through work-based learning, in close cooperation with the public and private sectors, countries should improve the quality and availability of apprenticeships and integrate workplace training in other programs by working with social partners to expand placements and strengthening the capacity of education and training institutions to support on-the-job training.
- vii. To improve the capacity of social partners to engage with and support the delivery, assessment and certification of TVET and skills development, countries should strengthen the capacity of social partners at national, sectoral and regional levels to contribute effectively to the skills development and lifelong learning systems.

### **d) Recommendations on how to improve access to skills development in rural and disadvantaged areas**

- i. To improve access to skills, countries should develop more inclusive, gender-responsive, flexible and innovative learning options, including high-quality digital, mobile and blended informal, non-formal and formal learning, that increase access for all, including groups with low levels of participation in lifelong learning.

- ii. To address the barriers which prevents learners from accessing online and blended learning options, countries should develop a concrete strategy for the universal acquisition of basic and necessary digital skills and include ways to overcome the digital divide.
- iii. To increase the participation of disadvantaged groups and expand access to rural and remote regions, countries should develop coordinated online and blended lifelong career counselling, vocational guidance and post-training support through public and private employment services and other institutions to support people of all ages with the provision of appropriate information, advice and guidance to access learning and decent work opportunities.
- iv. To build lifelong learning pathways for disadvantaged groups, countries should develop robust systems for the validation of skills and competencies, and the recognition of partial and full qualifications (including micro-credentials) acquired through all forms of prior learning, including formal, non-formal and informal learning, which are supported by qualified teachers, trainers and assessors and which enable and enhance the portability of skills and facilitate labour, social and geographical mobility.
- v. To realise the goal of Decent Work, countries should ensure they include those in the informal economy and other insecure forms of work in any targeted strategies to ensure effective access to skills and lifelong learning for all workers.
- vi. To increase the participation of disadvantaged groups in skills development and lifelong learning countries should develop targeted skills strategies for individuals and enterprises in the informal economy, in rural communities and in remote locations, especially when structural and digital divides exist.

### **e) Recommendations on how to maximise the value of skills competitions**

- i. To strengthen and consolidate skills competitions, countries should ensure a coherent national framework of local, regional and national competitions which provide a wide range of opportunities for participation beyond the occupations included in the biannual competitions of World Skills International.
- ii. To maximise the promotional value of skills competitions, countries should undertake targeted social marketing campaigns that promote the social utility of skills development to employers, parents and prospective students.
- iii. To improve understanding of how skills competitions are affecting the quality and attractiveness of TVET and skills development, countries should contribute to internationally comparative research in conjunction with the new World Skills Occupational Standards Development Centre.
- iv. To capitalise on the high-profile status of skill competitions, countries should also consider linking competitions with national quality awards to promote a culture of excellence and continuous improvement in the system.

### **f) Recommendations on how to strengthen cooperation on skills development among BRICS countries**

- i. To improve the likelihood of cooperation on skills development amongst BRICS countries, a standing skills development working group, secretariat or network of focal points should be established.
- ii. To identify agreed priority areas for collaboration, the skills development working group, secretariat or network of focal points should consult to identify priorities and develop an action plan.



## 4. Conclusions

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The ILO Centenary Declaration for the Future of Work calls on all members to invest more in people's capabilities and the institutions of work, and to shape a fair, inclusive and secure future of work with full, productive and freely chosen employment and decent work for all.<sup>67</sup> In the emerging post-pandemic world, BRICS countries have noted the importance of promoting skills development from a lifelong learning perspective and called for greater investment in human capital to enable workers to benefit from the employment opportunities created by technological changes, globalization and climate change.<sup>68</sup>

The BRICS countries have become important engines driving world economic recovery and growth in the post-COVID era. However, insufficient investment in human capital and poor infrastructure for education and training are also common challenges faced by all five countries.

This paper has discussed and made recommendations for six broad priority areas identified for the 2022 BRICS Labour and Employment Ministers' Meeting. These were:

- i. Upskilling and reskilling in response to digitization and technological innovation;
- ii. Improving governance and coordination in skill systems;
- iii. Improving quality in skills development;
- iv. Strengthening skills development in rural and disadvantaged areas;
- v. Harnessing the potential of skills competitions; and
- vi. Enhancing cooperation on skills development in BRICS.

Given the breadth of these topics and the limited scope of this paper, the treatment of these issues was limited and should not be considered as comprehensive. The bibliography and footnotes provide references to material where further detail and guidance on the topics can be found.

Regardless, the paper highlights various good practices and key issues to be addressed in the priority areas and BRICS countries should continue to advance their work on skills development with these in mind.

Now more than ever, in these unstable times, countries need to focus on adopting a people-centered approach to strengthening systems for skills development and lifelong learning, to adopt innovative approaches to upskilling and reskilling, improve the quality of skills development and create opportunities for economic transformation, quality job creation and inclusive and sustainable growth.

<sup>67</sup> ILO (2019). [ILO Centenary Declaration on the Future of Work](#)

<sup>68</sup> MOHRSS (2022). *Developing Skills for a Resilient Recovery*



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