

# Practical Solutions for Addressing Labor-Related Barriers to Bhutan's Private Employment Growth

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This note provides practical solutions for addressing the labor-related barriers that impede Bhutan's private sector employment growth.<sup>1</sup> Bhutan has a labor force participation rate of more than 60 percent, with approximately 414,000 people currently employed, 42 percent of whom are female,<sup>2</sup> and an unemployment rate of 2.6 percent, which is relatively low by international standards. These figures mask pockets of greater unemployment among certain population subgroups however, particularly educated urban youth, a group experiencing a 9.4 percent unemployment rate. In addition to being more likely to be unemployed, these younger workers are also more likely to be working only part-time, with about 1.9 percent of those ages 19 to 24 working fewer than 35 hours per week.

Bhutan's working age population is increasing just as the public sector's absorption capacity is diminishing, making it more important than ever that the private sector creates quality jobs. A truly effective employment policy must also address the ability of the private sector to access the workforce it needs for growth.

<sup>1</sup> This note was prepared at the request of Bhutan's Ministry of Economic Affairs (MoEA), in collaboration with the Ministry of Labor and Human Resources (MoLHR). It builds on the recent reports *Bhutan's Labor Market: Towards Gainful and Quality Employment for All* (MoLHR and WBG 2016) the *Investment Climate Assessment of Bhutan* (Santini, Tran, and Beath 2017), and from additional input from MoLHR.

<sup>2</sup> Based on data from the World Development Indicators Database and the Bhutan Labor Force Surveys from 2014 and 2015.

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According to the analysis in the Bhutan Enterprise Survey (BES) of 2015 (MoLHR and WBG 2016), the main labor-related constraints to private sector employment growth are: (i) lack of workers with relevant experience and skills, (ii) restrictions on employing non-Bhutanese workers, and (iii) lack of interest among Bhutanese workers in private sector employment opportunities, which is closely linked to the low quality of the jobs offered.

This note draws on international experience from comparable settings and identifies potential solutions to the constraints listed above: (a) improve the population's work skills to better align with market needs and to boost productivity; (b) balance local and foreign employment; and (c) increase the attractiveness of private sector jobs by extending critical benefits (primarily pensions) to its workers. Part A of this note addresses the need to improve the skills of Bhutan's working population, focusing on four avenues to create a stronger workforce: expand vocational training to be more responsive to employers' needs; strengthen ICT training programs; develop soft skills training modules at all educational levels; and improve opportunities for on-the-job training. Part B explores employers' ability to hire workers with immediately needed skills by accessing foreign labor markets (see Santini, Tran, and Beath 2017) and balancing the Bhutanese and non-Bhutanese workforces by using approaches including occupational shortage lists, extension of the minimum wage to non-Bhutanese workers, and a focus on skill and technology transfers from foreign workers. Part C investigates potential ways that a pension system designed to meet the needs of private sector employees can help make private sector positions more appealing to Bhutanese workers.

### A. IMPROVE THE SKILLS OF THE WORKING POPULATION

Several approaches can lead to improved skills among Bhutan's working population, including improvements to the formal education system and to the technical education and vocational training (TEVT) programs. The Royal

Government of Bhutan (RGoB) has already made impressive investments to strengthen its TEVT programs, some with input from the Japan International Cooperation Agency and the United Nations Educational, Scientific, and Cultural Organization (UNESCO). As of 2014, eight Technical Training Institutes (TTIs) operated under the Ministry of Labor and Human Resources (MoLHR), with 1,405 students and 140 instructors (Bhutan 2014a). Private institutions also provided vocational training in computer programming, hospitality, and tourism.

Other important steps have also been taken. Under a joint effort by the Ministry of Education (MoE) and MoLHR, for example, the Vocational Skills Development Curriculum (VSDC) for classes IX and X was created and piloted in five schools located near TTIs.<sup>3</sup> MoE, in addition, took the important step of developing its Vocational Qualifications Framework in collaboration with UNESCO.

Two new government-run training programs were instituted in 2014 under the Employment Skills Scheme (ESS): the Youth Employment Skills Initiative (YES), targeting class X and XII job seekers, and the Graduate Skills Program (GSP), targeting university grads. Both programs rely on performance-based contracts (but with slightly different terms) and include skills in both information and communications technology (ICT) and soft skills (such as the ability to work in teams). As of September 2016, YES has surpassed by more than 10 percent its target of 500 trainees.

In the formal education system, the Bhutan Education Blueprint 2014–2024 prioritizes dynamic, relevant, and contemporary curricula (Bhutan 2014a). Schools' curricula have recently been updated to include soft skills, ICT, health, and other contemporary subjects. The Royal University Board, which develops university curricula, has also been considering major changes.

<sup>3</sup> Both TEVT (through TTIs) and VSDC address vocational training needs. The difference between the two lies in the ages and education levels of the groups they target, with VSDC addressing the needs of secondary school students and TEVT addressing the needs of those who have completed their secondary education or dropped out.

Despite these important policy steps, room for improvement remains. An assessment of the VSDC pilot in 2014, for example, found that it had failed to attract significant numbers of students due to inadequate financing and the inability to overcome potential students' perceptions that vocational training provided a "second class education" (Bhutan 2014a). Furthermore, a tracer study of TTI alumni conducted by MoE found that the TTIs had not adequately equipped their graduates for private sector jobs (Bhutan 2012) and that unemployment among them was therefore relatively high. Finally, nonfarm private sector firms continued to perceive lack of adequate skills, including both soft skills and computer and other technical skills, as an obstacle to growth.

This note proposes a fourfold approach to better aligning the skills of Bhutanese youth with labor market demand: (1) further improve the responsiveness of vocational training to private sector market needs;<sup>4</sup> (2) strengthen ICT-specific modules in both formal and vocational education; (3) introduce soft skills modules into formal education and vocational training; and (4) strengthen on-the-job training modules to ensure workers' continued ability to adopt new technologies and operate at maximum productivity.

This note discusses skills shortages at a very broad level. Further policy development regarding the job skills of Bhutanese youth would benefit from an in-depth assessment of the specific skills required. Currently available data at the national level indicates that employers identify shortage of skills as a constraint (MoLHR and World Bank 2016), but for a skills development policy to succeed in the long term, a firm understanding of what skills are missing (for example, technical, socio-emotional, or cognitive) is essential. A comprehensive assessment of the skills demanded by Bhutan's employers will help government officials to better align the formal education and training systems with real demand, thus ensuring that

<sup>4</sup> Universities can also play a role in upgrading workforce skills and should be encouraged to do so. This note, however, focuses on the TEVT system (which is more likely to fall under the MoLHR mandate) and leaves the discussion of changes in formal tertiary education for future consideration.

the policies developed achieve broader and longer lasting impact.

### 1. Improve the responsiveness of vocational training to private sector needs

Two elements are usually required to ensure that job training aligns with the needs of the private sector:

- Market-driven selection of trade occupations
- Performance-based contracts for training providers

The first element requires either (i) rapid market appraisal or (ii) in-depth market analysis to reveal the trade occupations most likely to lead to career growth, or some combination of both.<sup>5</sup> The programs featured in Table 1 combine both approaches.

Given that unemployment in Bhutan is particularly high among educated urban youth (almost 9.5 percent), a stronger focus on job skills training that can lead to career growth is needed. McKinsey Generation has effectively used this approach with a target population similar to Bhutan's. The McKinsey Generation targets trade occupations in a given market structure that studies have shown are most likely to lead to a career progression in a company or industry. In Mexico, for example, McKinsey Generation chooses cashiers for their training because cashiers are highly likely to eventually become store managers. McKinsey Generation also includes trade occupations that, with further education, can lead to skill upgrades (for example, nurses, nursing assistants, or MRI technicians). In other words, the focus of the training is not just on giving participants a job; it is also intended to give them careers.

Most importantly, because Generation carefully selects trainees and prepares them for long-term positions, 75 to 84 percent of employers (depending on the country and

<sup>5</sup> For advanced OECD economies, in-depth studies also identify skills needed for long-term economic growth, given technological progress and automation. See [http://www.skillsforemployment.org/KSP/en/Details/?dn=WCMSTEST4\\_171460](http://www.skillsforemployment.org/KSP/en/Details/?dn=WCMSTEST4_171460).

**TABLE 1:** Examples of Skill-Building Interventions with Strong Market Links

Intervention	Location	Target Group	Content	Outcomes	Key Relevant Features
Adolescent Girls Employment Initiative <sup>a</sup>	Nepal	Urban and semi-urban youth ages 16–24 from disadvantaged backgrounds	Short-term technical and business skills training	20% increase in likelihood of employment  20% increase in hours employed  45–82% increase in monthly earnings <sup>d</sup>	Progressive payment structure in performance-based contracts
McKinsey Generation <sup>b</sup>	Spain, Kenya, USA, Mexico, India	Unemployed youth in targeted countries	Short-term technical skills training	90% placement rate with about 80% of graduates retaining their jobs three months after placement  4–6 times increase in income  94–100% of employers willing to hire a Generation grad again	Focus on positive return on investment for both employers and students  Selection of occupations that can lead to long-term career development and growth
Apprenticeship Program <sup>c</sup>	Brazil	Urban youth (14–24), both in and out of school	Long-term on-the-job training with additional classroom instruction	5% increase in probability of being employed in the long term (2–3 years after the program)  2% increase in hourly wage	Financed by firms receiving government tax exemptions for having apprentice workers  Added flexibility in terminating contract apprentices in cases of nonperformance

Notes: <sup>a</sup> Chakravarty, Lundberg, Danchev, and Zenker 2016.

<sup>b</sup> Jaffer and Mourshed 2017; Mourshed 2015.

<sup>c</sup> Corseuil et al. 2012.

<sup>d</sup> The 2010 cohort had an increase in monthly earnings of 45–67 percent; the 2011 cohort had an increase in monthly earning of 67–82 percent.

industry) attest that they do, in fact, save money on hiring and training by using Generation graduates. Participants are trained only for positions that firms find essential, and thus the firms are willing to contribute financially, some providing up to 30 percent of training costs. This model thus not only helps to defy the myth of a “second class” education, it also introduces beneficial cost sharing.

An approach not followed by Generation but still useful in aligning training with private sector needs is the performance-based contract. In most cases, these agreements involve withholding from the training institution (for

usually three to six months after trainees complete the program) a percentage of the total fee due to them. After verification of the trainees’ wage employment or income generating activities, the balance of the fee is paid.

This method is employed by both the YES and the GSP programs in Bhutan. YES reserves 100 percent of the provider’s payment until trainees are successfully placed in jobs, and GSP splits the payment into two tranches of 50 percent, with the first portion disbursed regardless of placement success.

### BOX 1: Selectivity and Potential Weaknesses of Performance-Based Contracts

Training efforts face an inherent trade-off between the desire to increase the reach of skill-building programs and the need for such programs to signal to potential employers the high quality of their trainees and curriculum. To result in long-term wage increases, all else being equal, course completion certificates must clearly represent to employers the programs' quality standards and its trainees' abilities. Similarly, any national certification program should be demanding enough to attest to the certificate holder's fitness to perform the particular trade. For this reason, selection of trainees based on their abilities remains important. It is this criterion that has helped ensure the success of AGEI and Generation as compared to programs not using thorough selection processes.

In addition, while performance-based contracts for training providers create incentives to tailor training to the current needs of the labor market, such contracts may also facilitate collusion between training providers and employers. For example, in return for a share of the provider's fee for trainee placement, firms might employ (or register as employed) a

provider's alumni. Potential collusion can be addressed either by (i) creating a system in which training is partially financed by the prospective employers needing the labor, with cost incentives for hiring trainees from vulnerable backgrounds; or (ii) creating a system in which training is partially financed by a private labor intermediary, who is then responsible for the trainee's job placement.

Finally, if trainees receive training free of charge, or receive a stipend for taking the training, collusion can be further perpetuated because alumni will not be invested in receiving higher earnings post-completion. They will have no incentives to inform relevant authorities or other prospective participants about concerns over the quality of the training (no reputational effects) or to complain about low-quality training or collusion between training providers and employers. Thus, selectively awarding training stipends (based on need and ability) or substituting stipends for subsidized training loans could be a first step toward reducing potential collusion between training institutions and the private sector.

Performance-based contracts are a promising tool, but more attention should be given to their structure to ensure their enforceability and to create appropriate incentives to encourage trainers to take on the riskier trainees. The more restrictive the performance-based contract, the more likely it will lead to negative effects in terms of trainee selection. If 100 percent of payment depends on trainees' employment at a specified time after training, for example, the provider will likely be hesitant to enroll hard-to-place students (such as those facing prejudice due to gender, caste, or economic status). In addition, the more weight such contracts place on the employment outcome, the more difficult it might be to attract training providers (and subsequently to enforce the contract in cases of nonperformance). The timing specified for employment verification matters as well, because training providers and employers may collude to employ trainees until the verification date has passed but then let them go. Finally, to be completely effective, the performance-based contract must clearly define what is meant by *quality employment* or *employment at the time of verification*; shared understanding of these terms

is essential to ensuring that training conducted under these contracts achieves the desired outcomes.

The structure of the performance-based contracts used in the Adolescent Girls Employment Initiative (AGEI) in Nepal provides a good example of a well-conducted implementation that successfully addresses these concerns. More specifically, AGEI demonstrates that combining a results-based system with a progressive incentive scheme can ensure that training providers capable of working with vulnerable groups will opt to do so. At the same time, the alternative approach of offering a bonus based on placement outcome, as opposed to withholding a part of the payment, is gaining some traction, particularly in training programs in Eastern Europe and Central Asia.

The Employment Fund (an implementing partner for the AGEI program) used a differential pricing mechanism that awarded higher incentives to service providers that agreed to train (and place) individuals from groups considered more disadvantaged according to established vulnerability criteria. The highest incentive was awarded

for training and placing the most disadvantaged (such as highly vulnerable women, widows, ex-combatants, and disabled women), and incentives gradually decreased for less prioritized groups (AGI 2016). In addition to encouraging training providers to take on those at higher risk of failing to achieve the desired employment outcome, higher fees for vulnerable target groups enabled training providers to expend more resources to help them.

Where the tax system functions well and is strongly enforced, tax breaks to firms can serve as incentives for providing on-the-job training programs for students in classroom technical training programs. A well-documented case using this approach comes from Brazil, where it was combined with relaxation of restrictions on firing temporary workers from trainee programs. This approach helps better align skills training with private sector needs. In terms of long-term employment of targeted youth in the private sector, however, results have been mixed. Trainees' probability of employment increased in the long term (measured as 24 months after program completion), and their earnings improved by a few percentage points compared to a control group, but on the other hand, no evidence shows that apprentices remained employed by the formal sector longer than did regular temporary workers. Thus, although it is an interesting model, it should serve only as a starting point for developing plans based on employer-financed training for new workers.

### **2. Introduce and strengthen ICT-specific training modules in formal and vocational education**

Bhutan's Education Blueprint and the iSherig ICT plan focus on specialized education in information and communication technology and on incorporating ICT into classrooms (Bhutan 2014b). This note suggests building on this foundation to further strengthen Bhutan's ICT capacity, which can be particularly beneficial for Bhutan since its geography presents challenges to engaging in non-ICT exports. For example, growth of ICT as a main export sector was a key objective for both Armenia and

Ghana, and successful projects implemented in both countries are described in this section.

Santini, Tran, and Beath (2017) identify ICT as a sector with high growth potential. Bhutan currently has a high level of ICT development, and the country is strategically placed to further deepen the ICT expertise of its labor force through partnerships among academia and the public and private sectors, and through incorporation of specialized and general ICT training into its formal schooling programs. As an initial step, Bhutan might capitalize on technology transfer through public-private partnerships with foreign universities and private sector companies at the tertiary and technical education levels. This approach was taken by Singapore's Industrial Training Board (ITB; now the Institute of Technical Education (ITE), by Hyderabad's International Institute for Information Technology (IIIT), and by similar entities in Malaysia and Bangladesh (see Table 2).

The government's initial provision of financial incentives for participation can help mitigate the associated risks for both Bhutanese and non-Bhutanese universities. Similarly, initial government investment would support procurement of and continuous upgrades to the equipment needed by the targeted universities. IIIT in Hyderabad, as intended under the model's design, successfully used government financing at the initial stages before becoming self-sustaining. The key to this transition was building strong incentives to align training and research with the needs of the private sector companies. ITB in Singapore also successfully graduated from government financing.

The model of a close partnership between academia and the private sector could be used to grow the domestic venture capital industry too. Armenia's E-Society and Innovation for Competitiveness Project ensured this outcome through a venture capital fund model that allowed for growth in both domestic ICT capacity and the local venture and ICT consumer markets.

**TABLE 2:** Examples of Interventions Aimed at Increasing ICT Skills

Intervention	Location	Content	Outcomes	Key Relevant Features
Industrial Training Board (ITB) <sup>a</sup>	Singapore	Industry-led training advisory committees	Tata's precision engineering plant established in Singapore following its partnership with ITB	Close collaboration with both academia (for example, Carnegie Mellon University) and the private sector  Government/private sector partnerships for attracting IT businesses
The International Institute of Information Technology (IIIT) <sup>b</sup>	Hyderabad, India	Industry-specific institute	Corporate-specific training and recruitment (IBM, Signal Tree, Motorola, Oracle, Dell, GE, and Satyam)	Initial state support for an industry-oriented university, with the goal of becoming self-sustaining  Partnership with firms to offer company-specific training
e-Ghana Project <sup>c</sup>	Ghana	ICT project with a component focused on development of skills needed for business-process offshoring	4,300 additional jobs created in the ICT and IT-enabled services (ITES) sector  8,700 people employed by ICT and ITES sectors at project closure	Ecosystem approach  Close link between ICT skills and business needs (through start-up incubation)
E-Society and Innovation for Competitiveness Project <sup>d</sup>	Armenia	Support for technology entrepreneurs throughout the incubation cycle	7,495 more people employed by ICT/ITES sectors  350–400 direct jobs created, of which 220–250 are IT/ITES specialist jobs	Focus on fostering domestic IT entrepreneurship, including start-up financing  Expansion of domestic Internet services consumer base by providing training for elderly population

Notes: <sup>a</sup> Sudan et al. 2010.

<sup>b</sup> Ibid.

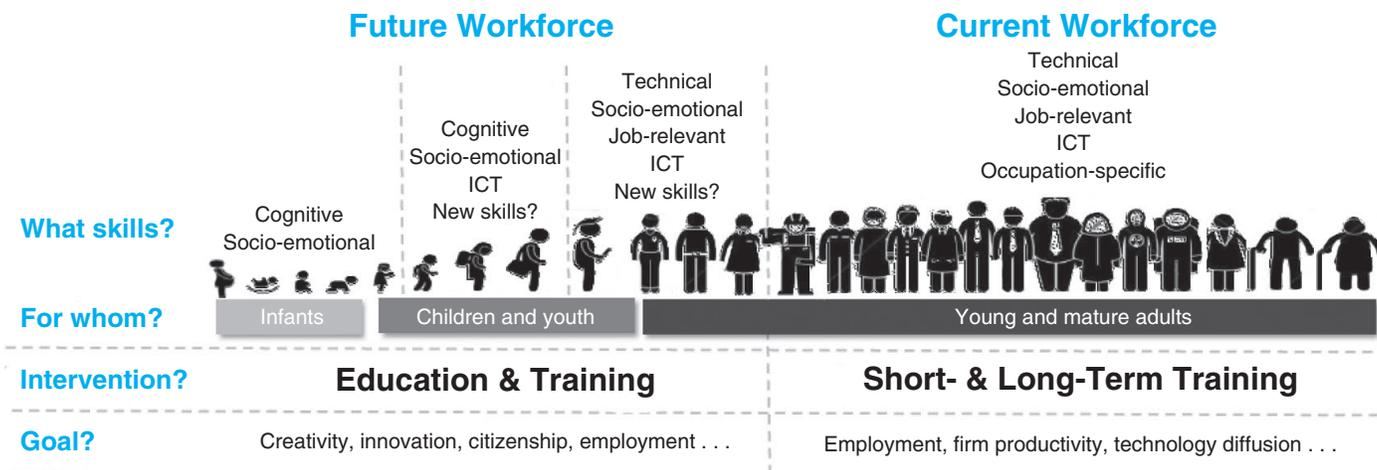
<sup>c</sup> World Bank 2015b.

<sup>d</sup> World Bank 2016a.

The e-Ghana Project focused primarily on developing ICT capacity for business-process offshoring, which highlights the importance of considering the ICT ecosystem as a whole. Working with regulations, standards, skills, businesses, and Internet service providers can ensure the connectivity essential for successful domestic ICT entrepreneurship. Because of the trade-off with project complexity, however, thorough gap analysis should precede evaluation of and changes to the ICT ecosystem.

### 3. Introduce soft skills modules in formal education and vocation training

Employers cite the lack of job-specific socio-emotional skills as at least a moderate obstacle to their operations, and the importance of socio-emotional skills will continue to grow as mechanization increases (World Bank 2016d). Many employers report needing workers with greater leadership and teamwork skills, and 35 to 40 percent of



**FIGURE 1:** Skill Development Throughout the Lifecycle

Source: Arias, Roseth, and Valerio 2016.

the nonfarm private sector firms surveyed in BES 2015 reported insufficient problem solving, critical thinking, or leadership skills among their employees. In addition, employers at one-fourth of firms surveyed found employees’ teamwork skills to be below their requirements (MoLHR and WBG 2016). Like ICT skills, socio-emotional skills should be taught at various education levels (see Figure 1). A recent work by Guerra, Modecki and Cunningham (2015) provides a thorough mapping between various socio-emotional skills and stage of life.<sup>6</sup> This section presents a range of examples of how to incorporate socio-emotional skills training into children’s and adolescents’ formal schooling and postgraduates’ ongoing technical training. Both approaches are relevant for Bhutan.

Given how recently skill improvement programs have focused on socio-emotional training, evidence about successful interventions is scarce. Despite the need for further rigorous impact evaluations, however, some ongoing projects provide good examples of how best to

introduce soft skills training at various educational stages. Three promising interventions are Construye T (Villasenor 2015) in Mexico, Girls First (Leventhal et al. 2015) in India, and McKinsey Generation globally, all of which make innovative use of online technology, a participatory approach, and skills reinforcement through continued supervision and mentorship (see Table 3).

The use of online technology makes wide-reaching interventions cost effective and can be particularly useful in countries with challenging terrain and difficult to reach areas. Construye T, implemented by the United Nations Development Programme (UNDP) and the Mexican Ministry of Education, successfully uses webinars, online training, and other online resources to improve both the quality of teaching and the psychological climate in schools. Construye T trains teachers from participating schools to incorporate socio-emotional skills into the curriculum using easily accessible 15-minute lessons. In just one year, the project reached 2.6 million students in 4,000 schools, and participants have viewed it positively (Villasenor 2015).

Based on learning from these programs, the participatory approach seems to be the key for success in socio-emotional training. Construye T offers brief online

<sup>6</sup> See Guerra, Modecki, and Cunningham (2015) for a mapping of the ages and contexts in which various socio-emotional skill subsets develop. The paper uses as its base a list of the socio-emotional skills that employers value, classified into eight subgroups, and then relies on psychological research (drawing from the concepts of psychosocial and neurobiological readiness and age-appropriate contexts) to arrive at the mapping.

**TABLE 3:** Examples of Interventions to Build Socio-Emotional Skills

Intervention	Location	Target Group	Content	Outcomes	Key Relevant Features
Construye T <sup>a</sup>	Mexico	School students, teachers, and principals	Web-based tool for incorporating socio-emotional training into regular classroom lessons	2.6 million students in 4,000 schools reached within one year of program initiation	Online technology used to improve socio-emotional skills
Girls First <sup>b</sup>	India	Adolescent girls (attending school)	Long-term participatory socio-emotional skills training	Improved emotional resilience, self-efficacy, and socio-emotional assets  Significant long-term improvement in three key aspects: depression, anxiety, and social well-being	Curriculum designed to be culturally flexible and scalable, while the framework (session sequence/length, topics, pedagogy) remains constant  Methodology relies on participatory approach, support group formation, and practice and role play

Notes: <sup>a</sup> Villasenor 2015. Also see <https://blogs.iadb.org/education/2015/04/15/social-emotional-skills/> and <http://s3award.com/campaign/detail/4756> for further description of program and results.

<sup>b</sup> Leventhal et al. 2015.

training modules, which are introduced by participating teachers. Girls First uses a structured modality in which a skill is explained, practiced, and then discussed in a group setting. McKinsey Generation conveys socio-emotional skills through role play, which many Generation alumni have anecdotally reported finding beneficial (Generation 2017).

Follow-up and mentorship are other key elements of these three programs. Construye T includes socio-emotional training continuously throughout the years of formal education. Formation of peer support groups, leading to ongoing discussion and sharing of experience and advice, is central to the Girls First program (Leventhal et al. 2015). McKinsey Generation supports its trainees through formal mentorship programs and postgraduation check-ins.

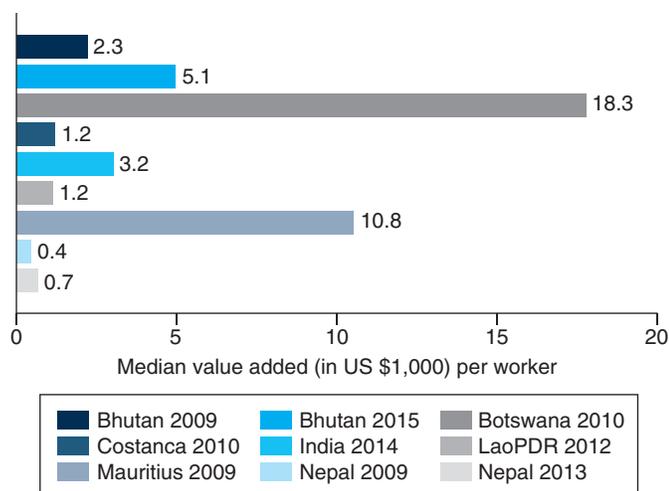
The further success and relevance of socio-emotional skills programs for participants' future employment will depend on accurate assessments of the soft skills most critical to effective performance in the specific occupations for which trainees are preparing. The

McKinsey Generation stands out in this regard because prior to deploying its training program in a new location, it assesses each occupation it will address to identify the specific skills, termed "breaking points," most relevant to it (Mourshed 2015).

#### 4. Strengthen on-the-job training and technical support provided to SMEs

The productivity of Bhutanese workers improved between 2009 and 2015 and is now one of the highest in the region (see Figure 2). Recent research indicates, however, that Bhutanese firms still face constraints in hiring workers with the right skills and experience for their needs.<sup>7</sup> Nearly 60 percent of manufacturing firms, for example, reported as a significant constraint to their operations the limited availability of workers with previous industry experience. Similarly, close to 40 percent of small- and medium-sized firms saw lack of skilled workers as a constraint to their operations (compared to only about 23 percent of large firms) (MoLHR and WBG 2016).

<sup>7</sup> For a more nuanced discussion of worker productivity, see Santini, Tran, and Beath 2017.



Use 2010 prices

**FIGURE 2:** Median Value Added of a Bhutanese Worker between 2009 and 2015

Source: Santini, Tran, and Beath 2017.

These concerns could easily be addressed by strengthening on-the-job training programs for existing employees. Such programs allow firm owners to hone the skillsets of their employees to ensure they match their requirements; they also contribute to the companies’ ability to upgrade technology. This in turn can help increase the attractiveness of private sector employment.

Levels of on-the-job training in Bhutan are currently low, which may be explained by the need to improve program design and financing. Skills at multiple employment levels should be addressed, including helping managers to build their own skills in fostering teamwork and professionalism (Santini, Tran, and Beath 2017). Only 14 percent of Bhutan’s firms offer worker training, a rate significantly below the regional average. Nearly 80 percent of firms not offering training report not needing it. Yet many of these same firms complain about the inadequate skill levels of their existing employees. This puzzle might be explained by the inadequate supply of on-the-job training

**TABLE 4:** Examples of On-the-Job Training Programs for Existing Employees

Intervention	Country	Target Group	Content	Outcomes	Key Relevant Features
Manufacturing Extension Partnership (MEP) <sup>a</sup>	United States of America	SMEs paying into the Unemployment Insurance System and that pay the Employer Training Tax	Public-private partnership providing customized business needs assessment and on-site training	2,654 jobs created or retained	Menu of public-private partnership funding options
Training Consortium (TC) Pilot <sup>b</sup>	Republic of Korea	SMEs	SME associations providing needs assessments and facilitating necessary training for member SMEs	More than 80 percent increase in worker productivity  Increased use of machinery by SMEs and reduced waste and defective products	SME-wide mandatory levy  Utilization of economies of scale to address firms’ HR constraints
Skills Development Fund (SDF) (Window 1) <sup>c</sup>	Ghana	Semi-skilled and skilled workers in formal sector firms and firm associations	Training partially financed by the government and provided to formal firms on a competitive basis <sup>a</sup>	60 percent increase in productivity of participating firms  62 percent of firms adopted new technologies	Demand-driven training with the clear goal of increasing productivity

Notes: <sup>a</sup> Jones et al. (forthcoming).

<sup>b</sup> Lee 2009.

<sup>c</sup> World Bank 2016b.

programs or by the perception that existing on-the-job training brings low returns. Disseminating information on examples of relatively successful training programs could help mitigate these concerns. A few effective programs are outlined and discussed in Table 4.

While the potential benefits for both employers and employees are great, on-the-job training for existing employees has not been rigorously evaluated. It also remains underutilized, particularly among less successful firms and those not focused on export (Saraf 2017). One explanation may be that on-the-job training in competitive industries by default becomes a public good, because trained employees may leave for better positions at competitor firms. All three of the programs in Table 4 therefore have in common public or public-private partnership financing, relying on specific tax revenue with, in some cases, matching grants from the companies.<sup>8</sup> One financing solution, therefore, would be to create employment training funds financed by a training tax in sectors with a high proportion of formal firms paying labor taxes or contributing to employment insurance. This model is used by the Manufacturing Extension Program (MEP) in the United States and by the Training Consortium (TC) Program in the Republic of Korea. The high degree of formalization of nonfarm private sector firms in Bhutan could make this financing approach workable. The MEP program also offers a range of public-private financing tailored to each client's training needs and the level of expense required to meet them.

Bhutanese SMEs are most affected by the lack of skilled workers, and these firms are also less likely to have the capacity to hire a human resources training manager or to benefit from the economies of scale that larger companies enjoy. Korea's TC program provides a useful example of an effective response to this issue. The TC Program (financed by a training tax) encourages creation of

consortiums of 30 to 50 SMEs to which the Chamber of Commerce, in collaboration with the Ministry of Employment and Labor and training experts, provides seconded training managers and technical assistance. The SMEs thus gain access to a training manager, a resource they could not otherwise afford. In addition, when enough SMEs in the same sector have similar training needs, TC enables them to tap into economies of scale. Experience with expanding the TC model, however, indicates that the consortiums should not grow too large and that the member firms should, to the extent possible, come from the same industry.

Finally, firms investing in worker training—often involving periods of worker absence from the workplace—must be confident that the training will yield post-training productivity increases sufficient to justify the short-term productivity loss. The approach taken by SDF in Ghana reassures employers by giving firms a clear vision of how specific training translates into higher productivity. Although firms in all three programs described in Table 4 experienced increased productivity and technological upgrades, SDF is the only model that put on-the-job training at the forefront.

## B. BALANCE LOCAL AND FOREIGN EMPLOYMENT

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Reform of regulations regarding foreign labor could ease constraints on firms' operations. To preserve RGoB's objective of self-reliance, as outlined in the Eleventh Five Year Plan, local and foreign employment should be balanced, especially where foreign employment can help address labor and skills shortages or promote technological transfer (Bhutan 2013).

As of June 30, 2015, Bhutan had a total of 44,744 foreign workers, including hydropower workers, more than 90 percent of whom were from India (Bhutan 2015). That number approached the government-approved ceiling of 45,000 foreign workers and represented about 10 percent of the labor force at the time (Bhutan 2015). BES

<sup>8</sup> The only exception is the Ghana program, which depends on donor funding that subsequently could be replaced by government financing. In the case of Bhutan, this expenditure can also be supported by the increased government revenue from hydropower using the social welfare fund model employed by Chile, Mongolia, and Norway.

2015 indicates that 30 percent of nonfarm private sector workers were not Bhutanese citizens.

Yet BES 2015 also shows that almost 20 percent of non-farm private sector firms find restrictive immigration rules at least a moderate obstacle to their operations (MoLHR and WBG 2016), and in the manufacturing sector, a quarter of the firms found restrictions on immigration inhibiting. In terms of firm size, almost half of the medium enterprises (49 percent) and more than a half of the large enterprises (54 percent) reported that immigration restrictions were at least a moderate obstacle. Furthermore, current regulations restricting foreign recruitment are likely hurting foreign firms in sectors with high growth potential, such as tourism and ICT, by limiting their ability to secure necessary skilled labor.<sup>9</sup>

As mentioned, a quota on the number of foreign workers helps protect Bhutanese workers from competition with cheaper foreign labor. This quota, established and enforced by the MoLHR, is not skill-level specific (Santini, Tran, and Beath 2017) however, and it is not distributed evenly across all employers in Bhutan. The permitted number of foreign workers is higher for companies contracted on government projects, for example. A construction company working on a government project can pay up to 30 percent of its total wage expense to foreign workers, while a company working on residential or personal construction can pay no more than 5 or 12 percent of all wage expense to foreign workers. In addition, due to quotas favoring government and international projects, the smaller businesses likely most in need of low-skilled foreign workers may not have access to them. Because the quota is not skill-level specific, it also hinders firms in some sectors, such as ICT and tourism, from hiring essential skilled foreign labor (Santini, Tran, and Beath). Finally, however well considered foreign worker quotas may be, if they are not updated frequently, they can impede

<sup>9</sup> Santini, Tran, and Beath (2017) find that while foreign investment regulations prescribe greater flexibility for foreign firms, such policies seem not to have been applied. Investors, rather, indicate that they are subject to the standard regulations and thereby limited in recruiting skilled foreign labor.

private sector firms from getting timely access to the workers they need for growth.

BES 2015 suggests that foreign workers are largely complementary to the Bhutanese workforce. Foreign workers, for example, tend to be less educated and to work for lower wages than do the generally more educated Bhutanese workers. The government takes measures to further ensure complementarity between the Bhutanese and foreign workforces, including permanently closing some occupations to non-Bhutanese workers and only allowing firms to hire non-Bhutanese workers if advertising for qualified Bhutanese workers failed to find any.

Worker protection minimum wage regulations currently apply only to Bhutanese workers, making foreign workers automatically much cheaper. Paying lower wages to foreign workers benefits Bhutanese employers, but it can also negatively affect the growth of minimum wages for Bhutanese workers, allow survival of low productivity enterprises, and discourage employers from looking for less labor-intensive production alternatives, such as mechanization.

This note proposes three main approaches to ensuring that foreign employment is used to address labor shortages and to effect technological transfer: (i) use a skill-specific occupational shortage list to simplify the process of hiring foreign workers where necessary; (ii) extend the minimum wage to foreign workers to prevent wage suppression and to ensure the technological upgrading and competitiveness of Bhutanese businesses employing foreign workers; and (iii) focus on skill and technology transfer by hiring highly skilled foreign workers and using “twinning” and “secondment” programs. (*Secondment* is a temporary assignment of a member of one organization to another to provide training and share experience [Cunningham, Dawes, and Bennet 2004]. *Twinning* refers to collaborative pairing of world-class institutions with institutions in the developing world to exchange knowledge and strengthen the capacity of the latter.)

## 1. Use occupational shortage lists to ensure complementarity of foreign workers

Use of evidence- and validation-based systems to determine areas of labor shortages that cannot be filled with local workers can improve the process for hiring foreign workers (see Table 5). The advantages of using shortage lists, as compared to the current system, include the following: (i) shortage lists signal transparency in the migration process and assure citizens that migrants do not threaten their jobs; (ii) lists improve process efficiency, especially if they are regularly updated and provide labor-market test exemptions; and (iii) lists can accommodate broader economic and social objectives. Shortage lists are usually publicly accessible, making the recruitment process more transparent for both domestic and foreign workers. In addition, some countries, such as the United Kingdom, use lists to allow firms to skip local advertising requirements before filling a position with a foreign worker. If lists are regularly updated, they can be the basis of an agile system that responds quickly to private sector business needs.

The process of creating a shortage list provides an opportunity for debate among stakeholders, which can in turn produce clear signals to the government regarding

necessary investment in education and training. Skills-based lists encourage both the government and the private sector to consider labor alternatives, such as mechanization, and they reduce the risk that low-skilled migrant laborers will slow down the speed of technological upgrading (Testaverde et al. 2017). At the same time, skill-specific quotas enable firms (both Bhutanese and foreign owned) to quickly access necessary high-skilled talent from abroad.

Effective use of this approach depends on data availability and the strength of labor-market monitoring systems. At a minimum, regularly updated sources for the following information are needed: (i) employment and jobs (derived from labor-force and industry surveys); (ii) wage trends (from the same sources); and (iii) vacancies (tracked based on applications submitted for review to the Labor Recruitment Commission). In addition, a mechanism is needed to update the shortage occupations list regularly so that the system remains responsive to private sector demands.

Another solution, proposed by Santini, Tran, and Beath (2017), uses a separate high-skill-specific quota, akin to H1-B visa system in the United States. This has the

**TABLE 5:** Examples of Use of Skills Shortage Lists

Program	Country	Skill Level	Key Relevant Features
Consolidated Sponsored Occupations List <sup>a</sup>	Australia	High skilled	Focus on skilled migration with a view toward medium- and long-term skills and economic growth needs
Shortage Occupations List <sup>b</sup>	United Kingdom	High, semi-, and low-skilled	Regular updating Combination of labor market analysis and stakeholder consultations
Critical Skills Monitoring Committee (CSC) <sup>c</sup>	Malaysia	High and semi-skilled	Regular updating Combination of labor market analysis and stakeholder consultations
Immediate Skill Shortage List <sup>d</sup>	New Zealand	High, semi-, and low-skilled	Geographic-area specific

Notes: <sup>a</sup> <http://www.visabureau.com/australia/consolidated-sponsored-occupation-list.aspx>.

<sup>b</sup> <http://www.visabureau.com/uk/shortage-occupations-list.aspx>.

<sup>c</sup> <http://www.talentcor.com.my/facts-and-figures/critical-occupations-list>.

<sup>d</sup> <http://skillshortages.immigration.govt.nz/immediate-skill-shortage-list.pdf>.

significant advantage of not requiring constant updating to reflect specific occupation- or skill-specific labor-market data. Its disadvantage, however, is that the hiring process is more time consuming for firms, which must show that they cannot hire local workers. In addition, as with any quota system, H1-B is often criticized for limiting access to foreign skilled labor. In the United States, for example, the number of applications from firms surpasses the allotted number of visas on a regular basis. If lists of critical occupations are not updated in a timely way, the system will fail to deliver necessary skills to firms.

Both approaches highlight the need to develop a labor-market information system (LMIS) capable of aggregating and regularly updating economy-wide information on employment, vacancies, the current labor market profile, and existing skill gaps. Bhutan's dedicated Labor Market Observatory (LMO)<sup>10</sup> could use LMIS information to develop labor market policy; of particular use would be information regarding employment, skills mismatches, and labor migration. Availability of these data would allow the RGoB to address current skill shortages, access foreign labor, and forecast future labor-market needs.<sup>11</sup>

### **2. Extend minimum wage provisions to non-Bhutanese workers to prevent wage suppression**

Extending minimum wage protection to foreign workers, at least partially, ensures that they will not contribute to wage suppression in low-skilled occupations. While some policy analysts support paying migrants lower wages than native-born workers, arguing that it decreases labor costs for employers and increases competitiveness, the advantages of ensuring that migrant workers receive at least the national minimum wage seem greater. Korea

actively implemented equal pay in its Employment Permit System (EPS), which controls temporary low-skilled employment. EPS workers in Korea not only receive at least the local minimum wage, they are also covered by several social policies (including pensions, where relevant). This ensures that employers do not hire foreign workers merely as a cheaper alternative to domestic ones.

In addition, extending minimum wage protection to foreign workers lowers the risk that foreign workers will slow down the speed of technological upgrading or support inefficient enterprises. If foreign workers are paid at least the minimum wage for a given occupation, the hiring firm must make the same cost-benefit analysis regarding alternative options, such as mechanization, as it would when hiring domestic low-skilled workers. In this case, the only reason to hire a foreign worker would be the lack of necessary skills among the native population or the distaste among native workers for specific occupations (in Korea, this includes jobs considered dangerous, degrading, or dirty).

### **3. Focus on skill and technological transfer from highly skilled foreign workers and on twinning and secondment programs**

In addition to a new foreign worker visa system that allows both Bhutanese and foreign firms to access necessary high-skilled labor, Bhutan must ensure that it benefits fully from the skill transfer realizable by temporarily hiring foreign workers. This objective might not be relevant in situations where highly skilled foreign workers are recruited to perform one-off projects, but it can be essential when capacity must be developed among the local population.

Some programs have successfully managed or aspire to achieve such skill transfers. This note sees such programs as complementary to other reforms that allow private sector firms access to high-skilled foreign talent when needed, and to programs that facilitate skill transfer at the managerial level (Santini, Tran, and Beath 2017). Nevertheless, despite the relevance of skill transfers for many developing and even developed countries, relatively

10 OECD defines LMO as a "technical platform designed to contribute to the development of an employment strategy through the provision of information, evaluation, and comparative research regarding employment policies and labor market trends."

11 See Kuddo (2015) for an in-depth review of LMOs. Use of LMOs has also been documented for countries such as Chile, Colombia, Egypt, Mongolia, Poland, and Tanzania. For more on Egypt, for example, see <https://www2.giz.de/wbf/4tDx9kw63gma/Establishing%20Regional%20Labour%20Market%20Observatories.pdf>.

**TABLE 6:** Examples of Programs Aimed at Skill Transfer between Highly Skilled Foreign Workers and Domestic Workers

Intervention	Country	Content	Outcomes	Key Relevant Features
International Twinning Partnerships for improving diagnosis, treatment, and care of children with cancer in low-income countries <sup>a</sup>	Malawi, Philippines	Locally led long-term training and technical support collaboration with a medical hospital/research center in a developed country	<b>Malawi:</b> 65 percent increase in access to treatment  60 percent increase in survival rates  <b>Philippines:</b> 160 percent increase in access to treatment  30 to 60 percent increase in survival rates	Local leadership and identification of training needs  Technical upgrading based on assessment of local capacity
Secondment arrangement for increasing health care sector capacity <sup>b</sup>	Botswana	Government-funded temporary hiring of skilled foreign workers in the health sector	1,827 workers trained in laboratory diagnostics  2,111 health workers trained in diagnosis and treatment of sexually transmitted diseases  National Cervical Cancer Prevention Program and Office of Strategy Management for strategic planning and project implementation established	Locally administered training and continuous day-to-day transfer of knowledge  Synchronization of system upgrades and training of necessary personnel  Locally identified needs
High-skilled migrants and intra-company transfer workers <sup>c</sup>	South Africa	Requirement to present a skill transfer plan that outlines how a high-skilled foreign worker will contribute to increased capacity of South African colleagues	N/A; the program has not been evaluated	Use of high-skilled immigration not only to address short-term skill shortages but also to address them longer term through skill transfer

Notes: <sup>a</sup> Hopkins, Burns, and Eden 2013.

<sup>b</sup> Grignon et al. 2014.

<sup>c</sup> Ernst and Young 2015.

scant documentation is available on the issue, with most experience coming from the health sector (see Table 6).

South Africa stands out as having formally embraced skill transfer when recruiting highly skilled foreign nationals (Ernst and Young 2015). In fact, in May 2014, South Africa changed its immigration law to require a skill transfer plan as part of the application for permission to hire a highly skilled worker. The policy is somewhat controversial. On

one hand, it requires companies to undertake the useful exercise of thinking through the skill transfer process in detail instead of merely assuming positive peer effects. On the other hand, unless the plan is monitored, the extent of its implementation will remain unclear. In addition, this requirement might make it tougher for SMEs, with their limited human resources capacity, to hire top talent. The effectiveness of the process has not yet been formally assessed.

Use of twinning or secondment arrangements is often a sector- or even a project-specific option. It could be especially useful for Bhutan, since it does not impose any new regulations on hiring foreign workers. The two programs are similar, except secondment allows continuous long-term presence of a foreign worker on-site for in-depth, day-to-day support, while twinning relies mostly on frequent phone or e-mail communication combined with short, intensive on-site trainings.

The up side to both approaches is that programs can be tailored to specific contexts and needs. In Bhutan, either could very effectively complement training conducted abroad.<sup>12</sup> Applications of these approaches in the Philippines, Malawi, and Botswana provide good examples of successful interventions for skill transfer in the health sector. In these cases, capacity building was successful precisely because local needs were identified and on-site training and support were then designed to transfer training and skills in the exact technical capacity needed on the ground (Hopkins, Burns, and Eden 2013). Botswana, in particular, demonstrated successful implementation of a secondment process, with some initial government support, strengthening capacity beyond the originally targeted hospitals (Grignon et al. 2014).

### C. EXTEND PENSION COVERAGE TO PRIVATE SECTOR WORKERS

Today, private sector jobs in Bhutan are rarely an aspiration. According to a recent survey of unemployed Bhutanese youth, close to 50 percent aspired to public sector jobs and another 30 percent hoped for jobs in a state-owned enterprise (MoLHR and UNDP 2014). This preference, however, seems driven more by differences in compensation packages for comparable jobs than by a wage differential. Development of a social protection strategy for private sector workers could help balance the attractiveness of public and private sector jobs.

<sup>12</sup> See Santini, Tran, and Beath 2017 for a more in-depth discussion of such programs.

A sizeable wage differential exists between public and private sector jobs. However, recent analysis finds the gap is almost entirely explained by differences in worker characteristics, such as education levels (Schmillen 2016). The same analysis shows that the preference for public sector jobs may be attributable to differences in access to pensions and other fringe benefits (such as overtime pay; paid leave, including annual, sick, casual, and maternity leave; and compensation for work accidents and occupational diseases). In fact, for each of these benefits, coverage among public sector workers easily exceeds 95 percent. At the same time, only about 30 percent of private sector workers receive pension benefits, overtime payments, or compensation for work accidents; about 40 to 50 percent enjoy paid annual and maternity or paternity leaves; and around 60 percent are covered by paid casual and sick leaves (Schmillen 2016).

The RGoB has already taken steps toward increasing the labor force's social protection coverage. All employees are supposed to receive a pension or provident fund, according to the Labor and Employment Act of 2007. Currently, however, the National Pension and Provident Fund (NPPF) covers only civil servants, government workers, employees of government-owned enterprises, and the army.<sup>13</sup> Pensions for private sector workers provided by Bhutan Royal Insurance Corporation and Bhutan Insurance Ltd reach only 5 percent of the Bhutanese labor force (Bhutan 2016). Increasing coverage to reach private sector workers is a primary objective of the ongoing pension reform, which addresses two key challenges: (i) the extension of the defined contribution scheme to private sector workers; and (ii) the increase in fiscal sustainability of the defined benefit scheme covering public sector workers. The NPPF Policy has been drafted and is scheduled for Cabinet approval before the end of calendar year 2017 (see Bhutan 2017).

A review of best practice social protection systems, in contexts similar to Bhutan's, shows that the optimal

<sup>13</sup> NPPF offers a two-tiered old age protection plan, providing both a monthly income and a lump sum payment to retired members. Tier 1 covers the National Pension Plan, a partially funded, defined benefit scheme. Tier 2 covers the National Provident Fund Plan, a fully funded, defined contribution scheme under which members receive lump sum payments of accumulated balances upon retirement.

policy for expanding pension coverage to private sector workers should: (i) provide incentives to participate for both employers and workers without discouraging formal employment; (ii) provide guaranteed minimum retirement income and rates of return comparable to other investments; and (iii) achieve fiscal sustainability. It should also guarantee an adequate income upon retirement to older or poorer workers, across both the public and the private sectors, who may lack sufficient time to benefit from the defined contribution scheme.

These considerations make the pension policy proposed in 2009 by the World Bank to RGoB still relevant (Palacios 2009).<sup>14</sup> That policy combined defined contributions and noncontributory social pension schemes. Table 7 provides examples of selected countries that have mostly successfully expanded their pension coverage using

<sup>14</sup> See also Holzmann et al. (2005) for additional background information and the framework used by the World Bank in its pension reform proposals.

**TABLE 7:** Examples of Interventions Aimed at Increasing Pension Coverage

Country	Content	Outcomes	Key Relevant Features
India <sup>a</sup>	National Pension System (NPS): a voluntary, defined contribution retirement savings scheme	14 million subscribers as of December 2016	Portability of benefits Flexibility in terms of the size and frequency of contributions Central record keeping
Kosovo <sup>b</sup>	Three-pillar pension scheme combining: (i) general revenue financed defined benefit “old-age” pension; (ii) mandatory, defined contribution scheme for formal sector workers; <sup>c</sup> and (iii) supplemental individual- and employer-financed options	Achieved nearly universal coverages from the baseline of only about half the elderly population covered under the old scheme	The combination of a universal pension, paid from general revenues rather than a wage tax, coupled with a sizable funded component Anchoring the universal pension to a real indicator, such as a poverty level Use of investment in European funds, as the country has no capital markets
Chile <sup>d</sup>	Pension scheme consisting of two categories: (1) mandatory 10 percent defined contribution pillar for formal workers, and (2) means-tested social pension (introduced in 2008) and top-up for those with insufficient contributions	Decreased poverty among elderly after introduction of the means-tested social pension	Means-tested social pension to prevent financial destitution among elderly Introduction of state-run pension fund in 2016 Elimination of hidden fees in 2016 <sup>e</sup>
Maldives <sup>f</sup>	Two-pillar pension system combined with a platform for efficiently administering and targeting other social protection support	More than 96 percent of elderly Maldivians received some public old-age security benefit in 2014, compared with less than 30 percent in 2007	Mechanism to allow the government to finance the switch from defined benefit to defined contribution pension Portable defined contribution component allows for movement between public and private sector

Notes: <sup>a</sup> NPS provides a cautionary note in that, despite its numerous desirable features uptake remained low, most likely because the plan did consider the saving and behavioral profile of the beneficiaries.

<sup>b</sup> Gubbels, Snelbecker, and Zegulin 2007.

<sup>c</sup> <http://www.latimes.com/business/hiltzik/la-fi-hiltzik-chile-social-security-20160812-snap-story.html>.

<sup>d</sup> Some sources cite a 1.6 percent decrease in poverty among the elderly after the solidarity means-tested pillar was introduced (see, for example, <https://www.forbes.com/sites/pensionresearchcouncil/2015/09/29/chiles-fabled-retirement-system-why-fix-it/#58e5fca91117>). Other research finds that by 2011 the solidarity pillar contributed to the 2.4 percent increase in the annual income of targeted households without crowding out of the private sector financing (Behrman et al. 2011).

<sup>e</sup> <https://www.economist.com/news/americas/21705850-pioneering-system-now-need-reform-perils-not-saving>.

<sup>f</sup> World Bank 2015c.

a similar combination of contributory schemes and noncontributory social pensions and cites features particularly relevant for Bhutan given its size, economic factors, and existing pension schemes.

A pension scheme that provides universal but fiscally sustainable pension coverage should offer sufficient incentives for participation. This could be achieved in several ways, as illustrated by the schemes presented in Table 7. One option is to make contributions tax deductible, as is the case in many countries in the Organisation for Economic Co-operation and Development (OECD). This option could only work as an incentive where a large percentage of individuals pay income tax, however.<sup>15</sup> As an alternative, governments could match contributions up to a certain limit for low income and informal workers, as is done in the state of Rajasthan in India (Palacios 2009) and in NPS.<sup>16</sup> In addition, accounting for potential seasonality of incomes, and allowing workers to vary their contribution schedule or amounts can provide additional incentives, since agriculture workers and those with unstable incomes need flexibility. Schemes in both India and Japan (see Table 7) have this feature.

At the same time, however, as the example of Chile shows, increasing workers' understanding of how much and how regularly they must contribute to achieve their desired level of income in old age is of paramount importance. One of the issues facing the Chilean pension system was its failure to examine the assumptions it made in promising workers replacement incomes of 70 percent of their last wages. The plan assumed that workers would contribute, without breaks, at least 10 percent of their income until age 65, but not all workers did so. Women, for example, are likely to take maternity leave at some point in their work lives, and the retirement age for women is 60, not 65. The assumed returns and fees were also not explicitly communicated (Mitchell, Todd, and Bravo 2008).

<sup>15</sup> A large proportion of those targeted by the new pension scheme in Bhutan likely do not.

<sup>16</sup> Additional experiences setting up matching contribution schemes for pensions in a wide range of countries can be found in Hinz et al. 2014.

Some examples in Table 7 also show that a centralized record keeping is not only an effective management technique but also, because it promotes pension scheme portability and reliability, an incentive for increased participation. With centralized records, each worker has a unique identifier in the pension database, and a pension account unattached to a specific employer; thus, even if workers change employers or switch between formal and informal employment, they can continue to accrue pension benefits. Centralized record keeping also makes it easier to ensure that records are reliable, a key requirement of a good pension scheme. From an administrative perspective, ensuring the quality of one centralized system is easier than monitoring a myriad of systems associated with multiple schemes. Finally, aggregation of information in one central system also makes it easier to provide workers with timely and accurate reports on the state of their pension savings and plans, which helps build trust in the system.

Most importantly, however, the incentives for worker participation and guarantees of minimal pension income must be designed to avoid creating disincentives for firms to offer formal employment contracts. Thus, the firm contribution should be voluntary, and preferably tax deductible, as in many OECD countries. Making employer contributions mandatory can lead to a decline in formal employment and GDP. For example, a simulation of Chile's current mandatory, employer-side 5 percent pension contribution demonstrated that it could be perceived as a labor tax and would likely result in a 0.5 percent GDP decline by 2021 (Santoro 2017). Similarly, noncontributory social pensions might best be financed not through a wage tax (such as the U.S. Social Security scheme), but from a general tax expenditure. For example, Kosovo's decision not to use the wage tax to finance pension expenditures likely reduced potential negative effects on formal employment or hours worked.

To be successful and sustainable, contributory pension schemes should provide rates of return comparable to those of other investments (Palacios 2009). To achieve this result, investment funds should aim to maximize

gross returns, be mindful of the trade-offs between risk and return, and minimize the cost of asset management and other administrative fees.<sup>17</sup>

Increasing gross returns, given that Bhutan is a small economy, might require further diversification of the pension fund investment portfolio. Exposure to international markets has risks, but it also offers potential gains, given sufficient diversification. Schemes adopted in Kosovo (which relies on investment in European and global funds), Norway (which heavily invests in global markets outside Norway), and Botswana (which relies on investment in neighboring South Africa) all serve as good examples of the benefits of portfolio diversification. Bhutan's current policy allows only 10 percent of funds to be invested internationally. To the extent possible, therefore, pension funds should be exempt from regulations limiting the ability to minimize investment-related risks only through the domestic market, a restriction that will ultimately hamper performance.

The return performance of pension funds is also subject to other factors. East Asian countries, many of which have only recently adopted the defined contribution approach to both public and private sector pensions, can serve as a reference point for other factors affecting returns in such schemes, including earnings profiles, participation rates, and presence of other mandatory schemes.<sup>18</sup>

On the cost side, pension fund management charges, usually in the form of fees, can have a significant effect on net rates of return from pension investments. To the extent that economies of scale matter, especially in a country as small

as Bhutan, this consideration would discourage the creation of multiple parallel entities for managing various pension schemes.<sup>19</sup> Some countries, like Sweden, have established centralized administration and record keeping in combination with competitive pension fund investments.<sup>20</sup>

While the RGoB actively considers introducing noncontributory social pensions, it might benefit from introducing a universal social pension approach, and graduating to a need-based one as the contributory system matures. Providing universal social pensions with guaranteed minimum incomes for all the Bhutanese over a certain age has been shown to be less costly than might be anticipated. Specific simulations prepared by the World Bank (Palacios 2009) show that providing universal minimum incomes for the elderly can cost the government as little as 0.5 to 1 percent of gross domestic product (assuming an eligibility age of 65 and a benefit of 15 percent of income per capita).

Lastly, regarding fiscal sustainability, the approach proposed in the World Bank in 2009 warned against expanding defined contribution occupational pension schemes, because such undertakings have the potential to significantly increase the government's liability. This remains pertinent and it is an essential concern given that, per the National Statistics Bureau, declining fertility and rising life expectancy will result in doubling the number of older persons nearing retirement age by 2030 (Bhutan 2005), and given that recent analysis of the public sector shows that profits from hydropower will peak in the next decade, while social protection needs will continue to expand (World Bank 2015a). Current coverage levels could also make it challenging for the government to address its growing liabilities (Bhutan 2017).

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17 See Palacios (2009) for a more in-depth view of the optimal risk profile trade-off between the investment and the amount of choice that should be offered to allow beneficiaries to express their risk preferences. In addition, selection of a scheme should involve evaluating costs to beneficiaries, such as the cost of maintaining a banking account (which has been significantly adjusted under the Indian NPS scheme, for example) or for accessing the pension funds. If funds can only be withdrawn through a bank or an ATM, for example, the scheme might not be useful in areas with low levels of financial infrastructure development (as in the case of Uzbekistan).

18 For a detailed critical overview of these experiences, and relevant policy suggestions, see chapter 3 of World Bank 2016c.

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19 See Sluchynskyy (2015) for a more in-depth discussion. Sluchynskyy provides cross-country evidence of economies of scale based on a sample of 104 public pension funds from 87 countries and finds that administrative costs per beneficiary fall by half when moving from 100,000 to 500,000 participants and by another 25 percent with 2 million participants.

20 In terms of managing pension fund reserves, Palacios (2002) reviews strategies for limiting risks arising when a public entity is entrusted with managing national pension savings, and he draws lessons from recent reforms in five OECD countries.

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