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#### INTERNATIONAL DEVELOPMENT ASSOCIATION

#### PROGRAM APPRAISAL DOCUMENT

ON A

#### PROPOSED CREDIT

#### IN THE AMOUNT OF US\$125 MILLION

#### TO THE

#### **REPUBLIC OF INDIA**

#### FOR A

## SKILLS STRENGTHENING FOR INDUSTRIAL VALUE ENHANCEMENT OPERATION

February 8, 2017

Education Global Practice South Asia Region

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# CURRENCY EQUIVALENTS

# (Exchange Rate Effective as of January 23, 2017) Currency Unit = Indian Rupees (INR) INR 68.18 = US\$1

## FISCAL YEAR

# April 1 – March 31

## ABBREVIATIONS AND ACRONYMS

AHI	Apex Hi-Tech Institute
ATI	Advanced Training Institute
ATS	Apprenticeship Training Scheme
CAG	Comptroller and Auditor General
CFI	Centrally Funded Institute
CITS	Craft Instructors Training Scheme
CPD	Continuous Professional Development
CPS	Country Partnership Strategy
CQS	Selection Based on Consultants' Qualifications
CSTARI	Central Staff Training and Research Institute
CTI	Central Training Institute
CTS	Craftsmen Training Scheme
DGS&D	Directorate General of Supplies and Disposals
DGT	Directorate General of Training
DLI	Disbursement Linked Indicator
DLR	Disbursement Linked Result
ESSA	Environmental and Social Systems Assessment
FA	Framework Agreement
FM	Financial Management
FSA	Fiduciary System Assessment
GDP	Gross Domestic Product
GFR	General Financial Rules
GO	Government Order
GoI	Government of India
IAI	Industry Apprenticeship Initiative
IC	Industry Cluster
ICB	International Competitive Bidding
ICT	Information and Communication Technology
IMC	Institute Management Committee
IPF	Investment Project Financing
IRR	Internal Rate of Return

ISP	Institute Strategic Plan
IT	Information Technology
ITI	Industrial Training Institute
IVA	Independent Verification Agency/ies
JRM	Joint Review Mission
LWE	Left Wing Extremism
M&E	Monitoring and Evaluation
MSME	Micro, Small, and Medium Enterprise
MIS	Management Information System
MoU	Memorandum of Understanding
MSDE	Ministry of Skill Development and Entrepreneurship
NCB	National Competitive Bidding
NCS	Non Consulting Services
NCVT	National Council for Vocational Training
NIMI	National Instructional Media Institute
NPIU	National Program Implementation Unit
NPV	Net Present Value
NSDM	National Skill Development Mission
NSQF	National Skills Qualifications Framework
NVTI	National Vocational Training Institute
ODL	Open and Distance Learning
OBC	Other Backward Class
OHS	Occupational Health and Safety
OJT	On-the-Job Training
OM	Operations Manual
PAP	Program Action Plan
PB	Performance-Based
PDO	Development Objective
PforR	Program for Results
PMC	Program Management Consultant
PPP	Public-Private Partnership
RDAT	Regional Directorate of Apprenticeship Training
RTI	Right to Information
RVTI	Regional Vocational Training Institute
SC	Scheduled Caste
SDIS	Skill Development Initiative Scheme
SIMO	Skill India Mission Operation
SME	Small and Medium Enterprise
SORT	Systematic Operations Risk-Rating Tool
SPIU	State Program Implementation Unit
SSDM	State Skill Development Mission
SSS	Single-Source Selection
ST	Scheduled Tribe
STEP	Systematic Tracking of Exchanges in Procurement
STRIVE	Skills Strengthening for Industrial Value Enhancement
TA	Technical Assistance

TL	Teaching and Learning
ToR	Terms of Reference
TVET	Technical and Vocational Education and Training
VTIP	Vocational Training Improvement Project

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# INDIA

# **Skills Strengthening for Industrial Value Enhancement Operation**

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# PAD DATA SHEET

## India

Skills Strengthening for Industrial Value Enhancement Operation

# PROGRAM APPRAISAL DOCUMENT

South Asia Region

Education Global Practice

Basic Information							
Date:	February 8, 2	2017	Sectors:	Education			
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Program ID:	P156867						
Team Leader(s):	Muna Salih N	/leky/					
Denis Medvedev							
Program Implementation Period:	Start Date:	04/15/2017	End Date:	11/30/2022			
Expected Financing Effectiveness Date:	07/10/2017						
Expected Financing Closing Date:	11/30/2022						

	Program Financing Data									
[]	Loan	[] Grant		[] Other						
[ X]	Credit									
For L	For Loans/Credits/Others (US\$, millions):									
Total I Cost:	Program	a 318.00			Total Bank Financing:	12	5.00			
Total ( financi	Co- ing:	0.00			Financing (	Gap:	0.00			
Finan	cing So	urce			Amount					
BORR	OWER	/RECIPIENT	1		193.00					
IBRD/	'IDA				125.00					
Total	Total 318.00									
Borrov	wer: Rej	public of Indi	a							
Respon	nsible A	gency: Minis	stry of Skill D	evelopment	and Entrepre	neurship				
Contact: Mr Asheesh Sharma Title: Joint Secretary										
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Expec	ted Dis	bursements (	(in US\$, milli	ions) Progra	am for Resul	ts (PforR)				
Fiscal	Year	2018	2019	2020	2021	2022	2023			
Annua	.1	11.2	18.2	27.2	20.4	30.0	13.0			
Cumul	ative	11.2	29.4	56.6	77.0	107.0	120.0			
Other	rwise E	xpected Disb	ursements (i	n US\$, milli	ons) – IPF ('	TA Compo	nent)	Į		
Fiscal	Year	2018	2019	2020	2021	2022	2023			
Annua	.1	1.0	1.0	1.0	1.0	0.5	0.5			
Cumul	ative	1.0	2.0	3.0	4.0	4.5	5.0			

## **Program Development Objective(s)**

To improve access to quality and market-driven vocational training provided in ITIs and apprenticeships

	Compliance			
Policy				
Does the program depart from the CAS in conte significant respects?	nt or in other	Y	Yes []	No [X]
Does the program require any waivers of Bank p applicable to Program-for-Results operations?	policies	Y	Yes []	No [X]
Have these been approved by Bank managemen	t?	Y	Yes []	No []
Is approval for any policy waiver sought from the	ne Board?	Y	Yes []	No [X]
<b>Overall Risk Rating: Moderate</b>	·			
Legal Covenants				
Name	Recurrent	Due Date	Fr	equency
National Program Implementation Unit	X	N/A	Th	roughout

#### **Description of Covenant**

Government of India (GoI) to maintain a national program implementation unit (NPIU) within the Directorate General of Training (DGT) for the carrying out of the day-to-day implementation of the Operation

implementation

Name	Recurrent	Due Date	Frequency
Program Management Consulting Firm	Х	1 year after effectiveness	Throughout implementation

#### **Description of Covenant**

MSDE to select and engage the services of a program management consulting firm (PMC) in order to assist the NPIU and the State Program Implementation Units (SPIUs) with the Operations planning and implementation.

Name	Recurrent	Due Date	Frequency
State Program Implementation Units	Х	3 months after the	Throughout
		signing of	implementation

	Performance-Based	
	Funding-MoU	

#### **Description of Covenant**

Participating States to establish and maintain SPIUs within the respective line Department responsible for the long-term training, to serve the state-level focal unit for the carrying out of the day-to-day implementation of the Operation's activities within the respective State.

Name	Recurrent	Due Date	Frequency
Safeguards	X	N/A	Throughout implementation

#### **Description of Covenant**

GoI to: (i) carry out the Project (IPF component), or cause it to be carried out, in accordance with the Tribal Peoples' Policy Framework and each additional assessment or plan required to be prepared and implemented thereunder; and (ii) ensure that the it is benefiting from the Operation maintain functional environment and social management systems guaranteeing Industrial Training Institute's (ITI) compliance with the GoI's relevant environmental and social regulations prevalent at the time, including those related to safe work environment for staff and students alike.

Name	Recurrent	Due Date	Frequency
Operations Manual	Х	N/A	Throughout implementation

#### **Description of Covenant**

GoI to prepare, approve and implement an Operations Manual, and thereafter carry out the Operation, and cause the participating States, the ITIs/Institute Management Committees (IMCs), and Industry Clusters (ICs) to carry out their respective activities under the Operation, in accordance therewith.

Name	Recurrent	Due Date	Frequency
Program Action Plan	Х	N/A	Throughout
			implementation

#### **Description of Covenant**

GoI to implement the agreed Program Action Plan

Name	Recurrent	Due Date	Frequency
Industry Apprenticeship Initiative (IAI) Grants	X	N/A	Throughout implementation

#### **Description of Covenant**

GoI to: (a) though the participating States, invite ICs to submit IAI proposals for financing through IAI Grants in accordance with the Operations Manual; (b) screen the IAI proposal in accordance with the protocols and eligibility criteria set forth in the Operations Manual; and (c) enter into tri-partite written agreements (with the respective participating state and the awardee IC) for the provision of the IAI Grant under terms and conditions set forth in the Operations Manual and the Financing Agreement.

Name	Recurrent	Due Date	Frequency
Performance-Based (PB) Grant Agreement for ITIs	Х	N/A	Throughout implementation

#### **Description of Covenant**

GoI to ensure that the participating States: (a) invite ITIs to submit Institute Strategic Plans (ISPs) for financing through PB Grant Agreements in accordance with the Operations Manual; (b) screen the ISP proposals in accordance with the protocols and eligibility criteria set forth in the Operations Manual; and (c) enter into tri-partite written agreements (with MSDE and the awardee ITI) for the provision of the performance based grant under terms and conditions set forth in the Operations Manual and the Financing Agreement.

Name	Recurrent	Due Date	Frequency
Performance-Based Funding for Participating States	Х	N/A	Throughout implementation

#### **Description of Covenant**

GoI to invite all States to enter into MoUs with GoI for the provision of performance-based funding terms and conditions set forth in the Operations Manual and the Financing Agreement.

Name	Recurrent	Due Date	Frequency
Gender Study	N/A	1 year after effectiveness	N/A

#### **Description of Covenant**

GoI to carry out a gender study on terms and conditions agreed with the Association to determine the demand and supply side constraints for women to undertake skills training and/or be part of apprenticeship initiatives, and thereafter transition into the labor market.

Name	Recurrent	Due Date	Frequency
DLI Verification Protocols	X	N/A	Throughout
			implementation

#### **Description of Covenant**

GoI to undertake the verification process to certify the fulfillment of the DLIs in accordance with terms of reference agreed with the Association.

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Jeil Butcher   Consultant		Johannesburg		
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## I. STRATEGIC CONTEXT

## A. Country Context

1. **India has become the world's fastest growing large economy.** India's gross domestic product (GDP) grew by 7.6 percent in 2015–16 steadily recovering from a low of 5.1 percent in 2012–13. This GDP growth was largely supported by robust consumption growth on the expenditure side and strong growth in the services sector, averaging more than 9 percent between 2012 and 2015, on the production side, although a recovery of industrial value added in 2015–16 was notable. With growth, poverty has declined rapidly from 38.9 percent in 2004–05 to 21.6 percent in 2011–12 (1.90 purchasing power parity per day) at a pace significantly faster than that witnessed in earlier periods. Poverty reduction was supported by greater rural-urban integration, increase in nonfarm wage employment, especially in construction, and higher rural wage growth. Given the cooling of the latter two trends in the past three years, it is likely the pace of poverty reduction moderated.

2. **Going forward, India's growth prospects remain bright.** A million youth will enter the labor market every month for the next two decades, and India will soon have one of the youngest and largest working-age populations in the world. These demographic dynamics and a rising age-savings profile are likely to generate significant volumes of savings and investment over the coming years. The average schooling of the working-age population—and, consequently, worker productivity—will increase by at least a full year until 2030 even with no further improvements in the educational attainment of today's youth (that is, simply because younger cohorts are better educated) and could rise much faster if further progress is achieved on the education agenda. The proportion of population living in urban areas is expected to rise to 40 percent in 2030 from around 30 percent today, reinforcing productivity-boosting agglomeration effects. Combined, these effects are likely to form the foundations of India's strong growth for decades to come.

3. To realize these benefits, further efforts will be required to harness the full potential of the demographic transition. A striking feature of India's labor market is the extremely low (31 percent) female labor force participation. More than 50 million of India's young women are neither studying nor working. In addition, at present, 4.9 percent of working-age people are unemployed and 82 percent work without any written job contract,<sup>1</sup> more than 70 percent work in firms with less than 10 employees, and more than 75 percent have no access to any social security benefits—attesting to the large size of the informal sector and a relative scarcity of 'good' jobs. These challenges could inhibit India's ambition to further modernize its economy by attracting resources to dynamic, high-productivity manufacturing and services sectors. To address these, the Government has taken important steps toward a reform agenda focused on job creation through improving the business environment, particularly in the manufacturing sector. The 'Make in India' campaign launched by the prime minister in 2014 has identified reforms in energy supply, access to finance, and upgrading skills as key priorities.

<sup>&</sup>lt;sup>1</sup>Fourth Annual Employment and Unemployment Survey Report (2013–14); Labour Bureau, Ministry of Labour and Employment, Government of India.

#### **B.** Sectoral (or Multisectoral) and Institutional Context

4. **Despite pockets of excellence, India's manufacturing sector as a whole has thus far underperformed its potential**. While India has had success in increasing the variety of products it exports and the number of destinations, its penetration of global merchandise markets—including in key sectors such as apparels, automotives, and electronics—remains low in absolute terms (it accounts for 1.5 percent of global exports of goods). India's manufacturing contributes just over 17 percent to GDP, having remained largely unchanged in the last two decades. This share is low relative to many comparator success countries such as Brazil, China, Indonesia, Korea, or Malaysia, which at India's current GDP per capita levels either stood at or accelerated to the mid-20 or high-20 percent range (figure 1).<sup>2</sup> Consequently, India's National Manufacturing Policy of 2011 envisages a structural transformation of its economy through increasing the share of the manufacturing sector in GDP to 25 percent with a related job creation potential of 100 million by 2022.





5. The development of a globally competitive manufacturing sector requires creating a cadre of comprehensively skilled technicians. Achievement of the ambitious goals outlined in the National Manufacturing Policy and embodied more broadly in the authorities' 'Make in India' campaign requires addressing a series of binding constraints holding back further development of manufacturing in India. The main constraints—as summarized and validated in the World Bank Group-India Country Partnership Strategy (CPS: Report Number 76176-IN) for

<sup>&</sup>lt;sup>2</sup> Some authors have pointed out that the peak contribution of the manufacturing sector to GDP (that is, the level of development at which a country attains its highest manufacturing share) may be declining over time – the so-called premature deindustrialization. For example, Amirapu and Subramanian (2015) argue that India's share of manufacturing may have already peaked and is unlikely to reach levels observed in China and Korea in earlier decades. Amrit Amirapu and Arvind Subramanian. 2015. *Manufacturing or Services? An Indian Illustration of a Development Dilemma*. Center for Global Development Working Paper No. 408.

2013-17, and its recent Performance and Learning Review—include infrastructure provision, access to finance, regulatory environment, and limited supply of adequately skilled labor. To address these constraints, the authorities have launched a series of ambitious initiatives including 24/7 electricity for all, railways modernization, Doing Business ranking of 50 or above, smart cities, and a comprehensive 'Skill India' campaign aiming to equip 500 million youth with skills to ensure India's global competitiveness by 2020.

6. **Skilled workers continue to be in high demand.** A good labor market position of graduates indicates the growing industry demand for skilled workers.<sup>3</sup> Data from labor market surveys in India have shown that individuals with formal vocational education training have a higher probability of being salaried workers (rather than being casual workers, self-employed, or unemployed) than individuals coming to the labor market with only general secondary education. Data also show that they benefit from a substantial wage premium (about 18 percent in 2011–12). As 46 percent of Industrial Training Institute (ITI) trainees are from below poverty line households,<sup>4</sup> comprehensive skills training also provides an effective pathway for youth from poor backgrounds into employment.

7. **Creating a stronger pipeline of skilled workers requires greater access to highquality long-term skills training**. The skills training landscape in India is characterized by both market and institutional failures. Since firms cannot fully appropriate returns from skilling workers, the private sector underinvests in training (for example, only 37 percent of Indian auto sector firms provide training to their workers versus 90 percent in China). The public vocational training system represents the authorities' response to this market failure: in particular, with their focus on technical skill areas, apprenticeship programs and ITIs form the backbone of long-term training for developing an increasingly competitive and well-qualified workforce capable of flexibly adapting to changing world markets and technological progress. However, these systems themselves face a series of challenges in adapting to increasingly dynamic industry demands: previous approaches to apprenticeship were deemed complex by firms and insufficiently attractive by workers, whereas the curriculum taught at many ITIs was often dated and not reflective of current industry needs due to lack of performance incentives.

8. At the national level, long-term skills development is coordinated by the Directorate General of Training (DGT) in the Ministry of Skill Development and Entrepreneurship (MSDE). While the Apprenticeship Training Scheme (ATS) is a three-year training scheme combining school-based and workplace learning provided by industry, the Craftsmen Training Scheme (CTS) is predominantly a 2-year<sup>5</sup> school-based training provided in ITIs. The ATS and CTS provide alternative, yet articulated pathways to formal skills qualifications.<sup>6</sup> Apprenticeship training is managed under the aegis of the MSDE with Regional Directorates of Apprenticeship Training (RDATs) and state apprenticeship advisers driving implementation at the ground. ITIs

<sup>&</sup>lt;sup>3</sup> Employment rates at ITIs are also high at around 60 percent compared to 30 percent for short-term training courses offered as part of five largest government-funded schemes.

<sup>&</sup>lt;sup>4</sup> CENPAP. 2012. Tracer Study of ITI Graduates in India.

<sup>&</sup>lt;sup>5</sup> Only 10 percent of ITI courses are one-year training programs, and the remaining 90 percent are two-year programs.

<sup>&</sup>lt;sup>6</sup> Two years of ITI training is recognized as equivalent to the first two years of apprenticeship training. ITI graduates can continue their technical training in an apprenticeship program and only need another six months to one year of training in a company to be eligible to sit for the Apprenticeship Training Certificate.

are under state governments, which own, run, and fund government ITIs and supervise private ITIs. The regulatory and quality assurance functions (curriculum development, assessment, and certification) for the CTS and ATS are largely carried out at the national level by the National Council for Vocational Training (NCVT), assisted by different central government institutions such as the National Instructional Media Institute (NIMI) and the Central Staff Training and Research Institute (CSTARI). Complementing the long-term skills development space, short-term training programs (approximately 3–6 months) under the MSDE and other ministries offer employability and skills upgrading training to a variety of target groups, training approximately 7 million youth per year (table 1). A National Skills Qualifications Framework (NSQF) has recently been formulated and will foster articulation and coordination between the different skills development schemes.

Training Program	Enrollment
CTS provided in ITIs	1,960,000
ATS	215,000
Short-term training programs	6,900,000

Table 1. Enrollment in Training Schemes (2014–15)

9. The potential resources for skills development provided through apprenticeship training and in the relatively large ITI network in India remain underutilized. Opportunities to strengthen the responsiveness of the training supply to the development needs of India as well as to the skills requirements in the labor market can be further exploited. In its National Policy for Skill Development and Entrepreneurship of 2015, and its related implementation framework, the Government highlights its intention to strengthen capacities and relevance of apprenticeship training and ITIs. It has thus laid the foundation for a substantial policy shift toward institutional reforms focusing on results orientation, decentralized responsibilities and initiatives, systematic strengthening of industry influence, and building sustainable structures to increase efficiency and quality in training management and delivery. Delivering on this mandate will require transformative thinking for (a) modernizing and expanding apprenticeship training in line with market needs; (b) enhancing performance and accountability of ITIs through systematically deepening the involvement of industry; (c) improving teacher training and teaching and learning (TL) resources and addressing the need for 'soft' skills (such as information literacy, problem solving, critical thinking, entrepreneurialism, and 'learning to learn'), and (d) addressing the gap in female participation and access for scheduled tribes (STs).

#### Modernizing and Expanding Apprenticeship Training

10. Apprenticeship systems provide for formally recognized demand-responsive training, which is driven by industry and predominantly delivered in companies. International experience shows that apprenticeship training facilitates an early link of learners to the labor market and is the most effective means for youth to transition to the labor market and acquire skills required in a rapidly changing labor market.<sup>7</sup> Apprenticeship training is attractive

<sup>&</sup>lt;sup>7</sup> See, for example, Arvil Van Adam. 2007. *The Role of Youth Skills Development in the Transition to Work: A Global Review*. World Bank; Constanza Biavaschi, Werner Eichhorst, Corrado Giulietti, Michael J. Kendzia, Alexander Muravyev, Janneke Pieters, Nuria Rodriguez-Planas, Ricarda Schmidl and Klaus F. Zimmermann. 2012. *Youth Unemployment and Vocational Training. Background Report to the World Development Report 2013*.

for youth, especially from vulnerable families, because it combines earning with the possibility to obtain an educational certificate that is recognized in the market. In modern apprenticeship systems, training is increasingly delivered in a dual approach systematically combining workplace learning in a company with theory and basic skills training modules in a training institution. The dual mode of training improves learning outcomes and is especially successful in developing transferable and soft skills allowing for better labor mobility of graduates. Recent research in India<sup>8</sup> has also documented beneficial cost-benefit relations for companies participating in apprenticeship training, but findings are largely unknown among firms.

The amendment of the Apprentices Act in 2014 introduced new provisions for 11. enhanced flexibility and demand responsiveness in the apprenticeship system in India. The previous design of the Indian apprenticeship system posed challenges to fully utilize the potential of quality and relevant employer-led training that characterizes modern apprenticeship training. The lack of responsiveness of apprenticeship curricula to market needs coupled with rigid program structures and bureaucratic apprenticeship management was a disincentive for companies to participate. Furthermore, the apprenticeship program did not follow the dual approach of integrating workplace learning with school-based basic training. Consequently, by international standards, the involvement of Indian firms in apprenticeship training is relatively low. Only around 212,000 trainees are annually enrolled in the ATS in 28,500 establishments representing about 0.05 percent of India's workforce. With the recent introduction of 'optional trades' through the amended Apprentices Act, companies can now design needs-based apprenticeship programs and register participants against their apprenticeship quota. Furthermore, companies involved in formal apprenticeship programs are now permitted to involve a third-party training provider to run basic training modules. Large companies have started to make use of the new opportunities and developed dual apprenticeship programs. However, small and medium enterprises (SMEs) do not have the capacities and financial resources to do the same, although discussions showed their substantial interest to get involved in new, improved, and needs-based programs. As argued by the World Development Report 2013 Background Paper on Youth Unemployment and Vocational Training,<sup>9</sup> most countries will benefit from strengthening feasible, 'light' forms of dual training, possibly involving sectoral or regional clusters of firms, larger (including foreign-owned) firms in modern sectors, or sectoral training schemes run by employer associations. Further system reforms are required in India to improve the mechanism to ease entry of SMEs into dual apprenticeship training through flexible delivery and support to cluster formation. These need to be complemented by effective instruments to recognize new apprenticeship trades in line with industry needs and an increased emphasis on the quality assurance mechanism and capacity development initiatives of major stakeholders including company apprenticeship supervisors and teachers and managers of basic training institutions.

#### **Performance and Accountability of ITIs**

<sup>&</sup>lt;sup>8</sup> See also Rothboeck, Sandra. 2014. Using Benefit Cost Calculations to Assess Returns from Apprenticeship Investment in India: Selected SME Case studies. International Labour Office.

<sup>&</sup>lt;sup>9</sup> Constanza Biavaschi, Werner Eichhorst, Corrado Giulietti, Michael J. Kendzia, Alexander Muravyev, Janneke Pieters, Nuria Rodriguez-Planas, Ricarda Schmidl and Klaus F. Zimmermann. 2012. *Youth Unemployment and Vocational Training. Background Report to the World Development Report 2013*. World Bank.

12. The Government recognizes that future investment in ITIs needs to focus on improving access and deepening the labor market responsiveness of skills development institutions. The number of ITIs has doubled from 2007 to 2014, driven mainly by an expanding private sector. There are currently approximately 13,000 ITIs, enrolling almost 2 million students per year, of which 70 percent are in private ITIs. Institutional conditions with regard to availability of teachers and training equipment, and thus training quality, differ significantly among states and between urban and rural areas.



**Figure 2. Enrollments in Education and Training (2014–15)** 

13. The World Bank started its first project in support of vocational training in 1989.<sup>10</sup> This experience substantiated by considerable analytical studies has revealed an ongoing need for critical reforms. Overall, three specific challenges have been identified as critical to ensuring that ITIs are fully responsive to the needs of both the supply and demand side of the labor market.

14. **First, linking public funds to proof of performance can incentivize institutions to effectively design and implement quality programs.** Even with the recent expansion in ITIs, only a small number of youth transit from secondary schools to formal vocational training (figure 2). Recent evidence suggests that average capacity utilization in government ITIs stands at about 80 percent,<sup>11</sup> but most ITIs neither drop under-enrolled courses nor systematically use spare capacities for employment-oriented short-term programs. There are limited incentives to encourage the institutions' management to increase their intake. Women constitute less than 10 percent of the total trainees enrolled in ITIs across India, and most ITIs are not incentivized to remove constraints to low participation of women and other vulnerable groups. While introducing a more transparent and objective way to disburse funds, performance-based funding will encourage ITIs to expand enrollments based on labor market needs, start partnerships with companies, purchase and use appropriate technology, regularly update curricula and improve TL methods, and provide more autonomy to institutions to achieve results.

15. Second, industry involvement in ITIs is emerging but needs to be strengthened to improve labor market outcomes for youth who attend. A considerable number of partnerships have emerged between public skills development institutions and companies that support training

<sup>&</sup>lt;sup>10</sup> Vocational Training Project 1989–1998, Credit 2008-IN/Loan 3045-IN.

<sup>&</sup>lt;sup>11</sup> This is an approximate number since the MSDE does not have accurate data on available seats across all government ITIs as yet.

providers with technical and material support and provide on-the-job training (OJT) opportunities and employment for graduates. However, such arrangements typically remain limited to urban areas with vibrant industrial ecosystems. For improving industry linkages in ITIs, the Government of India (GoI) encouraged the establishment of Institute Management Committees (IMCs), constituted from industry partners, in government ITIs. By 2015, 75 percent<sup>12</sup> of all government ITIs had established IMCs. Nevertheless, moving forward, there is agreement on the need to more systematically link ITIs to the local economic environment through empowered IMCs and provide incentives to offer training courses that serve the local market.

16. Third, the regulatory and support environment for ITI operations at the state level needs to be further strengthened to leverage industry engagement. State-level commitment to developing the long-term training supply and aligning ITI operations with the needs of the labor market varies considerably. In some states, ITIs are restricted with little responsibility given to IMCs. Investment in providing sufficient teachers and principals to ITIs and funding teacher training and upgrading differs among states. Most states do not have a functioning system for collection and analysis of management information from their ITIs nor do they conduct tracer studies to monitor training effectiveness after graduation. There is a need to improve the linkages between state-level and central-level monitoring to improve India's capacities for monitoring and planning its long-term skill development resources. Increasing cooperation and synergy in the wider ITI network is another approach.

## **Teacher Training and TL Resources**

17. Teachers and managers of training institutions are the key to quality skills development. Principals and teachers in government and private ITIs, as well as in basic training institutions for apprenticeship training, often lack technical and pedagogical competencies, management skills and leadership, and sufficient industrial exposure. Recent NCVT regulations require that teaching staff in ITIs are obliged to obtain the pre-employment Craft Instructors Training Scheme (CITS) qualification within three years. Annual CITS training capacities, however, are limited to 10,000, and only 50 percent of the around 90,000 currently employed teaching staff in the government and private ITI space are formally qualified. In addition, many ITIs cannot afford to release their teaching staff for a full calendar year, which is the duration of the Program. In 2015, the NCVT also issued a guideline requiring all ITI instructors to undergo refresher training for 3–4 weeks every five years. Some ITIs, which maintain close relationships with industry, have introduced industrial attachments of teaching staff to upgrade practical competencies, and this has proven to be an efficient and effective option for specialized skills upgrading.

18. **Focusing on outcome-based TL resources will support teachers to raise quality and relevance in ITI and apprenticeship training**. The adoption of the NSQF initiated a reform toward outcome-based training in India representing a key step toward improved labor market relevance in skills development. The concept of resource-based learning is important for enriching the communication between students and teachers through the use of different media

<sup>&</sup>lt;sup>12</sup> This number includes only the ITIs that have signed a formal Memorandum of Understanding (MoU) with the IMCs. An advisory was issued by the MSDE encouraging all government ITIs to constitute IMCs for which implementation data are unavailable.

involving various forms of student support, for example, tutorials, peer group discussion, or practical work.

Information and communication technology (ICT)-supported training solutions, 19. and aligning contents and methodologies with international standards, have a huge potential to improve learning outcomes and to increase quality and access in teachers training. While some progress has been made during recent years in rolling out ICT infrastructure to ITIs and teacher training institutions, the potential of this infrastructure is underused so far. The GoI has invested in the development of new teaching media as well as technology-supported materials for teacher training. It has recently introduced a hub-and-spoke model for distance training of ITI teaching staff with support from the World Bank-funded Vocational Training Improvement Project (VTIP). However, the scope of coverage of these innovations remains limited, and the design of materials and programs is largely focused on transmission of theoretical information to passive learners. Investment in new and improved TL resources and methodologies-using modern technologies and distance education delivery-will first support the Government to improve the relevance and quality of training in ITIs and apprenticeships. Second, it will raise the efficiency and effectiveness in teacher pre- and inservice training, thus improving the competencies and skills of teaching staff and at the same time—through increasing the outreach—enhancing the availability of competent teachers in the system. Distance education, including the use of ICT, has been used to support teacher education in numerous parts of the world. Studies concluded that these technologies were not significantly different from regular classroom learning with regard to effectiveness.<sup>13</sup> However, it is widely acknowledged that distance education is particularly appropriate to reach widely dispersed teacher populations without disrupting their personal, professional, and social lives. It best suits countries where face-to-face institutions cannot respond urgently and adequately to increasing demands for teacher education due to lack of space and facilities.<sup>14</sup>

## Addressing the Gap in Female Participation and Access for STs

20. **Broadening the range of training options and creating a more conducive learning environment is important to attract more young women and youth from vulnerable population groups into long-term technical training.** Female and ST participation in long-term technical training is extremely low. There are government norms on reservation of seats in ITIs for women, STs, and scheduled castes (SCs). While SCs are represented relatively well, with around 8.8 percent SC student population against an average of 11 percent reservation of seats across states, the representation of STs and women is very low. In the entire ITI space, STs constitute only 1.35 percent of the students, despite a reservation of 7.5 percent of seats on average across states and an ST share in the total population of 8.6 percent. Factors influencing these outcomes go beyond the economic: there are cultural barriers and social biases that affect the demand for skills by those belonging to disadvantaged groups. Recent studies of ST

<sup>&</sup>lt;sup>13</sup> Barbara Means, Yukie Toyama, Robert Murphy, Marianne Bakia and Karla Jones. 2009. *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*. Washington, DC: U.S. Department of Education.

<sup>&</sup>lt;sup>14</sup> http://www.adeanet.org/adea/biennial2003/papers/4E\_WGDEOL%20Maurice\_ENG\_final.pdf. See also Sampong, K.O. 2009. An Evaluative Study of a Distance Teacher Education Program in a University in Ghana; and Chiero, R., and P. Beare. 2010. "An Evaluation of Online versus Campus-Based Teacher Preparation Programs." *MERLOT Journal of Online Learning and Teaching*. 6 (4).

participation include barriers such as distance to home as STs tend to cluster in remote areas, unavailability of trades that are relevant to their local environment, and appropriate housing. Further, despite a 30 percent reservation of seats for female students, only one out of 10 students is female. However, the female enrollment rate differs considerably between states. Of the 36 Indian states, 8 record a female participation rate of 30 percent and higher, while in 6 states, representing 32 percent of the entire ITI enrollment, the rate is 5 percent or below. In Bihar, only 1.15 percent of all ITI students are female. The situation is even worse in apprenticeship training where only 7 percent of all registered apprentices are female.

21. Experience in other countries has shown that female participation rates improve once the range of sectors covered in technical schools and apprenticeship systems was broadened toward modern occupations, notably service sector professions.<sup>15</sup> However, there are also new occupational specializations emerging in the engineering sector, providing attractive job prospects for female youth, such as computer-aided design/manufacturing (CAD/CAM) and other technology-based jobs. The challenge in the Indian long-term training space therefore is to broaden the range of programs offered toward trade specializations—needed in the labor market—that are more attractive to young women, alongside mobilizing more female students for trades with good labor market outcomes. In addition, improving the attractiveness of the facilities is required including employing more female teachers, enhancing sanitary facilities, introducing women-targeted counseling and employment promotion programs, and creating a safe campus.

## C. Relationship to the CPS and Rationale for Use of Instrument

22. The proposed Operation contributes to two of the three engagement areas under the World Bank Group's India CPS. The Operation is designed to directly support the achievement of CPS outcomes of improving market-driven skill development for productive employment under the Integration engagement area as well as improving access to services and opportunities for excluded population groups under the Inclusion engagement area (over 40 percent of those enrolled in ITIs and apprenticeships come from below poverty line families). By focusing on expanding and improving formal long-term skills development through apprenticeship training and skills development provided in ITIs, the Operation will support youth to acquire the critical technical and soft skills required to be productive members of the workforce. These improvements, in turn, will contribute to achieving higher-order long-term CPS objectives of increased productivity, trade, and investment, greater off-farm employment, and larger female labor force participation—supporting progress toward the overarching goals of faster economic growth, poverty reduction, and shared prosperity.

23. Currently, the World Bank is supporting the development of a demand-driven skills development system in India through a variety of channels. For example, through the ongoing VTIP and previous projects, the World Bank has been closely engaged with the GoI since 1989 for improving the training system. VTIP used an Investment Project Financing (IPF) modality and was able to design and implement specific interventions, build state implementation capacity, and develop robust safeguard and fiduciary processes at the national and state levels, all

<sup>&</sup>lt;sup>15</sup> See also *Towards a Model Apprenticeship Framework*. A *Comparative Analysis of National Apprenticeship Systems*. World Bank/International Labour Office. 2013.

of which will continue after the project closes. In addition, the ongoing Technology Center Systems Project focuses on developing high-end technology resources for capacity development of micro, small, and medium enterprises (MSMEs). The Tejaswini: Socioeconomic Empowerment of Adolescent Girls and Young Women and Nai Manzil: Education and Training for Religious Minorities both support reducing access constraints and providing comprehensive education and training for youth from vulnerable groups. The Manufacturing Plan Non-Lending Technical Assistance, two World Bank reports on apprenticeship training, and a study on five training schemes in India have analyzed the Indian experience in the light of international good practice.

24. The use of the Program for Results (PforR) instrument is particularly suited to achieving the GoI's results-based objectives, as it allows for improvement of the systems and institutions that are critical to the implementation of the GoI program. The instrument will ensure a sharp focus on the most important results the GoI wants to achieve (that is, improve relevance and efficiency of vocational training), allow for flexibility in the end use of funds by states and training institutions, support the development of state-level capacities to manage ITIs more effectively, incentivize introduction of performance-based management principles, and strengthen output and outcome monitoring. The MSDE will use a performance-based approach to disburse funds to states and ITIs, mirroring the relationship between the World Bank and the GoI.

25. The technical assistance (TA) component, implemented under the IPF modality, responds to the authorities' request to include technical support through a project-based approach to manage, monitor, and motivate capacity support to states to execute the national program on time, address key institutional impediments, and strengthen the implementation and institutional capacities of the implementing agencies. For these purposes, the MSDE prefers to utilize the IPF instrument whereby World Bank funds are used to pay for 'specific expenditures' (for example, consulting services) in compliance with the World Bank's fiduciary policies. In particular, the TA component will complement the PforR by supporting the MSDE to develop and implement monitoring and assessment tools required to ensure a well-targeted and robust Program, as well as support the MSDE to mobilize special sector expertise for analytical work that underpins Program interventions and design and implement selected pilot interventions. This type of hybrid approach has been successfully implemented in other recent World Bank operations (for example, the Enhancing Teacher Effectiveness in Bihar Operation and the Swachh Bharat Mission Support Operation), and the proposed Operation follows these good practice examples.

# II. PROGRAM DESCRIPTION

# A. Operation Scope

# **Government Program**

26. The GoI introduced its National Policy for Skill Development and Entrepreneurship in June 2015. A policy implementation framework is provided by the National Skill Development Mission (NSDM). The mission reflects the Government's commitment to skilling opportunities for economically disadvantaged/underserved communities and developing a globally competitive workforce. The mission also seeks to shift toward outcome-focused training provision and

establishes and enforces cross-sectoral, nationally and internationally acceptable standards for skill training by creating a sound quality assurance framework. The national Skills Strengthening for Industrial Value Enhancement (STRIVE) program was developed by the GoI to incentivize the critical institutional reforms required in the institutional training systems—defined as the ITI and apprenticeship—to meet the GoI's commitment to providing skilling opportunities for economically disadvantaged/underserved communities and developing a globally competitive workforce. STRIVE is divided into four results areas: (a) Improved Performance of Industrial Training Institutes; (b) Increased Capacities of State Governments to Support Industrial Training Institutes and Apprenticeship Training; (c) Improved Teaching and Learning; and (4) Improved and Broadened Apprenticeship Training. STRIVE is a national program implemented by the MSDE, targeting ITIs and apprenticeship training pan-India (see table 2). The proposed World Bank Operation will support the entire national STRIVE program.

Table 2. The National STRIVE Flogram	Table 2.	The	National	STRIVE	Program
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	Government Program/World Bank Support		
Title	Skills Strengthening for Industrial Value Enhancement		
Objective	To improve access to quality and market-driven vocational training provided in ITIs and		
	apprenticeships		
Activities types	(a) Performance-based grants for upgradation of selected ITIs		
	(b) Performance-based funding to state governments to incentivize reforms in state management		
	of ITIs and apprenticeship training		
	(c) Overhauling curricula and TL resources in selected key CTS programs		
	(d) Enhancing distance and blended learning in pre-employment and in-service teachers training		
	(e) Incentivizing SME participation in modern apprenticeship training through grant funding of		
	industry apprenticeship initiatives (IAIs)		
	(f) System development, capacity development, and advocacy for apprenticeship training		
Geographic scope	Pan-India		
Budget	US\$318 million		

27. Investment through STRIVE is designed to leverage previous reforms introduced through VTIP by focusing on the critical policy and program interventions for systemic reforms and expanding focus to include apprenticeship. STRIVE's four results areas represent a comprehensive and synergetic approach to institutional capacity building and system reform for long-term training addressing a fundamental reorientation of ITI programs and apprenticeships toward demand responsiveness, industry involvement, and effective implementation structures, initiating performance-led management structures for long-term training in the state governments and strengthening their institutional capacities, and fostering reforms in the development of curricula and TL resources for long-term training and teachers training. STRIVE reflects an evidence-based, innovative, and pragmatic approach, building on lessons learned from past interventions and local and global knowledge.

28. The Operation will be closely coordinated with the upcoming World Bank-supported Skill India Mission Operation (SIMO). While STRIVE focuses on long-term training that is part of the formal education system, SIMO is geared toward increasing capacities for short-term employability training. Synergy potentials emerging in capacity development of central government and state institutions and among industry stakeholders and in the development of the regulatory regimes, will be exploited.

## **Operations Cost and Financing**

29. The estimated cost of the national STRIVE program is US\$318 million over five years. The proposed World Bank Operation comprises a US\$120 million Program using the PforR instrument and a US\$5 million TA Project using the IPF instrument.<sup>16</sup> The proposed World Bank Operation supports the entire government program.

	Amount (US\$, millions)	Percent of Total
Estimated Operation Expenditures		
Improved Performance of Industrial Training Institutes	151	47.5
Increased Capacities of State Governments to Support Industrial Training Institutes and Apprenticeship Training	70	22.0
Improved Teaching and Learning	61	19.2
Improved and Broadened Apprenticeship Training	31	9.7
Program Management Support for Strategic Technical Assistance for Improving Efficiency and Monitoring and Evaluation	5	1.6
Total Operation Expenditures	318	100.0
IDA	125	39.3
GoI	193	60.7
Total sources	318	100.0

 Table 3. Costs and Financing (US\$, millions): 2017–2022

## The STRIVE Program

30. The Program aims to improve access to quality and market-driven vocational training provided in ITIs and apprenticeships. It consists of a PforR component that is comprised of four results areas and is complemented by a TA component financed through IPF.

## **Results Area 1: Improved Performance of Industrial Training Institutes**

31. With Performance-Based (PB) Grant Agreements, Results Area 1 introduces a resultsbased funding approach for ITIs to better address key challenges affecting quality, relevance, and efficiency of training in government and private ITIs. Support will be provided to selected ITIs though the provision of performance-based grants for the implementation of their Institute Strategic Plans (ISP) to improve accessibility and quality of their skills development programs, and enhance market relevance and efficiency of their operations, through: (a) deepening industry relations for on-the-job training, industrial exposure of teachers and joint needs assessments; (b) introduction of new courses to respond to local market needs; (c) mobilizing previously underrepresented vulnerable groups by introducing tailored services; (d) strengthening pedagogical approaches for soft skills development; (e) strengthening employment promotion

<sup>&</sup>lt;sup>16</sup> As per the current calculation, the available amount for the Operation is approximately USD 125,000,000. The exact available amount for the credit will be determined on the date of the IDA Board approval and will be determined by applying the USD/SDR exchange rate prevailing on such date to the estimated available ninety one million seven hundred forty one thousand Special Drawing Rights (SDR 91,741,000) remaining under the IDA 17's allocation for India.

activities for graduating students; (f) introducing income-generating activities for enhanced institutional sustainability; and (g) improving facilities and management thereof. The PB Grant Agreement Scheme for ITIs will be managed at state level, and benefitting ITIs will be competitively selected in each state by state governments based on defined selection criteria and through a standardized, transparent selection process. Funding agreements will be based on ISPs, and selected agreed targets in the ISP will serve as financing triggers for disbursement under PB Grant Agreement (share of students undergoing OJT, share of female students, and enrollment increase).

32. Three DLIs have been identified to incentivize reforms for increased access to labor market-relevant training programs and stronger emphasis on industry exposure of students and on inclusion of female youth: Increase in the number of graduates from ITIs that have signed PB Grant Agreements (DLI 1); Improvement in industrial training and employment outcomes for trainees and graduates of ITIs that have signed PB Grant Agreements (DLI 2); and Increase in female enrollment rate in ITIs with signed PB Grant Agreements (DLI 6).

# **Results Area 2: Increased Capacities of State Governments to Support Industrial Training Institutes and Apprenticeship Training**

33. Under this results area, STRIVE aims to improve the overall operational environment of ITIs and apprenticeship programs at the state-level through the provision of performance-based funding to states adopting policy-related and programmatic interventions aimed at: (a) increasing financial and administrative autonomy of ITIs; (b) establishing and implementing management information systems aligned with the NCVT's requirements, including the carrying out of tracer studies and timely transmission of management information; (c) implementing a centralized admission system for ITIs; (d) reducing teacher's vacancy rates; (e) facilitating industry training for teacher in ITIs; (f) undertaking policy reforms in the areas of ITI examinations, promoting vertical progression from ITI training; implementation of dual training trades, and career progression of ITI trainers. Commitment of state governments to undergo these reforms is essential to improve the operational space of ITIs. Therefore, the performance-based funding contract between the state and the central government is a precondition for the state governments to receive funding for the ITI PB Grant Agreement Scheme in their states.

34. State-level reforms especially in the critical fields of teacher management and monitoring are incentivized by two DLIs: Reduction in ITIs' trainer vacancies (DLI 3) and Number of Participating States that have conducted tracer studies (DLI 4).

## **Results Area 3: Improved Teaching and Learning**

35. This results area aims at modernizing existing TL materials/resources for skills development to improve the quality of learning through the use of modern ICT solutions to be made available to ITIs, as well as the adaption of teaching and learning curricula and assessment procedures. To improve TL for CTS and CITS programs and basic apprenticeship modules, activities under STRIVE will focus on the development and implementation of instructionally effective educational materials packages including printed materials for students and teachers, structured assessment activities, video demonstrations, simulations, and computer-based interactive self-assessment activities. 'Soft' skills development will be systematically integrated,

and materials will be designed for inclusive education. The new tools will be introduced and piloted in selected engineering trades, to be selected by the MSDE on the basis of their economic importance and enrolment potential. The result areas also involves supporting the professional development of ITIs' teaching staff and principals through the design and development of a comprehensive professional development eco-system in the skills development sector, with a strong focus on technology-based solutions, including: (a) upscaling of ICT-enabled educational resources for teachers' pre- and in-service training schemes; and (b) upgrading selected teacher training institutions into multi-purpose resource centers equipped with state of the art technology, complemented by master training initiatives; and (c) the strengthening of NIMI and CSTARI to undertake curriculum design and design of course and course materials. The results area has a strong focus on further developing open and distance learning (ODL) solutions in teaching practice and teacher pre- and in-service training harnessing previous investment into information technology (IT) infrastructure in ITIs and teacher training institutions made under VTIP. Technology-supported TL resources will broaden access to high-quality training in remote areas.

36. One DLI was identified to incentivize the systematic introduction of modern resourcebased learning in the skills development space, which also requires comprehensive capacity building for the design, production, and application of modern TL materials: Improvements in training of trainers (DLI 3).

## **Results Area 4: Improved and Broadened Apprenticeship Training**

37. This results area aims at modernizing the GoI's apprenticeship training systems, though the provision of Industry Apprentice Initiative (IAI) grants to industry clusters (ICs) for the development and implementation of apprenticeship programs that increase the influence of industry, in particular SMEs, in defining the programs' contents, and strengthening their cooperative delivery modes. IAIs are apprenticeship development projects driven by stakeholders with the joint interest of improving ongoing apprenticeship training and/or introducing new or improved apprenticeship programs. Participants in these initiatives will be interested firms, training providers, and potentially other stakeholders in one or several industrial sectors. IAIs will be facilitated and managed by industry cluster organizations, which will also be the formal partner in the grant agreement with the Government. Grant funding can be used to cover the costs involved in (a) setting up new or revising existing apprenticeship training programs in line with the specific needs of the participating firms (including development of curricula, enterprise training plans, TL material, assessment mechanism); (b) capacity development (including infrastructure) of basic training providers (apprenticeship training schools run by ICs, ITIs, or other third-party basic training providers); (c) initiatives to establish and raise the standards of quality assurance of apprenticeship training with the participation of industry experts; (d) training of trainers (that is, company supervisors of apprentices and trainers in basic training institutions) and other stakeholders; and (e) other costs necessary to improve and expand needs-based apprenticeship training within IAI firms. IAIs to be supported will be identified in a competitive and transparent selection process. Grant conditions will specifically incentivize enrollment of young women and other currently underrepresented groups, such as STs.

38. STRIVE will also incentivize the MSDE to initiate critical system reforms. STRIVE will include capacity building activities and communication campaigns to: (a) strengthen capacity of government and industry stakeholders to design and undertake apprenticeship training; (b) raise awareness and understanding about apprenticeship training among industry, communities, training providers and political decision-makers; (c) encourage dual apprenticeship delivery approaches; (d) improve quality assurance mechanisms both in basic training provision and company training, and (e) increase employers' participation in apprenticeship programs.

39. Two disbursement linked indicators (DLIs) have been defined to incentivize engagement of ICs in apprenticeship training, as well as inclusion of female students: Number of ICs that have introduced at least 2 different apprenticeship programs within their participating (member) industries (DLI 5); and Increase in female enrollment rate in ICs receiving IAI Grants (DLI 6).

# **Program Management Support for Strategic Technical Assistance for Improving Efficiency and Monitoring and Evaluation (Investment Project Financing)**

40. The Operation will provide TA to support a coordinated, coherent, and evidence-based approach to the critical activities that are expected to be change agents in skills development. Specifically, the Operation will fund (a) Program implementation support, including strengthening the institutional capacities of the National Program Implementation Unit (NPIU) and State Program Implementation Units (SPIUs) and the recruitment of a program management consultant (PMC); (b) the facilitation of policy development and the implementation of regulatory reforms in the skills sector; (c) piloting innovative interventions focused on improving training and employment outcomes for girls, including introducing stipends to foster women participation in labor market and collection of information on labor market returns to different trades; (d) the carrying out of monitoring and evaluation (M&E) activities including impact evaluations and qualitative assessments of Program results; (e) the carrying out of beneficiaries feedback studies examining demand and supply challenges faced by youth and vulnerable/marginalized groups, with specific focus on girls; and (f) the carrying out of third-party validation of the Program results.

## **B.** Development Objective

41. The development objective (PDO) of the Operation is to improve access to quality and market-driven vocational training provided in ITIs and apprenticeships.

## C. Key Results and Disbursement Linked Indicators

## **Key Results**

42. The following indicators will be used to measure the achievement of the PDO:

- Increase in the number of graduates from ITIs that have signed PB Grant Agreements
- Female enrollment across ITIs with signed PB Grant Agreements

- Percentage of graduates from ITIs that have signed PB Grant Agreements who are in gainful employment one year after graduation (disaggregated by gender and ST)
- Number of participating states that have reduced the vacancies of sanctioned trainers' posts by at least 20% in government ITIs
- Number of teachers who have completed pre-employment or in-service distance learning/blended modules
- Number of ICs that have introduced at least 2 different apprenticeship programs within their participating (member) industries
- Direct Operation beneficiaries (disaggregated by gender)

#### DLIs

- 43. The Program has six specific DLIs as follows:
  - (1) Increase in the number of graduates from ITIs that have signed PB Grant Agreements
  - (2) Improvement in industrial training and employment outcomes for trainees and graduates of ITIs that have signed PB Grant Agreements
  - (3) Reduction in ITIs' trainer vacancies and improvements in training of trainers
  - (4) Number of Participating States that have conducted tracer studies
  - (5) Number of ICs that have introduced at least 2 different apprenticeship programs within their participating (member) industries
  - (6) Increase in female enrollment rate in ITIs with PB Grant Agreements and ICs receiving IAI Grants

44. The achievement of DLIs triggers World Bank disbursements to the Program. The choice and detailed definition of DLIs reflect the critical reform areas the GoI has to address to improve access and labor market relevance of long-term training: (a) a stronger involvement of industry in long-term training, which also includes capacity building of firm stakeholders; (b) a stronger focus on inclusion; (c) incentivizing flexibility in the range of programs offered for better labor market relevance; (d) improved management of teachers and teachers training; and (e) increased focus on efficiency in training and monitoring of results.

45. Detailed descriptions/definitions of the achievement of each DLI are provided in annex 3. A credible and robust independent verification protocol will be developed for collection and processing of data required for assessment and validation of key performance data against achievements of DLIs. The MSDE will hire independent verification agency/ies (IVA), and the information collected under the aegis of MSDE by the IVA will serve as the data source for assessing progress towards the DLIs. The IVA will validate the data on the number of graduates,

number of trainees undergoing OJT, employment outcomes of ITI graduates and female enrollment in ITIs on a sample basis from the ITIs that have signed PB Grant Agreements, in order to verify DLIs 1, 2 and 6. The IVA will also verify the data submitted by states on the reduction in vacancies of trainers and tracer studies conducted on sample basis for DLIs 3 and 4. Further, for DLI 3, the IVA will verify the roll-out of upgraded CITS trades in ATIs on a sample basis. For DLIs 5 and 6, the IVA will verify on a sample basis the data available with RDATs on the number of ICs and female enrollment in apprenticeship programs run by the ICs. The report of the IVA will be independently verified by the World Bank before confirming achieved results to the MSDE.

#### **D.** Capacity Building and Systems Strengthening Activities

46. STRIVE's predecessor project, VTIP, has made important strides to influence the direction of ITI development, mainly through initiating the formation of employer influence in government ITIs through IMCs and introducing distance education in teacher training, among others. It also created an NPIU, consisting of government staff that is now an integrated unit of the MSDE and in charge of managing all major reform projects in the space of long-term training. STRIVE will build on these achievements, by reinforcing implementation support for the upcoming Operation through a PMC to support the NPIU, assisting in major policy and system reform activities through TA, and through funding, as part of the Program's key interventions aimed at strengthening public and private sector institutions and initiatives to transform skills development structures in line with the labor market needs. While introducingand reinforcing-essential innovations in public management and implementation of skills development (for example, results-based funding within government structures; grant-funding support to IAIs; technology-based TL resources within a blended learning approach), evaluations and impact assessments will support the GoI to continuously monitor reform achievement and appropriateness of chosen pathways. Result-based funding will help the MSDE develop better capabilities to manage for accountability and equity and will ensure data are available for evidence-based decision making.

47. STRIVE is aimed at modernizing formal apprenticeship training in India and will have a special emphasis on strengthening the role of industry and ICs in apprenticeship development and implementation. Significant capacity development of stakeholders at different levels needs to accompany this process to ensure a lasting impact. This includes the Directorate of Apprenticeship Training under the MSDE and its regional arms, the RDATs, state apprenticeship advisers, as well as private stakeholders, notably industry cluster organizations and firms. Interventions to strengthen ITI capacities build on VTIP experience and will assist ITIs in further deepening industry linkages. TA funded under STRIVE will build capacities in ITI management to identify labor market needs, formulate result-oriented strategic plans, and collect data used for performance monitoring, among others. At the state level, the Program will support the setup or revision of comprehensive state MIS for long-term training, the development of a technologybased tool for conducting tracer studies, and providing TA for skills development planning and human resource development for ITIs. As part of the investment in curriculum and educational materials development, both for the CTS and teachers training schemes, the Operation will provide TA to NIMI and CSTARI, to ensure that the capacity of both institutions to undertake

effective curriculum design and instructional design of courses and course materials is systematically developed so that both institutions are able to continue this work independently after the Operation is completed. Furthermore, for the upgradation of teacher training institutes, the Program includes training of management staff and master trainers.

# III. PROGRAM IMPLEMENTATION

## A. Institutional and Implementation Arrangements

Diversified implementation responsibilities. STRIVE is a national program 48. representing a multi-level approach that reflects the complex structure of the skills development ecosystem with its different layers of action and responsibilities. Responsibility for management and funding of grants to selected ITIs under the PB Grant Agreement Scheme (Results Area 1) rests with the state governments, which will sign PB Grant Agreement with the ITIs and disburse funds annually based on the achievement of performance indicators (financing triggers) defined in the ISP. Under Results Area 2, the MSDE will channel funds to incentivize state-level policy reforms to state governments based on defined financing triggers, for which targets are defined in a funding agreement. Under Results Area 3, funds will be given to centrally funded institutes (CFIs), namely NIMI and CSTARI, through the MSDE, to undertake curriculum design and design of course and course materials Under Results Area 4, the MSDE through its RDAT will manage grant funding for IAIs, to be implemented by competitively selected ICs. Investments to support activities of central government institutions and CFIs, notably the NIMI, CSTARI, ATIs, CTI, NVTI, RVTIs, RDATs, and the Central Apprenticeship Council are directly managed by the MSDE.

49. **Implementation support.** Responsibility to coordinate and facilitate the implementation of STRIVE and provide overall fiduciary guidance at the ministerial level rests with the existing NPIU. Similarly, at the state level, SPIUs established under VTIP will be responsible for providing fiduciary guidance, implementation, monitoring, and facilitation of STRIVE. The VTIP implementation revealed considerable capacity constraints both at central and state levels for the implementation of large-scale reform programs in the skills development sector. Under STRIVE, the NPIU and SPIUs will therefore be supported through a dedicated PMC directly funded through the Operation's TA component. The PMC is a consultancy team comprising key experts in project management, M&E, skills development, and apprenticeship training.

## **B.** Results Monitoring and Evaluation

50. **Monitoring mechanism.** The NPIU within the MSDE has significant experience with implementing World Bank-supported projects and has a well-defined institutional mechanism for planning, managing, and monitoring implementation of skills training programs. At the national level, the NPIU supported by the PMC will lead the overall M&E arrangements of the Program. Activities undertaken by the NPIU on M&E include (a) periodic Program progress reviews; (b) consolidating and disseminating information on Program progress reports (including reporting on youth satisfaction with Program design and delivery, fiduciary performance, and safeguards compliance); (c) reporting on DLI achievements and providing evidence according to the agreed verification protocols; and (d) commissioning surveys, studies, and assessments as necessary. At the subnational level, implementing agencies will be responsible for preparing and submitting

annual reports on implementation progress. To support these reporting processes, the PMC will design standardized reporting templates to ensure that Program reports provide clear and transparent progress updates on all relevant aspects of the Program Results Framework and DLIs.

51. **MIS.** An important focus will be on establishing effective MISs across the sector. As part of this, the Program will ensure that the MIS is collecting all data required for effective Program monitoring and that a special purpose data analytics dashboard is established to enable regular Program monitoring against the specific monitoring requirements of the Results Framework and the DLIs. These data will be subject to periodic randomized audits and third-party validation to ensure its accuracy.

52. **Studies.** Primary data collection including tracer studies of labor market outcomes and prospective experimental impact evaluations to test programmatic and policy alternatives will be undertaken. In addition, beneficiary assessments will be undertaken to improve Program impact.

53. **Review missions.** The MSDE and the World Bank will conduct Joint Review Missions (JRMs) focusing on overall Program progress and agreed indicators. JRMs will also provide an opportunity for stakeholders to share their solutions to challenges faced during program implementation.

# C. Disbursement Arrangements

54. **Disbursement arrangements and financing allocation to each DLI.** STRIVE will use DLIs for Program management and disbursement. Annex 3 shows the agreed list of DLIs and the proposed annual financial allocations across DLIs. The amounts are indicative. Estimated amounts for each DLI are dependent on assumptions made for projected performance year on year. However, the disbursement will be dependent on actual performance achieved. The allocations across DLIs will be reviewed and/or reallocated (as appropriate) during the course of implementation of the Program.

55. **Disbursement modalities for each DLI.** Details of agreed disbursement modalities for each DLI are provided in annex 3. Some DLIs are scalable, with funds being disbursed in proportion to achievement of the DLI. Where actions are not achieved in any particular year, the allocated amount will be carried over to the subsequent year. Conversely, if the achievement outperforms the targets, the corresponding credit amount may be fully disbursed before the end of the Operation.

56. **Advances**. The Program will provide an advance, as an enabling provision, of up to a ceiling of 25 percent of the Program credit amount. The advance will be adjusted against disbursements due when the DLIs are achieved or in the later years of the Program. The drawdown of the advance including quantum will be based on GoI's needs and cash flow mismatches if any.

57. **DLI verification protocols.** Verification protocols for each DLI are detailed in annex 3. DLIs will be verified by independent verification agency/ies (IVA) to be contracted by the MSDE and submitted to the World Bank as part of the supporting documentation to report

achieved results (therefore, the report of the IVA will be independently verified by the World Bank before confirming achieved results to the MSDE and as part of the approval process to disburse Program's funds). The World Bank will also review the evidence base for all DLIs during implementation.

58. **Disbursement arrangement for TA component.** Disbursements under the TA component will be made primarily as reimbursements on the basis of interim unaudited financial reports to be submitted on a quarterly basis.

# IV. ASSESSMENT SUMMARY

## A. Technical (including program economic evaluation)

59. **Strategic relevance.** The GoI has identified an urgent need for a combination of 'skill, scale, and speed' in the National Policy on Skill Development and Entrepreneurship 2015. By 2026, 64.8 percent of India's population is expected to be in the working-age bracket (15–64 years). Despite this demographic advantage, India faces a shortage of skilled labor with the projected demand of skilled workforce at 400 million by 2022, of which 150 million is required in the manufacturing and services sectors.<sup>17</sup> The GoI has taken an important step by consolidating the country's fragmented regulatory ecosystem for skills training under a dedicated MSDE and the introduction of the NSDM. Within this framework the further development of long-term training in ITIs and through apprenticeship training, providing the corps of broadly skilled technicians, is of particular importance for the further development of the manufacturing sector.

60. **Technical soundness.** The technical design of the Program is based on the GoI's reform priorities. It builds on the lessons learned from the IDA-financed VTIP, the findings of the World Bank's different skills development studies in India,<sup>18</sup> and the World Bank's international experience with skills development across the region and the globe. The Program focuses on results by using the PforR instrument and by systematically introducing results orientation at different levels of implementation. Emphasizing the development of the apprenticeship system and industry participation in the operations of ITIs, the design reflects that involvement of employers in skills development and close linkages between training providers and industry are the most important drivers for improving quality and labor market relevance in the skills development. Furthermore, the Program significantly promotes the use of technology for robust M&E and student and instructor training.

61. **Expenditure framework.** The national STRIVE program has an estimated outlay of about INR 2200 crores (US\$318 million) over five years. The GoI sent a request to the World Bank to externally fund the Operation up to INR 865 crores (US\$125 million). The remaining

<sup>&</sup>lt;sup>17</sup> Confederation of Indian Industry. 2016. *Linking Skills to Jobs*.

<sup>&</sup>lt;sup>18</sup> World Bank. 2015. Labor Market Impacts and Effectiveness of Skill Development Programs in Five States of India: Assam, Andhra Pradesh, Madhya Pradesh, Odisha, and Rajasthan; World Bank. 2013. Possible Futures for the Indian Apprenticeship System. Options Paper for India; World Bank/International Labour Office. 2013. Towards a Model Apprenticeship Framework. A Comparative Analysis of National Apprenticeship Systems.

funds for the Program will be met through budgetary allocations by the GoI. A separate line has been created for this purpose in the FY16–17 budget. If needed, the GoI will add more lines to cover the expected level of expenditure. Consultations with the GoI have shown that resource mobilization and utilization at the estimated levels through budgetary allocation are not expected to pose significant challenges during implementation.

62. **Results framework and M&E capacity.** The Program design envisages greater levels of decentralization and accountability at the state and institutional training delivery levels, together with a new results-based financing modality that will require additional capacity building. Through the TA component, the Operation will strengthen capacity of implementing agencies to manage and monitor activities. Specifically, the MSDE will be supported by a PMC that will help the MSDE establish systems to (a) define protocols and system for collecting data on key Program parameters; (b) aggregate data for preparing annual reports; (c) design impact evaluation studies to test the effectiveness of innovative interventions including stipends for women to participate in engineering trade; and (d) develop protocol for using ICT methodologies including crowdsourcing for obtaining feedback on satisfaction and labor market outcomes of beneficiaries.

63. Economic justification. Economic and financial analysis suggests that the Program is economically justified and financially viable. A cost-benefit analysis over a 40-year horizon finds that each of the Program results areas has an annual internal rate of return (IRR) of at least 8 percent and a positive net present value (NPV), with results robust to sensitivity analyses across various scenarios. The main benefits from the Program quantified in the analysis are (a) an increase in the employment rate of ITI graduates; (b) a quality wage premium over and above the current premium; and (c) an increase in the wage premium related to apprenticeship training, which combined are estimated to generate an NPV of US\$268 million in the medium case scenario. Beyond the direct impact, the Program is expected to generate a series of broader productivity-enhancing spillover benefits, further justifying public intervention, including greater provision of training-consistent with a socially rather than privately optimal level-and closer match of ITI course offerings to specific skills demanded by the industry. The Program is also expected to contribute to increased diversity and reduced inequities in the workforce by increasing the participation and workplace readiness of women and youth from disadvantaged backgrounds, including students and apprentices belonging to SCs/STs, the benefits of which are more difficult to quantify.

## **B.** Fiduciary

64. Fiduciary management for PforR operations is part of an integrated approach that covers the technical, financial management (FM), procurement, disbursement, and risks aspects. The Fiduciary System Assessment (FSA) was carried out, in line with the World Bank policy and procedure for PforR financing, and covered the DGT, the MSDE at the central level, and State Directorates and two government ITIs each in five states (Jharkhand, Madhya Pradesh, Maharashtra, Telangana, and Odisha). The ITIs were selected in a manner that covered ITIs funded under VTIP (3), public-private partnership (PPP) 1396 scheme (4), and non-VTIP (3). Complemented by World Bank's existing knowledge and understanding of the fiduciary systems gained from VTIP, this sample may be considered adequate for purposes of the FSA. 65. **Procurement systems.** The General Financial Rules (GFR) 2005 developed by the Ministry of Finance, GoI, and updated from time to time establish the principles for general financial management and procedures for government procurement. All GoI purchases must strictly adhere to the principles outlined in the GFR, as updated from time to time. As India is a union of states, each state, including the Union Territories, have their own rules, guidelines, or legislation on procurement. State governments and Central Public Sector Units have their own general financial rules, which are based on the broad principles outlined in GFR 2005. Most of the states have updated their financial rules following the GFR that were updated in 2005, and legislations on procurement have been enacted by individual states such as Rajasthan, Tamil Nadu, and Karnataka. The reports of the constitutionally appointed comptroller and auditor general (CAG) also include procurement. The STRIVE PforR will be implemented under the above existing environment by the DGT of MSDE (including its CFIs, such as ATIs, NIMI, CSTARI, RDATs), State Directorates, and selected ITIs.

66. The Program (PforR-supported activities) will exclude activities that involve procurement of (a) works, estimated to cost US\$75 million equivalent or more per contract, (b) goods, estimated to cost US\$50 million equivalent or more per contract, (c) IT systems and nonconsulting services, estimated to cost US\$50 million equivalent or more per contract, and (d) consultant services, estimated to cost US\$20 million equivalent or more per contract. Most procurements under the Program are expected to be decentralized, of low value, and are likely to include civil works such as refurbishment, extension, repair and maintenance of existing buildings, and construction of new buildings; goods such as machines, hand tools, measuring equipment, and so on (types of equipment will depend on the industrial trades selected by the ITIs for upgradation); TL resources including ICT; instructor training; curriculum development and upgrading; information campaigns and dissemination; and consultancy and TA. The assessment of the existing procurement systems and arrangements has identified the challenge of ensuring consistency and monitoring a large number of small-value contracts within a decentralized and complex implementation structure and certain areas of improvement through Program support such as (a) lack of comprehensive instructions for all steps of the procurement as rules and guidelines are spread across multiple documents and circulars; (b) need for disclosure management; (c) an IT-based system for procurement monitoring, or MIS; (d) oversight over procurement process including procurement review and audit across entities, (e) use of e-procurement to the extent possible; (f) insufficient human resources; and (g) poorly maintained records that are not available at a centralized location.

67. Based on the findings, the following critical action points are to be undertaken: (a) a comprehensive procedures manual to act as a guide for all procuring entities; (b) an annual finance audit to cover procurement review of contracts under STRIVE; (c) a functioning procurement complaint and grievance redressal system; (d) disclosure of procurement information on websites; and (e) availability of adequate human resources critical to implement the Program.

68. Under DLI 5, the IAI Grant Mechanism Guidelines will ensure that the selection process of implementing agencies to implement IAIs is competitive, fair and transparent. Ex ante summary assessment of procurement management capacity of implementing agencies expected to participate in and implement IAI grant mechanism will be conducted by the DGT as part of the appraisal process.

69. The TA component will complement the Program. For details on procurement arrangements under the TA component, kindly refer to annex 9.

70. **FM systems.** The FM systems at all levels are operational; the DGT and CFIs operate within the country public FM systems, whereas state-level societies, established under the State Department of Training under Skills Development Initiative Scheme, and IMCs, established as empowered committees of government ITIs in the form of registered societies are required to maintain separate books of accounts and prepare annual financial statements as laid down in their bylaws. The state societies have been established in almost all states, and funds under other schemes such as VTIP and Skill Development in 34 Districts Affected by Left Wing Extremism are now being routed through these societies. In other states, fund flows are proposed though State Skill Development Missions (SSDM), which are state societies or corporations established to provide inter sectoral coordination in the area of skills development. While no separate assessments of the state societies have been undertaken under STRIVE, FM assessments of SSDMs undertaken under the proposed SIMO indicate that adequate systems exist for accounting and financial reporting for reporting receipts and expenditures incurred and timely annual audits.

71. These include an established budgetary framework that ensures that adequate resources are allocated to departments and implementing agencies. While there have been some concerns noted in the findings of the assessment over the timeliness of fund releases, there appears to be sufficient predictability in the availability of resources for the implementation of the Program. Basic books of accounts are maintained at all levels, though significant internal control weaknesses are noted from field observations (also confirmed in various state- and Program-level CAG audit reports). Findings from the FSA indicate weaknesses in the accounting and financial reporting systems at ITIs/IMCs and state-level societies, attributed largely to absence of accounting staff. There are also delays in conduct of annual audits at all levels

72. In the absence of a structured integrated MIS, stand-alone systems for FM have evolved for the various schemes. A common weakness noted across the Program is the absence of internal audits as an important tool for internal control. Downstream FM aspects such as fund utilization, financial reporting, and audit assurance receive insufficient management attention. There are also concerns over the oversight and auditing arrangements, partly on account of the dispersed nature of the institutional arrangements. These factors considerably increase the FM risk of the Program for all levels of stakeholders including the beneficiaries.

73. Key mitigation measures that have been considered in the design of the Program include actions to strengthen key capacity and systems at state and ITI levels and include (a) minimum eligibility conditions that ITIs/State Directorates must meet to access Program funds, including satisfactory audits and compliance with financial reporting requirements, and (b) performance measures that will further incentivize ITI/State Directorates to address areas of weaknesses, including enhancing the staffing for FM and putting in place acceptable internal audit arrangements at the state level. The IAI Grant Mechanism Guidelines developed for the implementation of Results Area 4 will include the FM arrangements for the operation of the grant mechanism. Ex ante summary assessment of FM capacity of ICs and possible other business associations expected to receive and manage grant funding under the IAI grant

mechanism will be conducted by the DGT using checklists, tip sheets, and so on as part of the appraisal processes and included in the guidelines.

74. Governance and accountability systems. Overall existing governance and accountability arrangements provide good underpinnings for improving transparency and accountability of the Program. At the ministry level, the chief vigilance officer who reports to the secretary, the MSDE is responsible for the vigilance function together with the grievance officer for VTIP. There is no separate Vigilance Cell under VTIP. In general, the vigilance function of line departments is fulfilled by a chief vigilance officer, and Vigilance Committees are also established at the block, district, and gram panchayat (village council) levels with various degrees of effectiveness. According to GoI guidelines, all grievances received from the public as well as employees are required to be redressed by the ministry/department/organization concerned arising from the work of ministries/departments/organizations in the GoI. The guideline further mandates that a person of a rank of joint secretary should head the grievance redress system at the ministry. At the national level, grievances can be raised by State Directorates, ITIs, and individual students. One of the major gaps in the system is that there are no records of any grievances raised on project issues, and the issues are disposed of at the level of the project director. Thus, even issues raised by the ITIs are dealt with as and when they come, and there is little evidence these issues are recorded in any systematic manner. There are grievance redressal mechanisms at the state and ITI levels, but they need to be strengthened in practice to allow for the identification and tracking of Program-related complaints.

75. **Applicability of the Anti-Corruption Guidelines of the World Bank to the Operation.** The GoI is fully committed to ensuring that the Program's results are not affected by fraud or corruption. Through the Program's legal documents, India (as the recipient of the IDA credit) is formally committed to the obligations under the Anti-Corruption Guidelines for the PforR operations, which shall cover all Program expenditures under Results Areas 1 through 4. Similarly, the 'Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loan and IDA credits and Grants' (dated October 15, 2006, and revised in January 2011) will apply to the TA component of the Operation.

76. The Right to Information (RTI) Act (2005) offers a valuable tool to enhance transparency of the Program. Under this act, access to information from a public agency has become a statutory right of every citizen. In the MSDE and DGT, there is a portal to file RTI applications/first appeals online along with a payment gateway. The state governments also have their own RTI system where one person in the department is designated as the point person to answer any questions that come through the RTI. The DGT has proactively made a lot of information on its schemes and funding public on its website for greater transparency. At the ITI level, normally one person (usually the principal) is designated to deal with all queries under the RTI.

77. Overall, the FSA concludes that, despite some weaknesses that have been identified and for which mitigation measures have been proposed, the Program fiduciary systems provide reasonable assurance that the financing proceeds under the Program will be used for intended purposes, with due attention to the principles of economy, efficiency, effectiveness, transparency, and accountability.
#### C. Environmental and Social

78. STRIVE aims at improving the relevance and efficiency of vocational training provided through ITIs and apprenticeship programs, and the interventions planned are expected to result in substantial social and environmental benefits to the society at large, especially to the poor and vulnerable sections. Adverse impacts that are sensitive, diverse, and unprecedented on the environment and/or people are not foreseen. However, planned efforts are essential to ensure that the proposed interventions do result in sustainable social and environmental benefits. Further, the lending instruments adopted for the purpose are twofold: (a) PforR, which covers the bulk of the credit, and (b) IPF, meant to support the TA component. Consequently, the social and environmental management have been planned separately for the two lending streams.

79. **PforR.** For this stream, the World Bank task team has carried out an Environmental and Social Systems Assessment (ESSA) as part of the Program preparation, to gauge the adequacy of environmental and social systems at national, state, and ITI levels against the six core principles This has enabled identifying the gaps and actions for enhancing the Program systems and mitigating environmental and social risks. Accordingly, recommendations have been made and an action plan has been drawn. Toward the preparation of the ESSA, the task team visited some 25 ITIs across the country in the states of Maharashtra, Jharkhand, Telangana, Assam, Delhi, Haryana, Tamil Nadu, Odisha, and Uttarakhand and held consultations with various stakeholders including Government officials and industry partners at the states who take in apprentices as well as trainers and trainees. As part of appraisal, the draft ESSA along with the action plan was discussed with, and buy-in secured from the borrower through a national workshop on November 8, 2016. The ESSA has been disclosed in the country on June 30, 2016 and on the Bank Portal on July 5, 2016. Key results of the social and environmental systems assessment reveal the following:

# Social System Assessments

80. The proposed Operation will have a significant impact on gender and social inclusion to ensure equitable access to training by targeting marginalized communities, and integrating gender-based planning, monitoring and reporting, as well as citizen engagement through information and advocacy campaigns in the design and implementation of the Operation. The ESSA found that the national and state systems though adequate to implement the program, need to be strengthened to address social management issues. The details are provided in Annex 6. Key issues relate to (a) inclusion-recognizing that the targeted clientele is quite diverse and heterogeneous and comprises several subgroups distinguishable based on nature and kind of endowment, gender, ethnicity, social, and cultural identity and geophysical considerations and identifying factors that enhance/constrain inclusion of poor and vulnerable sections encompassing women, SCs, STs, and religious minorities; (c) strategies for effective outreach in tribal and conflict/left wing extremism (LWE) areas; (d) infrastructural inadequacies in the ITIs and their interface with industries and corporate bodies; and (e) innovative and instructive information, education, and communication campaigns including effective counseling and motivation to make the Program 'inclusive'.

# **Environmental Aspects**

81. The existing environmental national and state legislation to address issues that arise from the day-to-day working of ITIs and construction activities is largely adequate. Since most activities are to be implemented at an ITI level or through apprenticeship actions focused in specific areas, large-scale environmental impacts are unlikely. However, gaps exist in environmental safeguards implementation, including adherence to regulations, such as (a) poor compliance to environmental legislation, waste management including e-waste and hazardous waste and batteries; (b) infrastructure design, that insufficiently considers the needs of handicapped students; (c) standard infrastructure designs resulting in local disasters and other risks arising from ITI functioning not considered, and infrastructure created under the Program may be damaged; (d) student training, apprenticeship, and training of teaching staff focus on technical training and soft skills but not occupational health and safety (OHS) or waste management, resulting in poor safety practiced in workshops and apprenticeship, and low awareness of waste management.

82. The ESSA identifies recommendations on environmental management in the Program for each ITI, which broadly includes introduction of robust environmental management and monitoring system, including OHS of workers, students, teachers, and other staff in the ITI; appropriate construction debris disposal; drainage along the ITI campus; hazardous waste management; sanitation and water supply; and taking due care to monitor these aspects and creating capacities and monitoring of above-listed environmental management and safety aspects by nominating one faculty member as a nodal person in each ITI. Key findings of the assessment have been described in annex 6. To ensure a basic understanding of safety and good environmental practices, Program actions have been identified.

83. **Climate and Disaster Screening:** The Operation was screened for climate and disaster risk. The results areas under the PforR aims to enhance the infrastructure in ITIs and provide youth a safe and conducive training space. The Operation builds on the existing environment frameworks introduced under VTIP and strengthens components of building safety (for example, curriculum integration, and safety measures included in Institutional Development plans). In addition awareness/workshops will be organized in training institutions. Hence the overall risk to the intended operation outcome is low to moderate.

84. **TA.** The TA has been planned to be financed through IPF. Correspondingly, social and environmental safeguards have been addressed separately. On the social front, as the Program is likely to be spread across the country including the tribal areas, it has prepared a Tribal Peoples Planning Framework in accordance with the World Bank's Operational Policy on Indigenous Peoples (OP 4.10).

85. Communities and individuals who believe that they are adversely affected as a result of a Bank supported PforR operation, as defined by the applicable policy and procedures, may submit complaints to the existing Program grievance redress mechanism or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to

submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <u>http://www.worldbank.org/GRS</u>. For information on how to submit complaints to the World Bank Inspection Panel, please visit <u>www.inspectionpanel.org</u>.

# D. Risk Assessment

86. Potential risks are stated in the Systematic Operations Risk-Rating Tool (SORT) in annex 7. The overall Operation risk is assessed as Moderate. Institutional capacity, fiduciary, and stakeholder risks are rated as substantial owing to, respectively, the low capacity at central and state levels to implement large-scale programs, delays in funds flow and weak engagement with industry as a stakeholder. The key risks affecting the overall risk rating are (a) the capacity constraints both at central (NPIU) and state (SPIU) levels for the implementation of large-scale reform programs in the skills development sector; (b) delay in funds flow and low capacity of fiduciary staff at the state level; (c) the adequacy of a robust institutional M&E system; and (d) insufficient industry engagement, as a critical stakeholder, in the design and implementation of courses.

The following mitigation measures have been taken: (a) the central and state 87. implementation unit will be supported through a dedicated PMC directly funded through the Operation (TA component); (b) for state-level activities, the funds will be directly disbursed to State Directorates by the MSDE based on defined financing triggers in the performance contract, and for grants to selected ITIs, the funds will be directly disbursed by state governments to the ITIs based on performance contracts; (c) the Operation's design through the DLIs focuses on results and helps build incentives to drive change; furthermore, the Operation focuses on establishing a robust MIS and M&E systems both at the central and state levels with periodic validation of data through third-party validation; and (d) strengthening the capacity of apprenticeship cells at the state level, continuous stakeholders workshops at the national and state level bringing together government and industry to identify solutions to constraints in coordination, and working closely with business associations and chambers of commerce. The fiduciary assessment identified further specific measures to strengthen the FM systems, which are described in annex 5. The Operation will focus on strengthening the MSDE's ability to develop robust fiduciary systems through hiring of a PMC, which will include FM and procurement specialists. Key FM and procurement-related performance indicators will be identified and may be included in the performance contracts as triggers for grants to states and selected ITIs, if considered feasible. On environment and social safeguards, the Operation is not expected to have any major negative effects. The Operation focuses on inclusion of females and disadvantaged group (ST), including measuring their progress in two PDO indicators. The World Bank will provide ongoing implementation support for effective implementation of the above risk management measures.

# E. Program Action Plan

88. The most critical steps required for the Program to achieve its objectives, which in the World Bank's assessment need specific external reinforcement, have been made the subject of a Program Action Plan (PAP) (see annex 8) that will be complemented by the TA component of the Operation. The proposed action plan has been formulated to address gaps identified by the Program assessments (technical, fiduciary, environmental, and social systems) to improve

Program implementation and to increase the likelihood of achieving Program outcomes. The action plan includes activities geared toward strengthening Program implementation and monitoring mechanisms, such as by hiring a PMC; strengthening FM and procurement arrangements; and promoting inclusion through coordinated activities at both central and implementing agency levels.

# **Annex 1: Detailed Program Description**

#### Scope of the Operation

1. The development objective of the Operation is to improve access to quality and marketdriven vocational training provided in ITIs and apprenticeships.

2. The national STRIVE program was introduced by the GoI to incentivize critical institutional reforms required in the long-term training systems—comprising ITIs and apprenticeships—to meet the GoI's commitment to skilling opportunities for economically disadvantaged/underserved communities and developing a globally competitive workforce. ITIs in India are owned and/or managed by the state governments,<sup>19</sup> while the role of the MSDE is policy making, regulation, quality assurance, as well as special (top-up) investment schemes to facilitate major intended reforms. STRIVE will be an instrument for the MSDE to fulfill its national mandate. It succeeds VTIP as the major investment project of the MSDE for institutional training. STRIVE is divided into four results areas: (a) Improved Performance of Industrial Training Institutes; (b) Increased Capacities of State Governments to Support Industrial Training Institutes and Apprenticeship Training. STRIVE is a five-year national program (2017–2022) with an overall volume of US\$318 million. It is implemented by the MSDE and targets ITIs and apprenticeship training pan-India.

3. Investment through STRIVE is designed to leverage previous reforms introduced through VTIP and expand the reform of long-term training in India by adding a special emphasis on apprenticeship training. It focuses on critical policy and program interventions for systemic reforms; it is based on strategic principles defined in the 2015 National Policy for Skills Development and Entrepreneurship and reflects international best practice in skills development. The proposed World Bank Operation will support the full STRIVE program.

# Activities of the Operation

4. The Operation consists of a PforR that is comprised of four results areas and is complemented by a TA component financed through IPF.

# Results Areas: (PforR)

- Results Area 1: Improved Performance of Industrial Training Institutes
- Results Area 2: Increased Capacities of the State Governments to Support Industrial Training Institutes and Apprenticeship Training
- Results Area 3: Improved Teaching and Learning
- Results Area 4: Improved and Broadened Apprenticeship Training

<sup>&</sup>lt;sup>19</sup> Government ITIs are owned, run, and financed by state governments, while private ITIs are supervised and regulated by state governments.

# TA (IPF)

5. The TA component is geared toward strengthening capacity in Program management, advocacy, and M&E by the MSDE and state governments.

6. **PDO/Outcome Indicators.** The following indicators will be used to measure achievement of the PDO:

- Increase in the number of graduates from ITIs that have signed PB Grant Agreements
- Female enrollment rate across ITIs with signed PB Grant Agreements
- Percentage of graduates from ITIs that have signed PB Grant Agreements who are in gainful employment one year after graduation (disaggregated by gender and ST)
- Number of Participating States that have reduced the vacancies of sanctioned trainers' posts by at least 20% in government ITIs
- Number of teachers who have completed pre-employment or in-service distance learning/blended modules
- Number of ICs that have introduced at least 2 different apprenticeship programs within their participating (member) industries
- Direct Operation beneficiaries (disaggregated by gender)
- 7. **Disbursement Linked Indicators (DLIs).** The Program has six specific DLIs as follows:
  - (1) Increase in the number of graduates from ITIs that have signed PB Grant Agreements
  - (2) Improvement in industrial training and employment outcomes for trainees and graduates of ITIs that have signed PB Grant Agreements
  - (3) Reduction in ITIs' trainer vacancies and improvements in training of trainers
  - (4) Number of Participating States that have conducted tracer studies
  - (5) Number of ICs that have introduced at least 2 different apprenticeship programs within their participating (member) industries
  - (6) Increase in female enrollment rate in ITIs with PB Grant Agreements and ICs receiving IAI Grants

8. A detailed results framework for the Operation (including definition of indicators) is provided in annex 2.

# Results Area 1: Improved Performance of Industrial Training Institutes

9. This results area is designed to address the key challenges of ITIs and to unlock their potential to dynamically develop into thriving agents of skills development in their catchment area. The Program will support selected ITIs to improve accessibility and quality of their skills development programs and to enhance market relevance and efficiency of their operations.

10. **Reform activities.** Grant funding under STRIVE will be awarded to participating ITIs on the basis of their ISPs. The PB Grant Agreement will specifically incentivize ITIs to initiate or deepen activities that are critical for institutional reform and capacity development for demand responsiveness through the following measures:<sup>20</sup>

- Deepening relations with companies for OJT, industrial exposure, and further training of teachers and joint needs assessments
- Introducing new courses (long- or short-term ones) to respond to local market needs, which will also include dual apprenticeship programs
- Mobilizing previously underrepresented and vulnerable groups, especially female and ST youth by introducing tailored services
- Strengthening pedagogical approaches for soft skills development
- Strengthening employment promotion activities for graduating students, such as job fairs, application training, entrepreneurship training and support, and so on
- Strengthening income-generating activities for enhanced sustainability, which at the same time deepen linkages with the local market
- Improving facilities and management

11. **Selection process.** Benefitting ITIs will be competitively selected in each state by the state governments based on defined selection criteria and through a standardized, transparent selection process. Both, government and private ITIs are eligible to apply, if they comply with a number of minimum eligibility criteria with reference to physical infrastructure, range of programs offered, management structures including industry involvement, and others. The actual selection will be done by state governments following overall scheme guidelines that are part of the Operations Manual (OM). State governments will issue a call for proposal and conduct a criteria-based selection of benefitting ITIs among all eligible applicants. Selection criteria include institutional characteristics and previous performance (for example, industry linkages, enrollment, capacity utilization, share of female and ST youth, employment rate of graduates, share of students undergoing OJT, existence of formal quality management structures, and others), as well as relevance of the proposed ISP. Benefitting ITIs will be selected once at the beginning of the STRIVE project implementation.

<sup>&</sup>lt;sup>20</sup> A detailed description of expected activities to be conducted in supported ITIs is included in annex 4.

12. The ISP for each participating ITI will include targets for a predefined list of indicators, and achievement of these targets will trigger disbursement under the PB Grant Agreement. Indicators include (a) percentage of CTS students undergoing OJT; (b) percentage of female students; and (c) increase in the number of graduates.

# Results Area 2: Increased Capacities of State Governments to Support Industrial Training Institutes and Apprenticeship Training

13. Under this results area, STRIVE aims to improve the overall operational environment of ITIs and apprenticeship programs at the state level through introducing performance-based financing between the MSDE and state governments. Results-based financing between the MSDE and state government will provide more autonomy to states to meet the agreed upon results while introducing a funding modality that will change the focus of dialogue between the MSDE and states from expenditures and inputs to policies and programs that improve the long-term training ecosystem. State government policies and regulations influence the scope of training providers to innovate and align their operations with the needs of the labor market. Creating a better environment for ITIs' performance requires conducive operational regulations, further investment, effective monitoring systems, and the provision of appropriately qualified, competent, and motivated principals and instructors. Performance-based funding will provide incentives to states to initiate necessary reforms and strategic programs.

14. Funding from the MSDE to states will be contingent on achievement of agreed indicators, which include both policy-related and programmatic interventions, such as reduced staff vacancies; establishment and implementation of an MIS aligned with central-level MIS requirements; timely transmission of management information, including providing the required information on teachers and students to the MSDE; implementation of tracer studies; teaching and management staff in the state undergoing further training; or implementation of centralized admission system for ITIs.

# Results Area 3: Improved Teaching and Learning

15. High-quality TL resources and good teachers are arguably the most critical factors determining quality enhancement of skills development programs. Reforms supported in this results area are therefore complementing the institutional reforms in the ITI and apprenticeship training space. Activities aim at further developing (a) TL resources through modernizing existing material using modern technology and adapting curricula and assessment procedures and (b) skills and competencies of the teaching staff, by making teacher pre-employment and further training better, more efficient, and more accessible. The results area has a strong focus on introducing ICT-based solutions into teaching practice, taking advantage of latest global developments in the field of technology-enabled skills development, while at the same time harnessing previous investment into IT infrastructure, which was also assisted under VTIP. Activities under this results area will address pedagogical improvements in the field of soft and employability skills, which is a mandatory module in all CTS programs, through the systematic integration of 'soft' skills such as information literacy, problem solving, critical thinking, entrepreneurialism, and 'learning to learn' across targeted CTS curricula and materials. Technology-enhanced solutions increase efficiency in teacher training by allowing a larger number of teachers to participate.

16. **ICT-enhanced TL resources for CTS courses to improve the quality of learning in the classroom.** The resources developed will make heavy use of visual design (including video demonstrations, simulations, and computer-based interactive self-assessment activities). The process will be accompanied by ongoing engagement with ITIs to shift from a traditional face-to-face educational delivery mode to a blended learning mode, in which high-quality materials replace the need for lectures and enable greater focus on practical sessions and tutorials at the ITIs. The materials developed will all be made available under open licenses and will be designed within the framework of a suitable set of guidelines for inclusive design, to ensure that the resulting materials are all accessible to people with special educational needs. Complementary to the design of TL packages, adapted assessment tools will be developed and curricula adapted as needed. This process will be initiated in selected engineering trades and piloted in selected ITIs. All materials developed will be aligned to the NSQF.

17. **Professional development of teaching staff.** STRIVE will support the GoI to invest in the design and development of a comprehensive professional development ecosystem for teaching staff and principals in the skills development space, with a strong focus on technology-based solutions. Activities to be incentivized focus on both (a) upscaling of ICT-enabled educational resources for teacher pre- and in-service training schemes with the aim of increasing quality and effectiveness in the teachers training space and (b) developing selected teacher training institutes into multipurpose resource centers. Activities will focus on teaching staff in ITIs, while outputs and outcomes will benefit the entire corps of teaching staff in India's skills development space.

18. To improve efficiency and effectiveness in teacher training, STRIVE will do the following:

- a. Introduce for pre-employment teachers training programs (CITS) in selected occupational areas the delivery of training modules through blended learning programs, involving a combination of distance education and face-to-face learning methods. Implementing ODL in the CITS domain will allow the programs to be delivered as part-time certificate courses, which will enable candidates to study while already teaching and thus help ITIs cope with the shortage of teaching staff.
- b. Enrich the teacher further training space by developing a CPD system (which would also link CPD courses into formal career development schemes) and introducing a full suite of CPD activities in selected occupational areas. This will also include an online 'Knowledge Hub' offering a comprehensive transactional space for all CPD to ITI managers and teaching staff.

19. Central teacher training institutes, including the CTI, 12 ATIs, Apex Hi-Tech Institute (AHI), 2 Foremen Training Institutes, NVTI, and 15 RVTIs represent a profound resource of teacher training and advanced technical training. As India is aiming at globally competitive technologies and production in engineering, currently the 30 centrally managed teacher training institutes are well-positioned to develop into multipurpose high-level resource centers for selected occupational areas, combining research and advanced training functions for industry with teacher training to produce state-of-the-art technology competence in teaching staff. STRIVE will fund the upgrading of selected teacher training institutes into such resource centers,

focusing on engineering trades. Benefitting institutes will be equipped with state-of-the-art technology in their field of specialization complemented by comprehensive master training initiatives.

#### Results Area 4: Improved and Broadened Apprenticeship Training

20. Under this results area, the Program aims at modernizing the Apprenticeship Training System by driving systemic changes and encouraging more companies, especially SMEs, to engage in apprenticeship training. Deepening the presently emerging reforms of the apprenticeship system will ultimately result in making better use of India's vast learning and training opportunities through employers.

21. Apprenticeship training is by nature an employer-led training mechanism and as such intrinsically demand-driven. STRIVE supports system reforms that will increase the industry's influence in defining programs and contents, improving quality enhancement and assurance mechanisms, and strengthen dual delivery modes that have internationally proven to be most effective to enhance learning outcomes and develop necessary soft and employability skills among students. The term 'dual apprenticeship' refers to apprenticeship programs that are designed as a combined and integrated approach to workplace and school-based learning. Some large firms in India have already embarked on such approaches, but so far most of them are not recognized as formal apprenticeship programs and therefore graduates cannot acquire a formal NCVT certificate. The Program will help build processes to allow employer-led programs to be formally recognized and disseminate dual training approaches in the SME sector. It will also focus on developing appropriate mechanisms and instruments for enhancing standards and quality of apprenticeship training and improving quality assurance, especially focusing on workplace learning. The Program will therefore not only increase the overall volume of apprenticeship training, but also enhance quality and relevance of apprenticeship training throughout India. In discussions, SMEs have indicated high interest in participating in dual apprenticeship programs provided these meet their specific skills needs.

22. IAIs. To incentivize industry-driven and needs-based apprenticeship training—especially in SMEs and in cooperation between large companies and SMEs-STRIVE will offer grant funding to IAIs within selected ICs. IAIs are apprenticeship development projects driven by stakeholders with the joint interest of improving ongoing apprenticeship training and/or introducing new apprenticeship programs. Participants in these initiatives will be interested firms, training providers, and potentially other stakeholders in one or several industrial sectors. IAIs will be facilitated and managed by industry cluster organizations, which will also be the formal partner in the grant agreement with the Government. To apply for grant funding, ICs will define the objectives and planned activities of the IAIs and the participating partners in a project proposal to be submitted to the MSDE. Grant funding can be used to cover the costs involved in (a) setting up new or revising existing apprenticeship training programs in line with the specific needs of the participating firms (including development of curricula, enterprise training plans and TL material, assessment mechanism); (b) capacity development (including infrastructure) of basic training providers (either apprenticeship training schools run by ICs, ITIs, or third-party basic training providers); (c) initiatives to establish and raise the standards of quality assurance of apprenticeship training with the participation of industry experts; (d) training of trainers (that is, company supervisors of apprentices and trainers in basic training institutions) and other

stakeholders; and (e) other costs necessary to improve and expand needs-based apprenticeship training within IAI firms. IAIs will be identified in a competitive and transparent selection process following the scheme guidelines which are part of the OM. Responsibility for calls for proposal and selection of IAIs rests with the six Regional Departments of Apprenticeship Training (RDAT). Selection criteria include to the strength and capacity of the IC, labor market relevance of the suggested apprenticeship programs, number of benefitting apprentices, and cost-effectiveness of grant project. It is expected that some 100 IAIs will be selected for grant support through two calls for proposal (at the beginning and in the second year of STRIVE implementation).

System reform and capacity development. STRIVE will incentivize the MSDE to 23. initiate critical system reforms. Issues to be addressed include mechanisms to strengthen industry involvement in the identification and/or revision of apprenticeship trades, incentivize dual delivery approaches, streamline the institutional framework for managing and supporting apprenticeship training, align the qualification structure to cater for different qualification levels in the apprenticeship training space in line with the NSQF, improve quality assurance mechanisms both in basic training provision and company training, and devise appropriate incentive structures for employers' participation. To implement such reforms, substantial capacity-building activities for key stakeholders are necessarily targeting: (a) government officers at central, regional, and state levels to build knowledge and expertise in dual training and facilitation of such approaches; (b) staff in ICs and other business associations (including chambers) to better fulfill their advocacy and facilitation functions; and (c) supervisory staff in companies to enhance pedagogical skills for the supervision of apprentices and understanding of quality assurance mechanisms. Information campaigns will target the business communities and potential apprentices, to raise awareness about opportunities and delivery options in apprenticeship training, and about its benefits to both companies and young labor market entrants after improved apprenticeship programs are introduced.

# **Implementation Arrangements**

# Implementation Responsibilities

24. STRIVE is a national program representing a multilevel approach that reflects the complex structure of the long-term training ecosystems with its different layers of action and responsibilities. To improve relevance and quality of ITI training and apprenticeship, a key focus of the Program is improved operations at the level of skills development delivery. However, improvements in the space of skills development hinges on enabling regulatory structures and an appropriate resource base. Consequently, relevant institutions at central and state levels will be responsible for implementation of regulatory reforms and improvement of support systems. Table 1.1 shows the actors responsible for the implementation of activities at different levels.

Implementation Responsibilities for Major Activities	Central Level	State Level	Level of Training Delivery
Results Area 1: Improved Performance of Industr	ial Training Institutes		
Grant funding support to ITIs	n.a.	State Directorates for Education and	n.a.

# Table 1.1. Institutions for Implementation of STRIVE

Implementation Responsibilities for Major Activities	Central Level	State Level	Level of Training Delivery
		Training	
Activities to increase performance and relevance of ITI training	n.a.	n.a.	ITIs
<b>Results Area 2:</b> Increased Capacities of State Gov Apprenticeship Training	ernments to Support Ind	ustrial Training Institu	tes and
Developing and implementing MIS, including tracer studies; improved human resource management and teachers training; policy reforms related to ITI admissions; and others	n.a.	State Directorates for Education and Training	n.a.
Results Area 3: Improved Teaching and Learning	1	1	
ICT-based reform of CITS programs; development of online and e-learning-based CPD system for teaching staff	NCVT	n.a.	n.a.
Upgradation of teacher training institutes to multifunctional resource centers	ATIs/CTI/NVTI/ RVTIs/AHI/Foremen Training Institutes	n.a.	n.a.
Development of ICT-enabled TL resources for CTS programs based on curriculum revision	NCVT, NIMI, CSTARI	n.a.	n.a.
Implementation of new TL resources and outcome-based assessment	n.a.	n.a.	Selected pilot institutions
<b>Results Area 4:</b> Improved and Broadened Apprenticeship Training			
Capacity building at central-, regional-, and state-level offices; Advocacy, awareness raising; policy research and dialogue; Grant funding to IAIs	Central Apprenticeship Council/Advisor; RDATs	State Apprenticeship Council/Adviser	n.a.
Support to IAIs	Regional Director of Apprenticeship Training	State Apprenticeship Council/Adviser	n.a.
Development and delivery of revised and new apprenticeship programs	n.a.	n.a.	ICs

25. The scope of the World Bank-supported Operation consists of two categories of activities: (a) performance of ITIs, state capacities to support ITIs and apprenticeship training, improved TL and improvements in apprenticeship to be supported under the PforR and (b) TA to be supported through IPF to the MSDE. Under the PforR, World Bank funding will be disbursed to the GoI/MSDE upon achievement of defined DLIs, presented in annex 3. The selection of DLIs reflect the critical reform areas the GoI has to address to improve access and labor market relevance of long-term training: (a) incentivizing flexibility in the range of programs offered for better labor market relevance and efficiency; (b) improved management of teachers and teachers training; (c) increased focus on monitoring of results; (d) better involvement of industry in long-term training through apprenticeships; and (e) a stronger focus on inclusion; and. The amounts are indicative. In case of any over- or underperformance in a given year, the draw down by the MSDE will vary depending on the actual performance. At midterm, allocations across DLIs will be reviewed. The GoI will channel funds to states and benefitting implementation institutions as discussed in the following paragraph.

26. To incentivize state-level reform, the MSDE will disburse funds annually to State Directorates based on defined financing triggers. Initial inclusion of states into the funding scheme is contingent upon proof of specified reforms and baseline achievements, including the following:

- Established a State Steering Committee and SPIU according to prescribed standards
- Request for Proposals issued for the selection of ITIs in the state to participate in the STRIVE PB Grant Agreement Scheme for ITIs
- ITIs have administrative and financial autonomy as those under the guidelines for the GoI scheme on upgradation of 1,396 government ITIs through the PPP
- Satisfactory audit structures and compliance with financial reporting requirements

27. State Directorates eligible for inclusion in the scheme in accordance with these criteria will conclude a performance contract with the MSDE, which identifies targets for predefined indicators that serve as financing triggers in the course of Program implementation. These indicators/triggers include the following:

- Functioning state-level MIS regularly submitting relevant data to the NCVT portal
- Conducting tracer studies
- Developing and using centralized admission process
- Reducing vacancy of ITI teachers
- Conducting industrial training of ITI teachers

28. Responsibility for management and funding of grants to selected ITIs under the PB Grant Agreement Scheme rests with the state governments. State Directorates will sign performance contracts with the ITIs<sup>21</sup> and disburse funds annually based on the achievement of performance indicators (financing triggers) defined in the ISPs. An ISP represents a five-year strategic plan for the development of the ITI. ISPs will follow a standard format that identifies a range of potential objectives and targets, to which the ITI commits itself in the plan. While indicators are standardized over all participating ITIs, each ITI will individually set targets in line with institutional strategies and potentials. Agreed targets will serve as financing triggers under the PB Grant Agreement (see the description of Results Area 1).

29. Verification of PB Grant Agreement achievements to trigger funding will be based on the internal ISP monitoring mechanisms of the ITI, complemented by external monitoring undertaken by the SPIUs. Achievements will be verified by the NPIU on a sample basis by employing independent verification agents. Responsibility for financial management and procurement at the level of ITIs rests with the management of the ITI, and the IMC and the state government in the case of government ITIs. Eligible expenditures under the PB Grant Agreement

<sup>&</sup>lt;sup>21</sup> In case the benefitting ITI is a government ITI, the contract partner will be the IMC of the ITI.

are defined in the OM of STRIVE. These include all activities that lead to the performance improvement and further development of ITIs specifically including investment in infrastructure and machinery for new and improved programs and other activities foreseen in the plan, development costs for programs and activities (for example, labor market assessments, curriculum development), seed funding for new programs and activities, and costs related to further training of teaching staff. Recurrent costs of government and third-party funded training programs and costs of land acquisition will not be covered through STRIVE funds.

30. The MSDE—operating through the RDATs—is responsible for managing grant agreements for IAIs. Benefitting ICs will be identified in a competitive selection process according to rules and procedures stipulated in the OM. The OM will include a detailed description of grant modalities and eligible expenditure. Principally, grant funding can be used to augment costs for setting up and introducing new or revised apprenticeship programs, costs for improving the capacities of basic training providers, training of company supervisors and other stakeholders, quality enhancement and quality assurance mechanisms, as well as costs related to the organization of IAIs.

# Program Monitoring

31. The NPIU within the MSDE has significant experience with implementing World Banksupported projects and a well-defined institutional mechanism for planning, managing, and monitoring implementation of skills training programs. At the national level, the NPIU will lead the overall M&E arrangements of the Program. The NPIU will be supported by a PMC. Activities undertaken with respect to M&E by the NPIU will include (a) reviewing program progress periodically; (b) consolidating and disseminating information on Program progress reports (including reporting on youth satisfaction with Program design and delivery, fiduciary performance, and safeguards compliance); (c) reporting on DLIs (achievements and providing evidence as per the agreed verification protocols); and (d) commissioning surveys, studies, and assessments as necessary. At the subnational level, implementing agencies including IMCs, SPIUs, ICs, and CFIs will be responsible for preparing and submitting annual reports on implementation progress. To support these reporting processes, the PMC will design standardized reporting templates to ensure that Program reports provide clear and transparent progress updates on all relevant aspects of the Program Results Areas Framework and DLIs.

# Reporting Requirements

32. **Implementation progress reports.** The MSDE will prepare annual reports for progress against STRIVE. The annual report will specify achievement of main interventions. Each implementing agency will be responsible for providing the required information to the MSDE. The report will cover the period August–July. In addition to providing evidence on achievement of DLIs and intermediate outcomes, the report will summarize financial performance. The Joint Review Mission will assess progress against the Results Framework, including how the targets are reached, and monitor progress related to specific strategies and the allocation and deployment of resources with information on skills supply and demand.

33. **Policy studies and third-party validation.** Specific policy and thematic evaluation studies and third-party validations will be undertaken as required.

#### Data Sources

34. **Program performance.** Progress in the long-term training space is primarily monitored through the NCVT MIS and annual reports. The MSDE capacities will be strengthened to develop and improve data collection systems. In addition, the MSDE will be strengthened to analyze information to report against key performance parameters on time. The NCVT portal will be strengthened further and developed in such a way that data is accurately captured (whether manually or electronically) at the training delivery level according to data standards that ensure it can flow in a streamlined fashion through to state-level MISs and then automatically into the NCVT MIS, using agreed technical standards and protocols (which conform to the requirements of the Open Data Policy of India) since these systems will play a major role in Program monitoring. Integrated MIS systems will enable real-time, online access to key data metrics such as number of candidates/apprentices, number of teachers and their qualification levels, courses offered across geographical areas, candidate/apprentice performance rates, graduate placement rates, and so on. For cases in which the Program monitoring data may not be accessible through the NCVT MIS, separate facilities have been designed.

35. **Third-party validations.** For external checks on the progress against DLIs, the MSDE will hire third-party agents to validate data.

36. **Surveys and studies.** Primary data collection, including studies of labor market outcomes and prospective experimental impact evaluations to test programmatic and policy alternatives, will be undertaken. In addition, studies that provide an in-depth understanding of implementation progress (challenges and success) both from the implementing agency and the beneficiary will be undertaken to improve Program design and implementation modalities of critical activities. In addition, annual third-party validations will be undertaken as required.

# **Annex 2: Results Framework Matrix**

# **Results Framework**

Results Areas Supported by PforR	PDO/Outcome Indicators	Intermediate Results Indicators	DLI Number	Unit of Measurement	Baseline (FY17)	End Target (FY22)
<b>Results Area 1:</b> Improved Performance	PDO Indicator 1: Increas have signed PB Grant Ag	e in the number of graduates from ITIs that greements	1	Percentage (annual)	0	20
of Industrial Training Institutes	IR Indicator 1.1: Percentage increas enrollment across ITIs with signed I Agreement			Percentage (annual)	0	25
		IR Indicator 1.2: Percentage of trainees undergoing OJT across ITIs with signed PB Grant Agreements	2	Percentage (annual)	2*	15
	PDO Indicator 2: Female Agreements	enrollment rate in ITIs with signed PB Grant	6	Percentage (annual)	9.7*	15
	PDO Indicator 3: Percent PB Grant Agreements wl graduation	age of graduates from ITIs that have signed to are in gainful employment one year after	2	Percentage (annual)	50*	65
	% female			Percentage (annual)	39.7*	42
	% ST			Percentage (annual)	49.1*	53
<b>Results Area 2:</b> Increased Capacities of State Governments to	PDO Indicator 4: Numbe vacancies of sanctioned t ITIs	r of Participating States that have reduced the rainers' posts by at least 20% in government	3	Number (cumulative)	0	20
Support Industrial Training Institutes and		IR Indicator 4.1: Number of Participating States that have conducted tracer studies	4	Number (cumulative)	0	20
Apprenticeship Training		IR Indicator 4.2: Percentage of trainees in government ITIs who are from ST populations		Percentage (annual)	1.35	4
Results Area 3: Improved Teaching and	PDO Indicator 5: Numbe employment or in-service	r of teachers who have completed pre- e distance learning/blended modules		Number (annual)	5,000	20,000
Learning		IR Indicator 5.1: Number of CTS trades for which ICT-based teaching and learning		Number (cumulative)	0	4

Results Areas Supported by PforR	PDO/Outcome Indicators	Intermediate Results Indicators	DLI Number	Unit of Measurement	Baseline (FY17)	End Target (FY22)
		packages have been developed and used				
		IR Indicator 5.2: Number of CITS trades upgraded and rolled out in distance learning/blended mode	3	Number (cumulative)	0	4
		IR Indicator 5.3: Impact evaluation of work readiness pilot and girls' incentive pilot completed		Number (cumulative)	0	2
Results Area 4: Improved and Broadened	PDO Indicator 6: Numbe different apprenticeship p industries	r of ICs that have introduced at least 2 programs within their participating (member)	5	Number (cumulative)	0	60
Apprenticeship Training		IR Indicator 6.1: Number of ICs receiving IAI Grants that have reached a female enrollment of 20% in their respective apprenticeship programs	6	Number (cumulative)	0	20
Crosscutting	PDO Indicator 7: Direct	Operation beneficiaries		Number (cumulative)	0	650,000
	% female			Percentage (annual)	0	30

\*Since PB Grant Agreement ITIs have not yet been identified baseline information is based on the average across all ITIs.

# **Indicator Description**

				Mathadalagy	Dognongihility	D	LIs
Indicator Name (Number)	Description (Clear Definition, and so on)	Frequency	Data Source	for Data Collection	for Data Collection	Responsibili ty for Data Verification	Scalability of Disbursement (Yes/No)
PDO Indicator 1: Increase in the number of graduates from ITIs that have signed PB Grant Agreements (DLI 1)	Indicator measures the percentage increase over baseline of total number of graduates across all ITIs with signed PB Grant Agreements. Graduates refer to trainees who have successfully completed a CTS trade or any other trade offered in the ITI with a minimum duration of 300 hours.	From year 2 onwards: Annual	Annual progress report on STRIVE to be prepared by the MSDE	ITIs submit enrollment lists to states, and states submit consolidated data to MSDE	MSDE	IVA to be hired by the MSDE	Ν
IR Indicator 1.1: Percentage increase in enrollment across ITIs with signed PB Grant Agreements	Indicator refers to all trainees in ITIs that have signed PB Grant Agreements who were enrolled in the year in any CTS trade or any other trade offered in the ITI with a minimum duration of 300 hours. If a trainee was enrolled in more than one training program in the same year, then s/he is counted for every different training program in which s/he was enrolled.	Annual	Enrollment lists from ITIs; State/NCVT MIS	ITIs submit enrollment lists to states, and states submit consolidated data to MSDE	MSDE		
IR Indicator 1.2 Percentage of trainees undergoing OJT across ITIs with signed PB Grant Agreements (DLI 2)	Indicator measures the number of trainees undergoing OJT across all ITIs with signed PB Grant Agreements in each academic year. This shall be counted for all dual training trades and other trades under CTS for which the curriculum has an OJT requirement. The minimum period of OJT for the purpose of this indicator shall be as prescribed in the curricula for dual training trades and two weeks per year for other CTS trades. OJT requirement may be fulfilled through training in any enterprise, including informal and/or local industry, and production centers.	Annual	Annual progress report on STRIVE to be prepared by the MSDE	ITIs submit OJT data to states, and states submit consolidated data to MSDE	MSDE	IVA to be hired by the MSDE	No
PDO Indicator 2: Female enrollment rate in ITIs with signed PB Grant	Indicator measures the female enrollment rate across all ITIs with signed PB Grant Agreements for each academic year.	Annual	Annual progress report on STRIVE to be prepared by the	ITIs will report through NCVT MIS portal each year.	States, MSDE	IVA to be hired by the MSDE	No

				Mathadalaan	D	D	LIs
Indicator Name (Number)	Description (Clear Definition, and so on)	Frequency	Data Source	for Data Collection	for Data Collection	Responsibili ty for Data Verification	Scalability of Disbursement (Yes/No)
Agreements (DLI 6)			MSDE	States will verify the report.			
PDO Indicator 3: Percentage of graduates from ITIs that have signed PB Grant Agreements who are in gainful employment one year after graduation (DLI 2)	Graduates refer to trainees from ITIs that have signed PB Grant Agreements who successfully completed the CTS program in academic year 2019/20 and hold the National Trade Certificate. Indicator measures the percentage of all graduates who are wage employed, self- employed, or enrolled in an apprenticeship contract. Indicator will be measured by tracer studies. Measurement of the indicator is considered sufficient if tracer studies have captured 5% of the population of graduates. The study must (i) be based on a representative sample of students; (ii) have a sample size large enough to also include representation at the trade level; (iii) cover student background characteristics; and (iv) disaggregate data based on gender, caste, location (rural/urban), education level, and household economic status.	Year 5	Tracer study report	Tracer study conducted by MSDE	MSDE	IVA to be hired by the MSDE	No
PDO Indicator 4: Number of Participating States that have reduced the vacancies of sanctioned trainers' posts by at least 20% in government ITIs (DLI 3)	Participating states refer to those states that have signed PB Funding Agreement with the MSDE. Vacancy rate measures the share of posts filled either permanently or through contract teachers of the total sanctioned posts for NCVT trades in government ITIs. Relevant is the state average across all government ITIs in the state. Indicator is met if the vacancy rate is 20% lower than at baseline (2016/17) Each participating state that met the target is counted once.	Annual	Annual progress report on STRIVE prepared by states	States will submit data through NCVT MIS	MSDE	IVA to be hired by the MSDE	Y
IR Indicator 4.1: Number of	Participating states refer to those states that have signed PB Funding Agreement with the	Annual	Tracer study reports by states;	States will conduct tracer	States; MSDE	IVA to be hired by the	Y

				Mathadalaan		D	LIs
Indicator Name (Number)	Description (Clear Definition, and so on)	Frequency	Data Source	for Data Collection	for Data Collection	Responsibili ty for Data Verification	Scalability of Disbursement (Yes/No)
Participating States that have conducted tracer studies (DLI 4)	MSDE. Indicator measures the number of participating states that have completed tracer studies (sample surveys) of ITI graduates using a methodology accepted by the central government, which shall include that the study must (i) be based on a representative sample of students; (ii) have a sample size large enough to also include representation at the trade level; (iii) include both government and private ITIs; (iv) cover student background characteristics; and (v) disaggregate data based on gender, caste, location (rural/urban), education level, and household economic status. A tracer study is considered completed, if data have been submitted to the MSDE in a format accepted by the central government and the findings are publicly disclosed.		Annual progress report for STRIVE prepared by the MSDE	studies and submit findings to MSDE		MSDE	
IR Indicator 4.2: Percentage of trainees in government ITIs who are from ST populations	Indicator measures the percentage of trainees in government ITIs who are from ST populations.	Annual	NCVT	States submitting data to NCVT	MSDE		
PDO Indicator 5: Number of teachers who have completed pre-employment or in-service distance learning/blended modules	Indicator measures number of teachers employed at the time of measurement in a government or private ITIs either as permanent staff or as contract teacher. Counted are teachers who in the year of measurement have successfully completed at least one online or computer-based training module recognized by DGT.	Annual from year 2 onwards	CITS and CPD databases	Evaluation of CITS and CPD database assessment records	MSDE		
IR Indicator 5.1: Number of CTS trades for which ICT-based teaching	The indicator measures curricula (so-called trades) for the CTS, for which comprehensive new technology-based TL resource packages have been developed by NIMI, in consultation	Year 3, 5	NIMI; NCVT	Provision of curriculum framework documents,	MSDE		

				Mathadalagy	Deenengihility	D	LIs
Indicator Name (Number)	Description (Clear Definition, and so on)	Frequency	Data Source	for Data Collection	for Data Collection	Responsibili ty for Data Verification	Scalability of Disbursement (Yes/No)
and learning packages have been developed and used	with CSTARI, based on a curriculum revision and content development process. There must also be evidence that package for each CTS trade has been used in the teaching processes in at least 10 ITIs, whether government or private. These ITIs may differ for each CTS trade.			documentation of availability of teaching and learning packages on NIMI website; download statistics per TL package from NIMI website; written reports from ITIs describing use of teaching and learning packages			
IR Indicator 5.2: Number of CITS trades upgraded and rolled out in distance learning/blended mode (DLI 3)	Indicator measures the number of CITS trades for which comprehensive new digital TL resource packages, incorporating effective use of video and computer-based multimedia as educationally appropriate, have been developed by NIMI, in consultation with CSTARI, using a curriculum revision and content development process, in order to offer the trades in a blended learning mode (comprising a combination of distance learning and face-to-face learning methods). There must also be evidence that the NCVT has offered the upgraded trade using these resource packages for enrollment in at least 2 ATIs.	Years 3 and 5	Annual progress report on STRIVE to be prepared by the MSDE	NCVT to prepare list of upgraded trades and maintain enrollment lists	MSDE	IVA to be hired by the MSDE	Yes
IR Indicator 5.3: Impact evaluation of work readiness pilot and girls' incentive pilot completed	The indicator captures the completion of two studies. The first study will pilot and test the effectiveness of different interventions to increase girls' enrollment in labor market- relevant trades including introducing stipends	Years 1 and 3	Surveys	Third-party provider will be hired to design the pilot, develop	MSDE		

				Mathadalagy	Dognongihility	D	LIs
Indicator Name (Number)	Description (Clear Definition, and so on)	Frequency	Data Source	for Data Collection	for Data Collection	Responsibili ty for Data Verification	Scalability of Disbursement (Yes/No)
	and/or information campaigns. The second study will pilot alternative work readiness interventions to identify what is the most effective curricula and delivery mechanism for improving soft skills of students. Both studies will use a prospective randomized evaluation methodology to allow for casual estimates.			the evaluation instruments (survey and so on), and collect the data			
PDO Indicator 6: Number of ICs that have introduced at least 2 different apprenticeship programs within their participating (member) industries (DLI 5)	Indicator refers to those ICs that have signed grant agreements with the MSDE under the IAI grant mechanism, and have introduced at least two different apprenticeship programs within their participating (member) industries. Apprenticeship programs must be designed in accordance with the requirements of upgraded dual training programs as defined in the IAI guidelines of the OM. There must be evidence that at least 20 apprentices have been enrolled under each apprenticeship program. ICs that have introduced at least 2 such programs are counted only once.	Annual	Enrollment lists; Apprenticeship portal	Enrollment lists to be submitted by ICs to RDATs	MSDE	IVA to be hired by the MSDE	Yes
IR Indicator 6.1: Number of ICs receiving IAI Grants that have reached a female enrollment of 20% in their respective apprenticeship programs (DLI 6)	Indicator measures the number of ICs that have signed grant agreements with the MSDE under the IAI grant mechanism that have at least 20% female enrollment in the apprenticeship programs introduced using the IAI grant funding. An IC which achieves the 20% female enrollment in any year is counted only once.	Annual	Enrollment lists; apprenticeship portal; annual progress report on STRIVE to be prepared by the MSDE	RDATs to report on the number of apprentices.	MSDE	IVA to be hired by the MSDE	Yes
PDO Indicator 7: Direct Operation beneficiaries	<ul> <li>The following groups are considered 'direct beneficiaries':</li> <li>a) Apprentices enrolled in apprenticeship programs implemented under the IAI grant mechanism</li> <li>b) All short- and long-term trainees</li> </ul>	Annual	<ul> <li>(a) Apprenticeshi p portal</li> <li>(b) See IR Indicator 1.1</li> <li>(c) See PDO Indicator 5</li> </ul>	<ul> <li>(a) Enrollment</li> <li>lists to be</li> <li>submitted</li> <li>by ICs to</li> <li>RDATs</li> <li>(b) See IR</li> <li>Indicator</li> </ul>	<ul> <li>(a) MSDE</li> <li>(b) See IR Indicator 1.1</li> <li>(c) See in PDO</li> </ul>		

				Mathadalagy	Dosponsibility	D	LIs
Indicator Name (Number)	Description (Clear Definition, and so on)	Frequency	Data Source	for Data Collection	for Data Collection	Responsibili ty for Data Verification	Scalability of Disbursement (Yes/No)
	<ul> <li>enrolled in ITIs that have signed PB Grant Agreements, as defined in IR Indicator 1.1</li> <li>c) Teachers who have completed CITS or CPD modules, as defined in PDO Indicator 5</li> <li>d) Any actor from the government or private sector that has participated in training programs that are related to apprenticeship or ITI reform and have been funded through STRIVE</li> <li>e) Number of ITI students, apprentices, or any other participants of skills development programs who have participated in programs based on revised curricula with ICT-supported TL resources as defined in IR Indicator 5.1</li> <li>f) Students trained in ITIs and other training institutions by teachers who have improved their skills through access to the CITS and CPD.</li> </ul>		<ul> <li>(d) Attendance sheets of training programs; annual progress report on STRIVE to be prepared by the MSDE</li> <li>(e) Enrollment lists; NCVT; IR Indicator 5.1</li> <li>(f) States submitting data to MSDE; state/NCVT MIS</li> </ul>	<ul> <li>1.1</li> <li>(c) See PDO Indicator 5</li> <li>(d) MSDE will maintain data on the attendees of training programs conducted through STRIVE funding</li> <li>(e) NCVT to maintain lists of training institutions providing relevant programs and their enrollment lists; IR Indicator 5.1</li> <li>(f) State will submit data to MSDE</li> </ul>	Indicator 5 (d) MSDE (e) MSDE (f) States, MSDE		

# Annex 3: Disbursement Linked Indicators, Disbursement Arrangements, and Verification Protocols

	Total Financing	Fotal         As % of         DLI         DISBURSEMENT-LINKED RESULTS           pancing         Total         Baseline						
DISBURSEMENT Linked Indicators	Allocated to DLI	Financing Amount	Dasenne	RESULTS TO BE Achieved in FY2017/18 (Year 1)	RESULTS TO BE Achieved in FY2018/19 (Year 2)	RESULTS TO BE Achieved in FY2019/20 (Year 3)	RESULTS TO BE Achieved in FY2020/21 (Year 4)	RESULTS TO BE ACHIEVED IN FY2021/22 (YEAR 5)
1. Increase in the number of graduates from ITIs that have signed PB Grant Agreements			0	At least 200 ITIs have signed PB Grant Agreements with MSDE*	The number of graduates in the academic year for ITIs that have signed PB Grant Agreements has increased by 5% compared with graduates in academic year 2015/16*	The number of graduates in the academic year for ITIs that have signed PB Grant Agreements has increased by 10% compared with graduates in academic year 2015/16*	The number of graduates in the academic year for ITIs that have signed PB Grant Agreements has increased by 15% compared with graduates in academic year 2015/16*	The number of graduates in the academic year for ITIs that have signed PB Grant Agreements has increased by 20% compared with graduates in academic year 2015/16*
Allocated Amounts	19	15.8		USD 2,000,000 upon achievement of threshold, plus USD 500,000 for each batch of 50 ITIs thereafter	USD 4,000,000	USD 4,000,000	USD 4,000,000	USD 4,000,000
2. Improvement in industrial training and employment outcomes for trainees and graduates of ITIs that have signed PB Grant Agreements			2% trainees undergoin g OJT**; 50% placement rate**		At least 5% of trainees enrolled in academic year 2018/19 across ITIs that have signed PB Grant Agreements have undergone OJT	At least 10% of trainees enrolled in academic year 2019/20 across ITIs that have signed PB Grant Agreements have undergone OJT	At least 15% of trainees enrolled in academic year 2020/21 across ITIs that have signed PB Grant Agreements have undergone OJT	At least 65% of trainees graduated in academic year 2019/20 from ITIs that have signed PB Grant Agreements are in gainful employment one year after graduation.
Allocated Amounts	21	17.5			USD 3,000,000	USD 4,000,000	USD 4,000,000	USD 10,000,000

# **Disbursement Linked Indicator Matrix**

3. Reduction in ITIs' trainer vacancies and improvements in training of trainers			(i) 0 (ii) 0	MSDE has developed a sustainability plan for the recruitment, training and career progression for ITIs trainers*	At least 3 Participating States have reduced the vacancies of sanctioned trainers' posts by at least 20% in government ITIs compared with vacancy numbers in academic year 2015/16*	<ul> <li>(i) At least 5 Participating States have reduced the vacancies of sanctioned trainers' posts by at least 20% in government ITIs compared with vacancy numbers in academic year 2015/16* and</li> <li>(ii) NIMI has upgraded at least 2 CITS trades and NCVT has rolled them out*</li> </ul>	At least 7 Participating States have reduced the vacancies of sanctioned trainers' posts by at least 20% in government ITIs compared with vacancy numbers in academic year 2015/16*	(i) At least 10 Participating States have reduced the vacancies of sanctioned trainers' posts by at least 20% in government ITIs compared with vacancy numbers in academic year 2015/16*; and (ii) NIMI has upgraded at least 4 CITS trades and NCVT has rolled them out*
Allocated Amounts	20.5	17.1		USD 2,500,000	USD 1,800,000	<ul> <li>(a) USD 1,200,000</li> <li>for DLR (i) above; and</li> <li>(b) USD 5,000,000</li> <li>for DLR (ii) above</li> </ul>	USD 1,200,000	<ul> <li>(a) USD 1,800,000</li> <li>upon achievement of threshold of DLR (i) above; plus USD 200,000 for each additional</li> <li>Participating State thereafter; and</li> <li>(b) USD 5,000,000 for DLR (ii) above</li> </ul>
4. Number of Participating States that have conducted tracer studies			0			At least 4 Participating States have conducted tracer studies and published their results*	At least 7 Participating States have conducted tracer studies and published their results*	At least 10 Participating States have conducted tracer studies and published their results*
Allocated Amounts	18	15.0				USD 3,600,000	USD 2,700,000	USD 2,700,000 upon achievement of threshold; plus USD 900,000 for each additional Participating State thereafter

5. Number of ICs that have introduced at least 2 different apprenticeship programs within their participating (member) industries			0	<ul> <li>(i) MSDE has developed and approved/adopted the Operations Manual for the IAI Grant mechanism*; and</li> <li>(ii) At least 8 ICs, that have enrolled apprentices under the IAI Grant mechanism, have each introduced at least 2 apprenticeship programs within their participating (member) industries*</li> </ul>				
Allocated Amounts	22.5	18.8		<ul> <li>(a) USD 1,500,000</li> <li>upon achievement of DLR (i) above; and</li> <li>(b) USD 2.800,000</li> <li>upon achievement of threshold for DLR (ii) above, plus USD 350,000 for every additional ICs meeting the requirements</li> </ul>				
6. Increase in female enrollment rate in ITIs with PB Grant Agreements and ICs receiving IAI Grants			(i) 9.7%** (ii) 0		<ul> <li>(i) Female enrollment across ITIs with signed PB Grant Agreements during academic year 2018/19 has reached 11% of all enrollees; and</li> <li>(ii) A minimum of 5 ICs receiving IAI Grants have reached a female enrollment of 20% in their respective apprenticeship</li> </ul>	Female enrollment across ITIs with signed PB Grant Agreements during academic year 2019/20 has reached 12.5% of all enrollees	Female enrollment across ITIs with signed PB Grant Agreements during academic year 2020/21 has reached 14% of all enrollees	Female enrollment across ITIs with signed PB Grant Agreements during academic year 2021/22 has reached 15% of all enrollees

			programs*			
Allocated Amounts	19	15.8	<ul> <li>(a) USD 2,500,000</li> <li>upon achievement of DLR (i) above; and</li> <li>(b) USD 2,250,000</li> <li>upon achievement of threshold of DLR (ii) above; plus USD 450,000 for each additional ICs reaching a female enrollment of 20% thereafter</li> </ul>	USD 2,500,000	USD 2,500,000	USD 2,500,000

\*These DLRs are not time-bound. The Fiscal Years in which they are expected to be achieved as per this Schedule are strictly for indicative purposes. These DLRs can accordingly be met up and until the Closing Date.

\*\*Since PB Grant Agreement ITIs have not yet been identified baseline information is based on the average across all ITIs.

# **DLI Verification Protocol Table**

		Definition/Description of	Scalability of	Protocol to Evaluate Achievement of the DLI and Data/Result				
#	DLI	A shievement	Disbursemen		Verification			
		Achievement	ts (Yes/No)	Data Source/Agency	Verification Entity	Procedure		
1	Increase in the	Year 1: Indicator measures the	Year 1: Yes	Annual progress	IVA to be hired by the	ITIs will report through		
	number of graduates	number of ITIs that have signed a PB	Year 2	report on STRIVE to	MSDE	NCVT MIS portal each		
	from ITIs that have	Grant Agreement in accordance with	onward: No	be prepared by the		year. States will verify the		
	signed PB Grant	the OM.		MSDE		report.		
	Agreements	Year 2 onward: Indicator measures the				Data will be validated on		
		percentage increase over baseline of				a sample basis by IVA.		
		total number of graduates across all						

#	DLI	Definition/Description of	Scalability of Disbursemen	Protocol to Evaluate Achievement of the DLI and Data/Result Verification			
		Achievement	ts (Yes/No)	Data Source/Agency	Verification Entity	Procedure	
		ITIs with signed PB Grant Agreements. Graduates refer to trainees who have successfully completed a CTS trade or any other trade offered in the ITI with a minimum duration of 300 hours. The results for Year 2 through Year 5 may be achieved in any year. For example, if MSDE achieves the result allocated for Year 4 in Year 3 itself, it will be entitled to receive the amount allocated for both Years 3 and 4 in Year 3 when it achieves the result.					
2	Improvement in industrial training and employment outcomes for trainees and graduates for ITIs that have signed PB Grant Agreements	Year 2 to Year 4: Indicator measures the number of trainees undergoing OJT across all ITIs with signed PB Grant Agreements in each academic year. This shall be counted for all dual training trades and other trades under CTS for which the curriculum has an OJT requirement. The minimum period of OJT for the purpose of this indicator shall be as prescribed in the curricula for dual training trades and two weeks per year for other CTS trades. OJT requirement may be fulfilled through training in any enterprise, including informal and/or local industry, and production centers. Year 5: Graduates refer to trainees from ITIs that have signed PB Grant Agreements who successfully completed the CTS program in academic year 2019/20 and hold the National Trade Certificate. Indicator measures the percentage of all graduates who are wage employed,	No	Year 2 to Year 4: Annual progress report on STRIVE to be prepared by the MSDE Year 5: Tracer study conducted by MSDE	IVA to be hired by the MSDE	Year 2 to Year 4: ITIs will report through NCVT MIS portal each year. States will verify the report. Data will be validated on a sample basis by IVA. Year 5: MSDE will conduct a tracer study on a sample basis for graduates from academic year 2019/20 from ITIs that have signed PB Grant Agreements.	

#	DLI	Definition/Description of	Scalability of Disbursemen	f Protocol to Evaluate Achievement of the DLI and Data/Result N Verification			
		Achievement	ts (Yes/No)	Data Source/Agency	Verification Entity	Procedure	
		self-employed, or enrolled in an apprenticeship contract. Indicator will be measured by tracer studies. Measurement of the indicator is considered sufficient if tracer studies have captured 5% of the population of graduates. The study must (i) be based on a representative sample of students; (ii) have a sample size large enough to also include representation at the trade level; (iii) cover student background characteristics; and (iv) disaggregate data based on gender, caste, location (rural/urban), education level, and household economic status.					
3	Reduction in ITIs' trainer vacancies and improvements in training of trainers	Participating states refer to those states that have signed PB Funding Agreement with the MSDE. Year 1: The indicator is met when the MSDE has developed guidelines for states to develop ITI teachers' development plans, which must include principles for recruitment, guidelines for training and further training, as well as guidelines for career progression and improvement of working conditions of technical teachers. In order to meet the DLI, at least 15 States must have developed specific teachers' development plans based on the guidelines provided by the MSDE. (i) Vacancy rate measures the share of posts filled either permanently or through contract teachers of the total sanctioned posts for NCVT trades in	(i) Yes (ii) Yes	Year 1: Sustainability plan document (i) Annual progress report on STRIVE prepared by states (ii) Annual progress report on STRIVE to be prepared by the MSDE	IVA to be hired by the MSDE	Year 1: The DGT submits the document and proof of formal adoption to the World Bank task team leader. (i) States will submit data to the MSDE. Data will be validated on a sample basis by IVA. (ii) IVA verifies roll-out of upgraded CITS trades in ATIs on sample basis.	

#	DLI	Definition/Description of	Scalability of Disbursemen	Protocol to Evaluate Achievement of the DLI and Data/Result Verification			
		Achievement	ts (Yes/No)	Data Source/Agency	Verification Entity	Procedure	
		government ITIs. Relevant is the state average across all government ITIs in the state. Indicator is met if the vacancy rate is 20% lower than at baseline (2016/17). Each participating state that met the target is counted once. (ii) Indicator measures the number of CITS trades for which comprehensive new digital TL resource packages, incorporating effective use of video and computer-based multimedia as educationally appropriate, have been developed by NIMI, in consultation with CSTARI, using a curriculum revision and content development process, in order to offer the trades in a blended learning mode (comprising a combination of distance learning and face-to-face learning methods). There must also be evidence that the NCVT has offered the upgraded trade using these resource packages for					
4	Number of Participating States that have conducted tracer studies	Participating states refer to those states that have signed PB Funding Agreement with the MSDE. Indicator measures the number of participating states that have completed tracer studies (sample surveys) of ITI graduates using a methodology accepted by the central government, which shall include that the study must (i) be based on a representative sample of students; (ii) have a sample size large enough to also include representation at the trade	Yes	Tracer study reports by states; Annual progress reports for STRIVE prepared by the MSDE	IVA to be hired by the MSDE	Data will be validated on a sample basis by IVA.	

#	DLI	Definition/Description of	Scalability of Disbursemen	Protocol to Evaluate Achievement of the DLI and Data/Result Verification			
		Achievement	ts (Yes/No)	Data Source/Agency	Verification Entity	Procedure	
		level; (iii) include both government and private ITIs; (iv) cover student background characteristics; and (v) disaggregate data based on gender, caste, location (rural/urban), education level, and household economic status. A tracer study is considered completed, if data has been submitted to the MSDE in a format accepted by the central government and the findings are publicly disclosed.					
5	Number of ICs that have introduced at least 2 different apprenticeship programs within their participating (member) industries	<ul> <li>(i) Indicator is achieved when guidelines for the IAI grant mechanism are developed, approved and formally adopted by the MSDE and are agreeable to the World Bank. Guidelines are part of the STRIVE OM and include selection methods and criteria, eligible expenditure, disbursement rules and procedures, and a monitoring plan.</li> <li>(ii) Indicator refers to those ICs that have signed grant agreements with the MSDE under the IAI grant mechanism, and have introduced at least two different apprenticeship programs within their participating (member) industries. Apprenticeship programs must be designed in accordance with the requirements of upgraded dual training programs as defined in the IAI guidelines of the OM. There must be evidence that at least 20 apprentices have been enrolled under each apprenticeship program. ICs that have introduced at least 2 such programs are counted</li> </ul>	Yes	(i) Guideline document and STRIVE Operation Manual (ii) Enrollment lists; apprenticeship portal; annual progress report on STRIVE to be prepared by the MSDE	IVA to be hired by the MSDE	<ul> <li>(i) The DGT submits the document and proof of formal adoption to the World Bank task team leader.</li> <li>(ii) RDATs to report on the number of ICs. Data will be validated on a sample basis by IVA.</li> </ul>	

#	DLI	Definition/Description of	Scalability of Disbursemen	Protocol to Evaluate Achievement of the DLI and Data/Result Verification			
		Acmevement	ts (Yes/No)	Data Source/Agency	Verification Entity	Procedure	
		only once.					
6	Increase in female enrollment rate in ITIs with PB Grant Agreements and ICs receiving IAI Grants	<ul> <li>(i) Indicator measures female</li> <li>enrollment across all ITIs with signed</li> <li>PB Grant Agreements for each</li> <li>academic year.</li> <li>(ii) Indicator measures the number of</li> <li>ICs that have signed grant agreements</li> <li>with the MSDE under the IAI grant</li> <li>mechanism that have at least 20%</li> <li>female enrollment in the</li> <li>apprenticeship programs introduced</li> <li>using the IAI grant funding. An IC</li> <li>which achieves the 20% female</li> <li>enrollment in any year is counted only</li> <li>once.</li> </ul>	(i) No (ii) Yes	<ul> <li>(i) Annual progress report on STRIVE to be prepared by the MSDE</li> <li>(ii) Enrollment lists; apprenticeship portal; annual progress report on STRIVE to be prepared by the MSDE</li> </ul>	IVA to be hired by the MSDE	<ul> <li>(i) ITIs will report through NCVT MIS portal each year. States will verify the report.</li> <li>Data will be validated on a sample basis by IVA.</li> <li>(ii) RDATs to report on the number of apprentices. Data will be validated by IVA on a sample basis</li> </ul>	

# **Bank Disbursement Table**

#	DLI	World Bank Financing Allocated to the DLI	Of Which Financing Available for Prior results	Deadline for DLI Achievement	Minimum DLI Value to Be Achieved to Trigger Disbursements of World Bank Financing	Maximum DLI Value(s) Expected to Be Achieved for World Bank Disbursements Purposes	Determination of Financing Amount to Be Disbursed against Achieved and Verified DLI Value(s)
1	Increase in the number of graduates from ITIs that have signed PB Grant Agreements	US\$19 million	0.00	August 30, 2022	In Year 1, Trigger: Number of ITIs that have signed PB Grant Agreements with the MSDE; USD 500,000 for each batch of 50 ITIs up to the total amount. For Year 2–6, Trigger: Increase in the number of graduates from ITIs that have signed PB Grant Agreements	300 ITIs have signed PB Grant Agreements; 20% increase in the number of graduates	Year 1 (FY18): US\$3 million Year 2 (FY19): US\$4 million Year 3 (FY20): US\$4 million Year 4 (FY21): US\$4 million Year 5 (FY22): US\$4 million (Financing amounts are indicative; disbursement will be on actual performance)
2	Improvement in industrial training and employment outcomes for trainees and graduates of ITIs that have signed PB Grant Agreements	US\$21 million	0.00	August 30, 2022	For Year 2-4, Trigger: Number of trainees undergoing OJT across ITIs that have signed PB Grant Agreements; For Year 5, Percentage of trainees graduated in academic year 2019/20 from ITIs that have signed PB Grant Agreements that are in gainful employment one year after graduation	15% trainees undergoing OJT; 65% graduates in gainful employment	Year 2 (FY19): US\$3 million Year 3 (FY20): US\$4 million Year 4 (FY21): US\$4 million Year 5 (FY22): US\$10 million (Financing amounts are indicative; disbursement will be on actual performance)
3	Reduction in ITIs' trainer vacancies and improvements	US\$20.5 million	0.00	August 30, 2020	In Year 1, Trigger: Adoption of sustainability plan by	(i) 20 states (ii) 4 trades	Year 1 (FY18): US\$2.5 million Year 2 (FY19): US\$1.8 million Year 3 (FY20): US\$6.2 million

#	DLI	World Bank Financing Allocated to the DLI	Of Which Financing Available for Prior results	Deadline for DLI Achievement	Minimum DLI Value to Be Achieved to Trigger Disbursements of World Bank Financing	Maximum DLI Value(s) Expected to Be Achieved for World Bank Disbursements Purposes	Determination of Financing Amount to Be Disbursed against Achieved and Verified DLI Value(s)
	in training of trainers				MSDE; (i) For Years 2-5, Trigger: Number of Participating States that have reduced their ITI trainers' vacancy by 20%; USD 600,000 for each Participating State up to 10 states; USD 200,000 for each Participating State thereafter up to the total amount; (ii) For Year 3 and Year 5, Trigger: Number of CITS trades that have been upgraded and rolled out		Year 4 (FY21): US\$1.2 million Year 5 (FY22): US\$8.8 million (Financing amounts are indicative; disbursement will be on actual performance)
4	Number of Participating States that have conducted tracer studies	US\$18 million	0.00	August 30, 2022	For Years 3-5, Trigger: Number of Participating States that have conducted tracer studies; USD 900,000 for each Participating State up to the total amount	20 states	Year 3 (FY20): US\$3.6 million Year 4 (FY21): US\$2.7 million Year 5 (FY22): US\$11.7 million (Financing amounts are indicative; disbursement will be on actual performance)
5	Number of ICs that have introduced at least 2 different apprenticeship programs within their participating	US\$22.5 million	0.00	August 30, 2022	In Year 1, Trigger: Adoption of guidelines for IAI Grant Mechanism by MSDE; For Years 1-5, Trigger: Number of ICs that	60% increase	Year 1 (FY18): US\$5.7 million Year 2 (FY19): US\$4.2 million Year 3 (FY20): US\$4.2 million Year 4 (FY21): US\$4.2 million Year 5 (FY22): US\$4.2 million (Financing amounts are

#	DLI	World Bank Financing Allocated to the DLI	Of Which Financing Available for Prior results	Deadline for DLI Achievement	Minimum DLI Value to Be Achieved to Trigger Disbursements of World Bank Financing	Maximum DLI Value(s) Expected to Be Achieved for World Bank Disbursements Purposes	Determination of Financing Amount to Be Disbursed against Achieved and Verified DLI Value(s)
	(member) industries				have introduced at least 2 different apprenticeship programs within their participating (member) industries; USD 350,000 for every IC up to the total amount		indicative; disbursement will be on actual performance)
6	Increase in female enrollment rate in ITIs with PB Grant Agreements and ICs receiving IAI Grants	US\$19 million	0.00	August 30, 2022	<ul> <li>(i) For Years 2-5, Trigger: Female</li> <li>enrollment across ITIs</li> <li>with signed PB Grant</li> <li>Agreements;</li> <li>(ii) For Years 2-5,</li> <li>Trigger: Number of ICs</li> <li>that have reached a</li> <li>female enrollment of</li> <li>20% in their respective</li> <li>apprenticeship</li> <li>programs; USD</li> <li>450,000 for each IC up</li> <li>to the total amount</li> </ul>	(i) 15% female enrollment in ITIs with signed PB Grant Agreements; (ii) 20 ICs	Year 2 (FY19): US\$5.2 million Year 3 (FY20): US\$5.2 million Year 4 (FY21): US\$4.3 million Year 5 (FY22): US\$4.3 million (Financing amounts are indicative; disbursement will be on actual performance)

#### **Annex 4: Summary Technical Assessments**

#### **Program Description**

1. STRIVE is a five-year government program aiming at improving the relevance and efficiency of long-term vocational training provided through ITIs and apprenticeship. It is divided into four results areas:

- (a) Improved Performance of Industrial Training Institutes;
- (b) Increased Capacities of State Governments to Support Industrial Training Institutes and Apprenticeship Training
- (c) Improved Teaching and Learning
- (d) Improved and Broadened Apprenticeship Training

2. STRIVE is scheduled to run from 2017 to 2022 with an overall volume of US\$318 million. It is a national program implemented by the MSDE, targeting ITIs and apprenticeship training in all 36 states. The World Bank will support the full STRIVE program.

#### Description/Assessment of Program Strategic Relevance and Technical Soundness

#### Strategic Relevance

3. STRIVE has a high strategic relevance. A striking feature of India's labor market is the extremely low (31 percent) female labor force participation, the large size of the informal sector and a relative scarcity of 'good' jobs. These challenges could inhibit India's ambition to further modernize its economy by attracting resources to the dynamic, high-productivity manufacturing and services sectors. The GoI has therefore taken important steps toward a reform agenda focused on job creation through improving the business environment, particularly in the manufacturing sector. Recent studies show that India faces a shortage of skilled labor with the projected demand of skilled workforce at 400 million by 2022, of which 150 million are required in the manufacturing and services sector.<sup>22</sup>

4. The GoI has consolidated the country's fragmented regulatory ecosystem for skills training under a dedicated ministry, the MSDE, and the introduction of the NSDM. Within this framework, the further development of long-term training in ITIs and through apprenticeship training, providing the corps of broadly skilled technicians, is of particular importance for the further development of the manufacturing sector. With their focus on technical skill areas, apprenticeship programs and ITIs form the backbone of the long-term training infrastructure in India. Past empirical evidence shows that youth with only a grade 10 or a grade 12 education tended to earn nearly 18 percent less compared to those youth who had undergone some form of formal training.<sup>23</sup>

<sup>&</sup>lt;sup>22</sup> Confederation of Indian Industry. 2015. *India Skills Report 2015*; Federation of India Chamber of Commerce and Industry. 2012. *Knowledge Paper on Skills Development in India*.

<sup>&</sup>lt;sup>23</sup> Employment rates at ITIs are also high at around 60 percent compared to 30 percent for short-term training courses offered through the five largest Government-funded schemes.
5. The focus on long-term training provided in ITIs and through apprenticeship training is particularly relevant for vulnerable youth, as it will increase access to labor market-relevant qualifications and thus job chances, especially of those youths usually from lower-income groups, who are less competitive in the education sector and cannot access higher education.

6. Investment through STRIVE is designed to leverage previous reforms introduced through VTIP. In particular, the initiation of PPPs through establishment of IMCs, upgradation of training infrastructure in selected ITIs aligned with curricular updating and the use of technology in governance and delivery represent reform directions that STRIVE intends to deepen further. Lessons from VTIP evaluations have also demonstrated the need for focused public attention on results (instead of expenditure), teacher training, and social inclusion in skills development, especially of female youth and youth from SCs and STs.

7. The interventions supported under STRIVE form a critical part of the Government's strategy to achieve the explicit national skilling targets for 2022 set out in the National Policy for Skill Development and Entrepreneurship. The Government is further committed to maintaining the reform momentum and building upon the achievements of STRIVE beyond 2022 as India's dependency ratio—and therefore the opportunity to maximize the potential of the country's demographic dividend—is expected to reach its minimum level only by 2035. The long-term success of the Make in India campaign and India's ability to deliver on Sustainable Development Goal 1 to end poverty are both predicated on the continued implementation of policies which create a globally competitive skilled workforce through, among other things, better-performing long-term training programs.

## Technical Soundness

The Program is technically sound and designed to efficiently produce results and 8. reach its objectives. It addresses the critical performance constraints to relevance in the public long-term training space by strengthening capacities and responsibilities in ITIs and training providers in the apprenticeship scheme to initiate and plan market-driven and needs-based training programs in line with local labor market needs and by supporting key interventions to increase the quality of TL: upgrading training equipment and infrastructure, improving TL material, and improving pedagogical and trade competencies of teaching staff. The most important determinants to increase efficiency, and thus access, in long-term training are addressed by increasing capacity utilization in government ITIs (through the introduction of market-related programs), through the large-scale introduction of online and distance education for teacher pre- and in-service training, and through developing currently untapped apprenticeship training resources in the SME sector. There is increasing international evidence on the fact that well-designed apprenticeship training is especially effective to support the transition to work of young labor market entrants, and cost-effective for Government. As such the increased focus of the GoI to develop apprenticeship training will also contribute to enhancing the overall efficiency in the Indian skills development system.

9. The design of the Program is based on strategic principles in accordance with priorities in the Indian skills development policy framework and aligned with international best practice in skills development, namely (a) focus on results; (b) deepening PPP; (c) development of ICT-supported learning; (d) promotion of inclusion in skills development; and (e) capacity development of skills development actors at different levels.



#### Figure 4.1. STRIVE Results Chain

Results Area 1: Improved Performance of Industrial Training Institutes

10. Under this results area, STRIVE will fund a PB Grant Agreement Scheme for selected ITIs. The results area aims at increased performance, which is—reflecting the main challenges in the ITI space—defined as improved labor market orientation of programs offered, achieved through enhanced industry linkages, better capacity utilization for improved efficiency, increased income generated, and higher enrollment rate of women and STs.

Situation of ITIs. ITIs represent the largest network of technical training providers in 11. India and the core resource for school-based long-term training in engineering occupational groups. ITIs are mainly involved in the CTS, which is the formal, institution-based long-term training scheme of the GoI at the secondary level. By the end of August 2015, 13,105 ITIs were registered, representing a capacity of 1,865,620 annual training places. Most of the ITIs are private; only 2,293 of all ITIs are run and managed by the public sector, mainly state governments. Availability and performance of ITIs vary considerably among states. Although CTS courses cover a broad range of technical and service provisions, enrollment is concentrated in engineering trades such as fitting, electrical, welding, and auto and diesel mechanics. These trades also show the highest capacity utilization rates. Among those trades that can be considered typically attractive for female students, sewing technology has the highest enrollment. Overall, only 10 percent of all ITI students are female. Despite a reservation of 30 percent seats for female students, there are inadequate incentives for ITIs to make extra efforts for increased female participation, as reserved seats that remain empty can be filled with male students.

12. The majority of ITIs are still characterized by a largely poor state of infrastructure, workshop facilities, and teaching equipment. Funding from the GoI's PPP scheme and VTIP supported the upgrading of facilities in more than 1,700 government ITIs. However, such modernization has in most cases remained limited to selected departments, while equipment

and facilities in other departments remain outdated. For many ITIs the large number of unfilled instructors' posts is among the greatest challenges. In rural areas, the vacancy rate can be as high as 90 percent. Many principal posts remain unfilled as well, in which cases principals from other ITIs take charge.

13. The selection of courses at ITIs is mostly driven by student demand and institutional capacities, rather than by industry needs. Although many curricula have been updated in recent years, standardization at the central level leads to lack of responsiveness to the skills needs of industry in the ITIs' catchment areas because curricular modifications in line with local industry needs are not facilitated. This situation is compounded by the fact that assessments are conducted every semester, forcing ITIs to tightly focus their training on assessment requirements instead of aligning learning with the needs of the local labor markets. Companies therefore highlight problems negotiating necessary curricular revisions or additions in ITIs to adequately prepare young graduates for relevant employment. The option to negotiate so-called flexi MoUs with the NCVT represents an important step toward more flexibility. However, the scheme is only in its initial phase, and it appears that in the ITI space, this opportunity has not sufficiently been used until now.

The recent formation of IMCs, which are registered under the relevant Societies Act, 14. in the majority of government ITIs clearly represents progress toward better ITI-industry linkages, and can be considered a bold step in improving relevance of training in line with market needs. However, the scope of responsibility of the IMC is rather limited. Under the VTIP scheme, IMCs only assume an advisory role, while investment decisions remain the responsibility of state authorities. Field visits have shown that the effective influence of the IMC was significant in some, but hardly visible in other cases depending on the specific preparedness to cooperate with state government officials and companies alike. Nevertheless, especially in industrially thriving areas, the PPP scheme and VTIP initiated formation of IMCs have facilitated an emergence of some deep, structural, and creative partnership examples between companies and ITIs, which clearly demonstrated the positive effect on quality and relevance of ITI training, once an engaged company meets a committed and reform-minded ITI leadership. To improve the impact of IMCs, state governments need to grant adequate responsibilities to the IMCs. STRIVE will incentivize such state activities under Results

Area 2.

15. Overall, ITIs lack incentives to perform better and overcome structural weaknesses including underused capacities, low-in-demand training courses, skills deficits of existing instructors, lack of OJT and apprenticeship opportunities for students, lack of flexibility in changing course structure and hiring instructors, and limited industry engagement for offering customized market-relevant training programs for students and workers of the local industry.

16. **Planned activities.** Under the results area, STRIVE is designed to unlock key drivers for improved performance that can be influenced by ITIs to better exploit their potential to dynamically develop into thriving agents of skills development in their catchment area. To ensure that the regulatory environment for ITI operations is conducive for the envisaged reforms, the participation of ITIs should be depending on the reform preparedness of the state governments, under which the ITIs are run. Hence, only ITIs in those states that have signed results-based contracts under Results Area 2 of STRIVE should be made eligible to participate in the PB Grant Agreement Scheme.

17. STRIVE will introduce performance-based funding in the ITI space, and provide funding under PB Grant Agreements to selected ITIs incentivizing activities toward the objectives specified in Table 4.1.

<b>Objective/Intervention Area</b>	Possible Activities (list not exhaustive)
Deepened cooperation with industry, which is key to improve the labor market relevance of programs and quality of the training supply	<ul> <li>Conclusion of formal MoUs with companies and company groups to define cooperation models and mutual responsibilities</li> <li>Labor market assessments and identification of priority skills development programs, jointly conducted by ITIs and industry</li> <li>Industry and ITI joint planning and cofinancing of rehabilitation, modernization, and new introduction of workshops and training facilities</li> <li>Cooperation in curriculum development/adjustments, and so on</li> <li>Involvement of enterprise experts in ITI training, for example, through guest lectures</li> <li>ITI instructors' staff development through internships in industry</li> <li>Introduction/expansion of internship arrangements and improved internship management, as well as company visits and other activities that deepen the exposure of students to the labor market realities</li> <li>Potentially, development and implementation of dual apprenticeship programs (synergies with Results Area 1)</li> </ul>
Demand-led range of training programs	<ul> <li>Introduction of new short- and long-term programs responding to established labor market needs, especially in the catchment area of the ITI, but also other relevant labor markets accessible to target groups</li> <li>New programs should ideally be affiliated with NCVT or Sector Skills Council</li> </ul>
Improved employment promotion activities to support graduates' work readiness and entry into the labor market	<ul> <li>Vitalizing of counseling and placement cells</li> <li>Capacity development of placement officers</li> <li>Introducing career counseling activities</li> <li>Company visits and other industry exposure activities</li> <li>Improving the relevance of entrepreneurship education and training, for example, through incorporating business practitioners</li> <li>Introduction of new methodologies for soft skills (socio-emotional skills) and work readiness teaching</li> <li>Conducting placement activities (job fairs, recruitment days, job matching services, and so on)</li> </ul>
Increased share of female students and graduates	<ul> <li>Increasing career counseling and marketing of ITI programs among female youth</li> <li>Hostels and improvement of sanitary facilities for female students</li> <li>Introduction of new courses with good labor market prospects for women</li> <li>Recruitment of female teachers (as contract teachers)</li> <li>Development of institutional gender policies and gender training of teaching and management staff</li> <li>Earmarked employment promotion activities for females</li> </ul>
Increased accessibility of courses for SCs and STs	<ul> <li>Studies to assess entry barriers and constraints of youth from SCs and STs</li> <li>Targeted career counseling and marketing activities</li> <li>Hostel facilities</li> <li>Earmarked employment promotion activities for disadvantaged graduates</li> </ul>
Improved income-generating activities	<ul> <li>New skills development programs</li> <li>Taylor-made upgrading training for workers in industry</li> <li>Production and sale of goods and services during practical training</li> <li>Renting out facilities, that is to industry</li> </ul>

 Table 4.1. Activities for ITIs that have signed PB Grant Agreements

18. It is envisaged that grant funding under STRIVE will be awarded to participating ITIs on the basis of an ISP. The ISP will follow a standard format that identifies a range of potential objectives and targets, to which the ITI commits itself in the plan. Agreed targets

will serve as funding triggers under the PB Grant Agreement. The importance of the ISP for defining the disbursement triggering indicators will also ensure that the ISP will remain a core reference framework for institutional activities throughout the plan period. Previous experience with Institute Development Plans under other schemes pointed to the risk that the plans, once developed as a precondition of funding, were not used as reference tools in further development steps.

19. Both VTIP and the PPP Scheme faced spending problems. In the case of VTIP, state governments lacked capacities to execute investment plans, while in the case of the PPP Scheme, central government funding to ITIs, provided as a loan fund, was often not used by the IMCs, or investment decisions were not executed by the principals. The design of STRIVE addresses this potential challenge mainly with the strict principle of result-based funding. Furthermore, unlike in previous central governments. This is expected to increase ownership of the scheme at state level. States will also be incentivized to adhere to implementation guidelines providing an increased scope of responsibility and flexibility to the use of funds under the scheme.

20. The scheme intends to target both government and public ITIs. As such it represents an important step forward towards creating a level playing field between the public and private training segments. Against this background a transparent and accountable selection process is essential. It is envisaged that ITIs will be selected at the beginning of the STRIVE implementation period. State government will select ITIs for grant funding in their respective states through a call for proposal that stipulated minimum eligibility criteria, as well as selection criteria. Criteria reflect institutions strength and development potential, and innovativeness and relevance of activities proposed in the ISP. Detailed guidelines for the identification of ITIs are prescribed in the OM of STRIVE, which also defines the number of ITIs to be selected in each state. The number depends on the population size of each state.

#### Results Area 2: Increased Capacities of State Governments to Support Industrial Training Institutes and Apprenticeship Training

21. **Overview.** STRIVE aims to improve the overall operational environment of ITIs and apprenticeship training providers through leveraging reforms in the state management of long-term training. As such, interventions are complementary to those in the other results areas. Government ITIs are owned and managed by the states, and state government policies and regulations influence the scope of ITIs to innovate and align their operations with the needs of the labor market. Creating a better environment for ITIs to perform requires conducive operational regulations, further investment, appropriate recurrent resource allocation, and the provision of appropriately qualified, competent, and motivated principals and instructors. With regard to apprenticeship training, states mainly perform a mobilizing and facilitating role, as responsibility for regulation rests with the central government. The Program will provide funding to states to undertake policy and programmatic interventions in support of the long-term training, including (but not necessarily limited to) the following:

• Providing a regulatory environment for ITIs that allows for sufficient influence of IMCs on the operations of ITIs, flexible course planning, management of contract teachers, and others

- Improvement of monitoring capacities of states with respect to ITIs and apprenticeship training programs, which also includes conducting tracer studies in regular intervals, and using these for skills development planning
- Introduction of centralized admission process for ITIs
- Improvement of human resource management in skills development with the aim to reduce vacancies of teachers and principal posts and to introduce performance incentives in government ITIs
- Improved management of teacher pre- and in-service training with the aim that an increasing share of teachers in the states will have access to needed training
- Facilitation of refresher training for ITI teachers in industry

22. **Results-based funding.** The mechanism to leverage funding for reform implementation at state level is results-based funding. States will have to comply with minimum eligibility conditions and funding under the MoU will depend on achievement of indicators serving as funding triggers. These triggers represent management progress considered key to the further development of ITI and apprenticeship training in the states: functioning state-level MIS regularly submitting relevant data to the NCVT portal; conducting tracer studies; developing and using centralized admission processes; reducing vacancy of ITI teachers; and achieving progress in ITI teachers undergoing industrial attachment.

23. **ITI cluster formation.** By encouraging states to use grant funding for costs related to ITI clusters, the GoI incentivizes the formation of ITI clusters in the states. Stakeholder discussions in recent years have realized the severe and ongoing capacity constraints in the operation of an increasing network of government ITIs. The approach to cluster formation appears feasible and appropriate. Forming clusters of ITIs for various purposes is not an unknown approach in India. Clusters (or hub-and-spoke models) have been formed notably for teachers' training. Already now, in some states more than one ITI are managed by the same principal, which implies grouping, coordination, joint processes, and cooperation in training delivery.

24. Monitoring and research capacities. Key reforms essential for state management of long-term training, and skills development in the wider sense, refer to the improvement of state monitoring and research capacities. Significant progress has been made in the form of an online MIS (the NCVT MIS portal), which is now a valuable resource of information on ITIs and associated datasets. However, there are different approaches within states regarding how data is uploaded into the central MIS (with some coordinating this at state level and others enabling direct upload by the ITIs), and many states also do not yet have their own MIS to manage ITI-related data. This suggests that there has not yet been a sufficiently rigorous process of defining the planning, management, and reporting requirements for these systems. STRIVE funding will therefore go into setting up, upgrading, or revising MIS systems at state level with a view to ensure that all important data are captured, that state data are compatible with central-level MIS systems. The monitoring function of states also requires capacities for conducting tracer studies, and STRIVE will support this function by facilitating the development of a technology-based (SMS-based or other appropriate technology), low-cost tracer study instrument that will allow easy to implement regular tracer study implementation.

#### Results Area 3: Improved Teaching and Learning

25. Interventions planned to be implemented under Results Area 4 address the most important determinants of training quality and therefore complement the institutional reforms to be initiated in the ITI and apprenticeship training space. High quality TL resources and good teachers are arguably the most critical factors determining quality enhancement of skills development programs. The results area is therefore divided into two distinct fields:

- a. Curriculum development and TL resources in the long-term training programs to be improved through modernizing existing material using modern technology and adapting curricula and assessment procedures
- b. Skills and competencies of the teaching staff to be further developed through making teacher pre-employment and further training better, more efficient, and more accessible

26. The results area has a strong focus on introducing ICT-based solutions into teaching practice, taking advantage of latest global developments in the field of technology-enabled skills development, while at the same time harnessing previous investment into IT infrastructure in ITI.

27. During implementation, emphasis needs to be put on addressing pedagogical improvements in the field of soft and employability skills and other cross-cutting areas, such as occupational health and safety (OHS). Employability skills is a mandatory module in all CTS programs, as is OHS. However, the effectiveness of these modules need to be assessed and the appropriateness of their teaching approaches revisited. Regarding employability skills, modern interactive and project-based teaching methodologies have proven to positively impact personality development—and hence employability—especially of female students and youth from minorities.

#### Development of TL Resources

28. International experience. The history of distance education and resource-based learning globally has demonstrated unequivocally that there is significant value to be gained from investing in the design and development of high-quality educational resources to improve the quality and financial efficiency of education systems, particularly in cases where education is required on a large scale and there are standardized curricula. Resource-based learning means moving away from the traditional notion of using a 'talking teacher' to communicate curriculum; a significant but varying proportion of communication between students and educators is not face-to-face but rather takes place through the use of different media as necessary. Importantly, the face-to-face contact that does take place typically does not involve simple transmission of knowledge from educator to student; instead it involves various forms of student support, for example, tutorials, peer group discussion, or practical work. Resource-based learning is not a synonym for distance education, but ICT has significantly expanded the scope of resource-based learning, as it has enabled the costeffective design and use of much more powerful educational resources, which harness the full potential of video, audio, and computer-based multimedia.

#### Improved Relevance and Efficiency of Teacher Training

29. **Overview of issues in teacher training.** India, like many other countries, faces several intertwined human resource challenges in its training system, which put the success of any skills development strategy at risk. Challenges include a severe shortage of teaching staff, lack of updated competence of teaching staff, especially with respect to practical trade skills, and limited pre- and in-service training capacities for teaching staff and principals.

30. Shortage of teaching staff and principals in ITIs is endemic. For example, in Karnataka, 45 percent of all teacher posts in government ITIs are unfilled. The situation is aggravated in remote areas, where up to 90 percent of posts may remain unfilled. Apparently, bureaucratic bottlenecks in the recruitment of teaching staff represent a key problem, and this issue is addressed in Results Area 3. Available studies show that teaching staff often lack the requisite competencies. Practical and pedagogical skills need to be permanently updated to keep pace with rapidly changing technologies in the labor market and development in modern teaching methodology. Industrial attachments of teaching staff to upgrade practical competencies has been introduced in those ITIs that maintain close relationships with industry, but this practice still remains the exception rather than the rule.

The GoI has made a big stride in enhancing ITI instructors' skills and qualifications 31. more recently, but capacities remain a severe bottleneck. The CITS, stretching over 4 modules in 12 months and comprising a combination of training methodology and traderelated theory and skills, has been introduced. A direction has been issued requiring all ITI teachers to be CITS qualified. Annual CITS training capacities, however, are limited to 10,000, whereas only 50 percent of the around 90,000 currently employed teaching staff in the ITI space are formally qualified. All teaching staff in service in future are obliged to attend upgrading training programs once every five years, and the GoI has in this context introduced the Hi-Tech Training Scheme and distance learning programs implemented through a hub-and-spoke model. During its pilot phase between June 2014 and January 2015, the distance learning scheme managed to establish 10 hubs with 194 spokes and train a total of 10,402 teachers in 23 states. Thirteen ATIs, a CTI, and some other specialized teacher training institutes, including women training institutions (one National Vocational Training Institute and 15 RVTIs) are run by the central government to cater for teacher upgrading training. Through the World Bank-supported VTIP, institutes for training of trainers have been set up at state level with the aim to decentralize teachers training to meet the growing demand.

32. **Planned interventions under STRIVE.** The Program intends to strengthen the GoI's initiatives to create and maintain effective, efficient, and sustainable structures for technical teacher capacity development, focusing on teaching staff in ITIs while indirectly benefitting the entire corps of teaching staff in India's skills development space. Activities focus on (a) upscaling of ICT-enabled educational resources for teacher pre- and in-service training schemes with the aim of increasing quality and effectiveness in the teachers' training space through an expansion of distance learning, and (b) developing selected teacher training institutes into multipurpose resource centers.

33. Distance education has been used to support various aspects of teacher education (preand in-service, continuing teacher education) in numerous parts of the world. This includes the use of ICT in teacher education. Online learning overlaps with the broader category of distance learning, which encompasses earlier technologies such as educational television, correspondence courses, and videoconferencing. Earlier studies of distance learning concluded that these technologies were not significantly different from regular classroom learning with regard to effectiveness.<sup>24</sup> Today, it is widely acknowledged that distance education is particularly appropriate to reach widely dispersed teacher populations without disrupting their personal, professional, and social lives. It best suits countries where face-to-face institutions cannot respond urgently and adequately to increasing demands for teacher education due to lack of space and facilities.<sup>25</sup>

#### Capacity-Building Activities

As part of the investment in curriculum and educational materials development, the 34. Program will provide ongoing TA to both NIMI and CSTARI. This TA is necessary to ensure that the capacity of both institutions to undertake effective curriculum design and instructional design of courses and course materials (across all media types), including integrated assessments, is systematically developed throughout implementation so that both institutions are able to continue this work independently after the Program is completed. Capacity building should also include developing and institutionalizing project management skills in the areas of curriculum development and materials development so that both agencies follow systematic workflows proven to create quality products and to manage the subcontracting of specialized work to outside agencies. Further, capacity-building activities will have to target teachers to incorporate the newly developed TL resources for CTS and apprenticeship courses into their teaching practice. Activities under this results area facilitate methodological innovations and capacity development for routine functions in the Indian skills development systems (development of curriculum and TL resources), which are expected to sustain beyond the duration of STRIVE.

#### Results Area 4: Improved and Broadened Apprenticeship Training

35. **Overview.** The Program addresses the key drivers of improving and expanding apprenticeship training in India. Under this results area, STRIVE aims at encouraging more companies, especially SMEs, to engage in apprenticeship training and to deepen the presently emerging reforms, ultimately resulting in making better use of India's vast learning and training opportunities through apprenticeship training. Incentives will be offered to industry cluster organizations to develop and implement IAIs, that is, industry-driven new, or revised, dual apprenticeship programs in line with the needs of participating companies. Activities will lead to improved quality and relevance of skills development programs delivered in cooperation with companies; an increased number of SMEs involved in apprenticeship training; and the development and evaluation of different models of cooperation between companies and training providers in modern apprenticeship training in India. The support to IAIs is embedded into a wider group of interventions aiming at policy and system reform and capacity building and awareness creation activities targeting major actors in apprenticeship training.

36. **State of apprenticeship training in India.** Although potential capacities are underutilized, India has a solid apprenticeship tradition, which the country can build on to enhance the scope of relevant, employment-oriented, and cost-effective skills development programs. According to the legal framework, which has been revised in 2014, companies

<sup>&</sup>lt;sup>24</sup> Barbara Means, Yukie Toyama, Robert Murphy, Marianne Bakia and Karla Jones. 2009. *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*. Washington, DC: US Department of Education. Retrieved from http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf.

<sup>&</sup>lt;sup>25</sup> http://www.adeanet.org/adea/biennial2003/papers/4E\_WGDEOL%20Maurice\_ENG\_final.pdf

with more than 40 employees are obliged to employ apprentices at a number representing between 2.5 percent and 10 percent of the total workforce. Companies can engage in apprenticeship training in mainly two ways. The first option is by taking in fresh school leavers and providing them with basic (curriculum-based) training in company training facilities over one or two years, followed by a 6- to 12-month period of workplace training. Alternatively, companies can take on ITI graduates with a CTS certificate. In this case, the ITI training is recognized as equivalent to basic training and companies have to provide only the workplace training. The latter is the predominant way of participating in apprenticeship training at the moment. Since the recent amendment, it is also possible for companies to outsource basic training to third-party training providers; however, this option is effectively limited to larger companies that can afford to pay the training fees charged in the private training market. Overall, the established capacities for apprenticeship training are underused, with only around 65 percent of all calculated places filled. In 2011, a total of 184,796 apprentices were enrolled at some 27,000 employers, whereas the estimated intake capacity was 290,448 provided in 32,141 enterprises.

37. While a large share of companies participates in apprenticeship training to comply with their legal obligation, many companies complain about the current formal scheme, considering it very rigid, expensive, bureaucratic in its implementation, centrally organized, governed by outdated curricula and an inadequate range of designated trades, and generally too inflexible to cater for the skills needs of individual companies and industry groups or clusters.

38. Furthermore, the current default curricular structure of consecutive years of basic training and workplace learning appears unrewarding and not instrumental to exploit the huge learning potential of dual apprenticeship training, whereby theory/basic training delivered in a training institution and workplace training are systematically integrated and mutually reinforcing.<sup>26</sup> The Government's management role in the Indian apprenticeship system, whereby selection of trainees and supervision of workplace learning is the responsibility of public apprenticeship officers, tends to prevent the industry to develop ownership of the training.

39. The apprenticeship practice in India, however, is undergoing change. Selected larger companies run own modern dual apprenticeship programs side by side with employing apprentices according to the formal apprenticeship scheme. A number of private training providers have been instrumental in setting up such schemes. Furthermore, private firms and training providers have started to operate as apprenticeship accelerators, that is, they mobilize a larger group of companies and facilitate apprenticeship training with these. The GoI has recently initiated a number of incentives and system improvements with the aim to increase the number of participating companies. A subsidization scheme for trainee allowances for MSMEs has recently been expanded to also cover fees to be paid to basic training providers. So-called 'optional trades' were introduced allowing companies to develop and engage in new apprenticeship programs in line with industry needs. A small number of new dual apprenticeship curricula have been designated, and ITIs are now encouraged to offer a selected number of CTS trades in a dual delivery approach. There is also a plan to develop an arrangement whereby short-term training programs under the Pradhan Mantri Kaushal Vikas Yojana<sup>27</sup> scheme are recognized as basic training within shorter dual apprenticeship programs. A major issue still to be clarified is to ensure that youth trained through

<sup>&</sup>lt;sup>26</sup> This type of modern apprenticeship training represents a 'dual' training approach.

<sup>&</sup>lt;sup>27</sup> The Pradhan Mantri Kaushal Vikas Yojana is a large-scale short-term training scheme operated by the MSDE.

apprenticeship training under the new arrangements will have the chance to obtain a recognized NCVT certification. Furthermore, as the new flexible arrangements are likely to increase the overall participation of firms in apprenticeship training, systematic approaches to increase skills of involved company staff and to assure quality of workplace as well as basic training need to be established.

40. Fostering improved apprenticeship training. While aiming at expansion of apprenticeship and introduction of new programs, the operation at the same time supports the improvement of apprenticeship programs and delivery practice in line with international best practices. STRIVE will encourage flexible models of integrated workplace and school-based learning (dual training), with coordinated school curricula and enterprise training plans geared toward one qualification. International experience clearly shows that the dual approach of modern apprenticeship training strengthens learning outcomes, deepens the understanding of technical concepts, and provides transferable skills. Recent studies on international experience have also shown that apprenticeship training is particularly wellsuited to link youth to the labor market and achieve high transition to work rates.<sup>28</sup> An increasing number of enterprises in India, mainly larger firms, has already embarked on such approaches to apprenticeship training, and the ATS has recently developed pilot curricula in accordance with dual principles. It is expected that the improved apprenticeship quality and relevance achieved through dual training will at the same time increase the preparedness of companies to get involved and thus ultimately increase the overall volume of apprenticeship training in India.

41. Grant support to apprenticeship industry clusters. The grant scheme for ICs to embark on IAIs planned to be a key intervention under this results area addresses challenges, specifically of SMEs, to be engaged in improved apprenticeship programs that will fit company skills requirements and comply at the same time with formal standards and regulations. Background research for the 2013 World Development Report has clearly made the case for the need of developing cluster approaches to address apprenticeship training in SMEs. In India, the emergence of firms functioning as apprenticeship accelerators has proven the need for facilitating structures. Present accelerator models are so far rather geared toward involving companies in conventional apprenticeship programs and have not made attempts to improve program structures and contents for better learning results. Against this background, the grant funding model for IAIs appears a timely and adequate approach to incentivize both: quality improvements by encouraging the establishment of new programs in line with dual principles, and expansion of training opportunities by encouraging more SMEs to get involved. The emphasis of the grant scheme on encouraging the emergence of new programs in line with market needs is also likely to increase the inclusion of previously marginalized groups. International experience shows that female youth, specifically, benefit from an expansion of the range of apprenticeship programs. Furthermore, selection criteria for IAIs should give special weight to those initiatives that are especially attractive to young females, and youth from marginalized communities, including SCs and STs. STRIVE interventions will initiate involvement of business organizations in apprenticeship training in a critical number of important ICs in India. With this, the Program is expected to facilitate joint learning of stakeholders and nurture a culture of industry participation and cluster organization in the implementation of apprenticeship training that are expected to be

<sup>&</sup>lt;sup>28</sup> See Constanza Biavaschi, Werner Eichhorst, Corrado Giulietti, Michael J. Kendzia, Alexander Muravyev, Janneke Pieters, Nuria Rodriguez-Planas, Ricarda Schmidl and Klaus F. Zimmermann. 2012. *Youth Unemployment and Vocational Training. Background Report to the World Development Report 2013*. Washington, DC: World Bank.

sustained beyond the duration of the IAI grant fund. In the long run, such initiatives will draw support from regular government schemes, such as the Promotion of Apprenticeship Program. To gain and maintain credibility of the IAI grant funding approach, transparency and accountability of projects to be selected is important. For this the IAI Scheme guidelines in STRIVE's OM provides an appropriate framework. IAIs to be funded are selected in a competitive selection process conducted by the Regional Departments for Apprenticeship Training (RDATs) twice during the Program implementation period: at the beginning and during the second year of Program implementation. During each selection round, ICs will enter applications upon a call for proposal that follows a defined application format. The selection will be done by the RDAT in conjunction with stakeholders based on selection criteria reflecting the relevance and feasibility of the apprenticeship programs to be introduced and the number of apprentices to be targeted. It is expected that some 100 IAIs will be supported with STRIVE funding.

42. **Policy reforms.** Activities under the results area will provide for learning and evidence to be fed into the broader discussion on necessary policy and system reforms. Issues to be addressed at the system level include the role of industry in the development of curricula and programs, role of industry in quality assurance and assessment, role of apprenticeship accelerators, apprentice allowances, financing of apprenticeship training including incentives for companies, and other issues. Necessary research and policy discussions should also be supported through IPF TA funding. Policy discussions should be designed in a way to ensure a strong influence of industry.

# *IPF: Program Management Support for Strategic Technical Assistance for Improving Efficiency and Monitoring and Evaluation*

43. The Program is complemented by TA under IPF, which is important to ensure sufficient TA to support a coordinated, coherent, and evidence-based approach to the critical activities that are expected to be change agents in skills development. Specifically, the Operation will provide direct TA for implementation support of policy reforms and systems development, and for improving M&E of long-term skills development reforms.

#### Institutional Arrangements

44. STRIVE is a national program representing a multilevel approach. This reflects the complex structure of the long-term training ecosystems in a decentralized political system characterized by different layers of action and responsibilities. The multilevel implementation structure appears appropriate against this background. Results-based funding principles with robust verification mechanisms for identified results at all levels will facilitate accountable actions.

#### **Description and Assessment of Program Expenditure Framework**

45. The MSDE is the nodal ministry for coordinating all skill development efforts across India. Within the MSDE, the DGT regulates apprenticeship training and ITI training. In addition, the DGT also regulates CFIs such as ATIs, RVTIs, CSTARI, and NIMI. The total budget estimate for long-term training for FY16–17 at the central and state levels is more than INR 4,950 crores (approximately US\$738 million).

46. At the central level, all funds for ITIs and apprenticeship training have been allocated through the umbrella head of 'apprenticeship and training' within the MSDE's budget for

FY16–17. Within this umbrella head, funds have been allocated for ITIs and apprenticeship training through nine budget lines,<sup>29</sup> which mainly include funds for (a) operation and maintenance of the DGT and central institutes for teacher training and curriculum and content development; (b) setting up of new central institutes for teacher training and regional directorates for regulation of apprenticeship; and (c) running of ITI and apprenticeship related training schemes. The main GoI-sponsored schemes for ITIs and apprenticeship training are the (a) upgradation of 1,396 government ITIs through PPP; (b) upgradation of existing ITIs into Model ITIs; (c) enhancing skill development infrastructure in north-east states and Sikkim; (d) skill development for 34 districts affected by left wing extremism; and (e) the Apprenticeship Protsahan Yojana. The total budgetary allocation for the abovementioned activities for FY16–17 is INR 191 crores (approximately US\$28 million). The GoI has also approved the new promotion of ATS to share the costs of stipends and basic training. This scheme has a budget of more than INR 10,000 crores (approximately US\$1.5 billion) from 2016–2017 to 2018–2019, for which additional allocation will be made in the MSDE's budget within the current financial year.

47. At the state level, the total budgetary allocation for ITIs and apprenticeship across all states and union territories in India for FY15–16 was more than INR 4,760 crores (approximately US\$790 million), which has increased by around 10 percent from FY14–15. This includes costs of setting up new ITIs, upgradation of existing ITIs, salaries, raw materials, other state-level schemes such as for distribution of learning materials, and support to private ITIs, and other related expenditure. The expenditure for both FY14–15 and FY15–16 has been around 80 percent, indicating a high absorptive capacity.

48. The national STRIVE program has an estimated funding volume of about INR 2,200 crores (US\$318 million) over five years. The GoI sent a request to the World Bank to externally fund the Operation up to INR 865 crores (US\$125 million). The remaining funds for the Operation will be met through budgetary allocations by the GoI. A separate line has been created for this purpose in the FY16–17 budget. If needed, the GoI will add more lines to cover the expected level of expenditure. Even though the GoI does not follow an explicit medium-term budget framework and therefore it is not possible to identify exact allocations to STRIVE in future fiscal years, consultations with the GoI have shown that resource mobilization and utilization at the estimated levels through budgetary allocation are not expected to pose significant challenges during STRIVE implementation.

#### **Description and Assessment of Program Results Framework and M&E**

49. The Results Framework presents a set of indicators measured at the national, state, and institutional level. The Results Framework shows the linkage between intermediate indicators, DLIs, outcome indicators, and the PDO. All indicators are specific, measurable, realistic, and time bound. The NPIU within the MSDE has significant experience with implementing World Bank-supported projects and has a well-defined institutional mechanism for planning, managing, and monitoring implementation of skills training programs. At the national level, the NPIU will lead the overall M&E arrangements of the Program. The NPIU will be supported by a PMC. Activities undertaken with respect to M&E by the NPIU will include: (a) periodic Program progress reviews, (b) consolidating and disseminating information on Program progress reports (including reporting on youth satisfaction with Program design and delivery, fiduciary performance, and safeguards compliance), (c)

<sup>&</sup>lt;sup>29</sup> This excludes the budget line on the World Bank-funded VTIP within the umbrella head on 'apprenticeship and training'.

reporting on DLI achievements and providing evidence according to the agreed verification protocols), and (d) commissioning surveys, studies, and assessments (including tracer studies) as necessary. At the subnational level, implementing agencies including ITIs, SPIUs, ICs, and teacher training institutes will be responsible for preparing and submitting annual reports on implementation progress.

50. Data planning, collection, and dissemination has been uneven under the DGT. Thus, to support these reporting processes, the PMC will design standardized reporting templates to ensure that Program reports provide clear and transparent progress updates on all relevant aspects of the Program Results Areas Framework and DLIs. Progress in the long-term training space is primarily collected through the NCVT MIS and tracer studies. The MSDE capacities will be strengthened to develop and improve data collection systems. In addition, the MSDE will be strengthened to analyze information to report against key performance parameters on time. The NCVT portal will be developed in such a way that data is accurately captured at ITI level according to data standards that ensure it can flow in a streamlined fashion through to state-level MISs and then automatically into the NCVT MIS, using agreed technical standards and protocols (which conform to the requirements of the Open Data Policy of India) because these systems will play a major role in Program monitoring. The portal will enable real-time, online access to key data metrics such as numbers of ITI trainees/apprentices, number of teachers and their qualification levels, courses offered across geographical areas, candidate/apprentice performance rates, graduate placement rates, and so on.

51. **Surveys and studies.** Primary data collection including studies of labor market outcomes and prospective experimental Impact Evaluations to test programmatic and policy alternatives will be undertaken. Studies that provide an in-depth understanding of implementation progress (challenges and success) both from the implementing agency and the beneficiary will be undertaken to improve Program design and implementation modalities of critical activities. In addition, annual third-party validations will be undertaken as required. The possibility of conducting tracer studies using simple, readily available technologies—such as SMS or other feasible technology—will be explored, and an appropriate standard instrument developed and disseminated to states.

52. **Capacity building.** Through the IPF TA component, the Operation will strengthen capacity of implementing agencies including SPIUs, RDATs, and teacher training institutes, especially to improve the accuracy and efficiency of their reporting processes. Specifically, the MSDE will be supported by the PMC establishing systems to (a) define protocols and system for collecting data on key Program parameters; (b) aggregate data for preparing annual reports; (c) designing impact evaluation studies that will use rigorous methodology to test the effectiveness of innovative interventions including stipends for women to participate in engineering trades; and (d) developing protocol for using ICT methodologies including crowdsourcing for obtaining feedback on satisfaction and labor market outcomes of beneficiaries.

53. STRIVE will include a focus on ensuring that the NCVT MIS is further developed in such a way that data is accurately captured. Separate focus will also need to be placed on ensuring that associated metrics from the apprenticeship schemes are captured and reported directly to RDAT through the NCVT MIS. These systems will play a major role in Program monitoring, as they will enable real-time, online access to key data metrics. However, it is important to note that the systems from which this data will be aggregated will be operational systems at the institutional level (ITIs and, in the case of apprenticeship schemes, ICs, which

will require systems to track and monitor funding disbursements for apprenticeship schemes). Consequently, there will likely be a separate requirement for some Program monitoring data that will not be accessible through the NCVT MIS. The most obvious example of this is ITIs reporting progress against their ISPs, which may well include one-off targets that are not part of a system-wide MIS. To facilitate this, separate facilities will be required in state-level MISs to enable institutions to capture their ISP targets and report on them appropriately, including—where necessary—submission of evidence (for example, photographs) to verify the attainment of the target. During MIS design, careful attention will be paid to defining all of the metrics that need to be tracked for Program monitoring purposes and ensuring that appropriate systems are in place to capture electronically the data required to track these metrics, as well as the necessary data analytics to enable decision makers and Program managers to access relevant reports as required for ongoing Program monitoring purposes. To make this work successfully, TA will be required to ensure that initial MIS design at the NCVT level is comprehensive and technically robust and to help states to establish their own MISs and then liaise with ITIs to collect all relevant data on an ongoing basis.

#### **Program Economic Evaluation**

54. Economic and financial analysis suggests that the Program is economically justified and financially viable. A cost-benefit analysis over a 40-year horizon finds that each of the Program components has an annual Internal Rate of Return (IRR) of at least 8% and a positive Net Present Value (NPV), with results robust to sensitivity analyses across various scenarios.<sup>30</sup> The main benefits from the Program quantified in the analysis are: (i) an increase in the employment rate of ITI graduates; (ii) a quality wage premium over and above the current premium; and (iii) an increase in the wage premium related to apprenticeship training.

		IRR (%)	NPV (US\$ million)
Program Support to ITIs	Low case: 2 pp increase in employment rate within 12 months with or without a quality premium	8-9	0-5
(Results Area 1)	Medium case: 5 pp increase in employment rate within 12 months and no quality premium in wages	17	195
	High case: 5 pp increase in employment rates within 12 months and quality premium in wages	18	256
Program Support for	Low case: 50% of expected number of trainees benefit	9	16
Quality Improvements (Results Area	Medium case: 60% of expected number of trainees benefit	10	47
2 and 3)	High case: 70% of expected number of trainees benefit	11	96
Program Support to	Low case: baseline wage premium with 60% employment rate within 12 months and 70% employment rate within 24	11	12
(Results Area 1)	Medium case: wage premium of INR 4000 per month with 70% employment rate within 12 months and 80% within 24	11	12
<i>`</i>	months	14	26
	High case: wage premium of INR 4000 per month with 80% employment rate within 12 months and 90% within 24 months	20	60
	monuis	20	00

Table 4.2. Program IRR and NPV under Different Scenarios

<sup>&</sup>lt;sup>30</sup> A discount rates of 8% is assumed to calculate net present value of Program benefits

55. Trainees who benefit from higher employment rates and quality wage premiums above currently observed levels are likely to derive substantial benefits from the Program. Research has shown that youth who have undergone ITI training have a higher likelihood of securing wage employment: while only 11 percent of secondary graduates and 12 percent of higher secondary graduates are wage employed, the proportion of ITI graduates (after secondary or higher secondary education) in wage employment is 32 percent and 23 percent, respectively. Evidence from tracer studies suggest that those who follow their ITI training with apprenticeship have even higher employment rates. Moreover, participating in ITI training yields a large wage premium: youth with only a grade 10 or a grade 12 education tend to earn nearly 18 percent less compared to those who undergo some form of formal training.

56. Beyond the direct impact on incomes of ITI graduates and apprentices, the Program is expected to generate a series of broader productivity-enhancing spillover benefits, further justifying public intervention. Global evidence indicates that firm productivity gains from training outweigh wage gains in both developed and developing countries, suggesting that public returns to investments in skills exceed private (individual) returns.<sup>31</sup> However, companies tend to underinvest in training because the costs are borne by them while some of the benefits accrue to workers and future employers, creating scope for governments to step in, reduce the externality, and contribute to raising overall skill and productivity levels.<sup>32</sup>

57. The overall underinvestment is exacerbated by the mismatch between industrial trades and apprenticeship training currently provided by ITIs and skills demanded by the industry. Although CTS courses offered by ITIs cover a broad range of technical and service provisions, enrollment is concentrated in engineering trades including fitting, electrical, welding, and auto and diesel mechanics. In most ITIs, women constitute less than 9 percent of the enrollment. The selection of courses at ITIs is mostly driven by student demand and institutional capacities, rather than by industry needs. The Program interventions will align, more closely, the supply and demand for skills, reducing search costs for firms, and in particular help smaller enterprises. Finally, evidence suggests that comprehensive training approaches of the type supported by the Program (classroom with OJT and counseling and so on), where the private sector is more engaged, tend to be associated with better labor market outcomes.<sup>33</sup>

58. The Program is also expected to contribute to increased diversity and reduced inequities in the workforce, the benefits of which are more difficult to quantify. In most ITIs, women constitute less than 9 percent of the enrollment, while Program interventions are expected to increase the participation and workplace readiness of women and youth from disadvantaged backgrounds, including students and apprentices belonging to SCs/STs.

#### **Inputs to the Program Action Plan**

59. The PAP of STRIVE covers all activities to be accomplished before the start of the Program or to be completed within the first year of implementation to achieve a speedy progress of the Program.

<sup>&</sup>lt;sup>31</sup> Lorraine Dearden, Howard Reed and John Van Reenen. 2006. *The Impact of Training on Productivity and Wages: Evidence from British Panel Data*. Oxford Bulletin of Economics and Statistics.

<sup>&</sup>lt;sup>32</sup> Jennifer P. Poole. 2013. *Knowledge Transfer from Multinational to Domestic Firms: Evidence from Worker Mobility*. The Review of Economics and Statistics, Vol. 95, No. 2.

<sup>&</sup>lt;sup>33</sup> See, for example, Jean Fares and Olga Susana Puerto. 2009. *Towards Comprehensive Training*. World Bank (review of 345 studies of training programs from 90 countries around the world).

#### **Technical Risk Rating**

60. The overall Operation risk is assessed as Moderate. Specific risks affecting the overall risk rating are: (a) the capacity constraints both at central (NPIU) and state (SPIU) levels for the implementation of large-scale reforms programs in the skills development sector; (b) delay in funds flow and low capacity of fiduciary staff at the state level; and (c) the adequacy of a robust institutional M&E system.

#### **Annex 5: Summary Fiduciary Systems Assessments**

1. As part of the Program preparation, in accordance with the World Bank policy and procedures for PforR financing, the World Bank carried out an integrated FSA to determine whether the fiduciary systems provide reasonable assurance that STRIVE Program expenditures will be used appropriately to achieve the intended purposes. The assessment is meant to identify the gaps that could impede the execution of the Program with a focus on the conditions surrounding the carrying out of procurement, FM, and governance, and the risks to the reputation of the World Bank as a financier.

2. The integrated FSA covers a sample consisting of the DGT, the MSDE at the central level, State Directorates, and two Government ITIs each in the representative sample of five states (Jharkhand, Madhya Pradesh, Maharashtra, Telangana, and Odisha) in the categories listed in table 5.1.

Category I: VTIP	Category II: Upgradation of 1,396 Government ITIs through PPP Scheme	Category III: Government/State Rules/Procedures
3	4	3

Table 5.1. ITI Categories

3. STRIVE represents a multi-level approach that reflects the complex structure of central- and state-level institutions. The implementing organizations are responsible for the prudent implementation of planned activities as laid down in the GoI's Program document and the Program's OM. The inventory of institutions that form the primary resources for implementation of STRIVE is listed in table 5.2.

Institution	Nos.	<b>Program Components</b>
Central level		
DGT, MSDE	1	Program management and TA-related activities
Centrally funded institutions for teachers training – institutions for STRIVE funds to be identified		Teacher training and curriculum development
CTI	1	
ATIs - Choudwar, Haldwani, Jodhpur, Calicut, Dehradun, Chennai, Ludhiana, Kanpur, Hyderabad, Mumbai, and Kolkata	12	
Foremen Training Institutes	2	
AHI	1	
NVTI	1	
RVTIs - Mumbai, Bengaluru, Trivandrum, Panipat, Tura, Allahabad, Indore, Vadodara, Jaipur, Mohali, Shimla, Patna, Agartala, Tiruchirappally, Kolkata	15	
NIMI	1	
CSTARI	1	
Centrally funded institutions for apprenticeship training		Apprenticeship training

# Table 5.2. Institutions for Implementation of STRIVE

Institution	Nos.	Program Components
RDATs - Mumbai, Kanpur, Kolkata, Hyderabad, Faridabad, and	6	
Chennai		
State level		
State Directorates of Training	36	Performance incentives to states to create enabling environment for ITIs
ITIs - selected ITIs will receive STRIVE funds directly; the	500	Performance incentives for
remaining will receive support through state financing		ITIs
Implementing institutes for apprenticeship		
ICs	100	
TOTAL	677	

4. This FSA is primarily based on the existing arrangements, which are in vogue at the central, state, and ITI levels which are the key implementing agencies, and hence the current assessment reflects the existing conditions. The FSA recognizes that given the volume, capacity limitations, and the decentralized nature of the Program, appropriate mitigation measures will be put in place; but, given the decentralized nature of activities, staff availability, capacity constraints, and the labyrinth of decision-making structures, the risk may not be fully mitigated.

5. The overall combined fiduciary risk rating involving the assessment of governance and anticorruption mechanisms and procurement and financial management systems is considered to be Substantial.

#### Procurement Management Assessment

6. GFR 2005 as updated from time to time, Delegation of Financial Powers and Rules, Government Orders (GOs), and the broader framework of the Indian Contract Act, the Sale of Goods Act and the guidelines issued by the Central Vigilance Commission and Manual on Policies and Procedures for Goods, Works, and Consultancy, contain broad and generic guidelines applicable to all procurements of the Government. In addition, there may be relevant GOs issued from time to time. Ministries and departments are advised to supplement the manual with their own detailed operating instructions, checklists, customized formats, and so on. Most of the states have updated their financial rules following the GFR that were updated in 2005, and legislations on procurement have been enacted by individual states such as Rajasthan, Tamil Nadu, and Karnataka. The constitutionally appointed CAG oversees the accounts of the union and states. The reports of the CAG also cover procurement and reports on union accounts are presented to each house of the Indian parliament, while reports relating to the accounts of the states are presented to the legislature of each state assembly. The STRIVE PforR will be implemented under the above existing environment.

7. Rules, procurement methods, and practices differ from state to state and the applicable procurement method depends on the value of the contract to be awarded and other factors as stipulated in the rules. For most states, procurement systems for goods and works are covered under the Public Works Department Manual and Store Purchase Manual, in addition to relevant GOs issued from time to time. Procurement under STRIVE is decentralized and most of it is expected to be of low value (mostly expected to be below US\$100,000). Therefore, the procurement challenge will not be on the complexity of procurement, but in ensuring consistency and monitoring the large number of small-value contracts within a decentralized and complex implementation structure.

8. The assessment of the existing procurement systems and arrangements identified certain areas of improvement through Program support: rules and guidelines that are spread across multiple documents and circulars; need for regulations on procurement of services; procurement planning; adhering to established standards for disclosure/transparency; system for capturing procurement information and reporting procurement progress; oversight over procurement process including procurement review and audit across entities, use of e-procurement in some states, insufficient human resources with limited procurement capacity, inefficiencies and delays in managing procurement processes, and poorly maintained records that are not available at a centralized location.

9. The procurement profile envisaged under STRIVE is likely to include civil works such as refurbishment, extension, repair and maintenance of existing buildings, construction of new buildings; goods such as machines, hand tools, measuring equipment, and so on (types of equipment will depend on the industrial trades selected by the ITIs for upgradation); TL resources including ICT; instructor training; curriculum development and upgrading; information campaigns and dissemination; and consultancy and TA.

10. Comparative position of various items of 'Procurement Considerations in Fiduciary Assessment' carried out at the center, five State Directorates, two ITIs in five states, and at ITI levels points out that the existing procurement arrangements and management systems have the following main gaps:

- (a) **Availability and capacity of human resources.** The assessment noted that except at the DGT, which has built capacity over the years due to its involvement with VTIP and will continue with STRIVE, there was no designated unit with dedicated staff handling procurement.
- (b) **Procurement planning and linkage to budget.** There is no uniform practice of preparing an item wise Procurement Plan with details of estimates, approximate quantities, and tentative timelines to make procurement more predictable. Details are available in the FSA report.
- (c) **Applicable procurement rules and procedures.** Rules, guidelines, and procedures are not available at one place for ready reference. Guidelines and standardized documents for procurement of consulting services are not in place.
- (d) **Bidding documents.** It is assumed that all states have bidding documents to undertake procurement.
- (e) **Procurement complaints mechanism.** While grievance redressal is handled differently in different states, no alternative dispute resolution procedure or written process for a formal complaint handling mechanism exists besides arbitration or jurisdiction avenues during the bidding process.
- (f) **Systems related to internal control are not robust.** There is a need to establish a procurement review process to determine adherence to agreed guidelines, procurement processes, and agreed procedures.
- (g) **Contract management and procurement record keeping.** The assessment made observations of weak contract administration and poorly maintained records. Contract management through a well-documented records procedure is

essential to maximize financial and operational performance and minimize the risk of unacceptable and non-transparent practices.

- (h) **Procurement management information system.** Absence of this system was noted in all states. Information regarding the procurement process followed, responsive suppliers/bidders, and performance on the contractor/supplier is not organized or consolidated at the state level to help make appropriate management decisions. Use of e-procurement to the extent possible would assist in providing tenderwise information for various departments to monitor procurement at the central level.
- (i) Disclosure of procurement information. The extent of public disclosure of procurement information on the outcome of the procurement process could not be assessed as this varies from state to state. There is a need to formulate and implement a disclosure management policy under STRIVE, such as publishing procurement plans and contract award notices, and achievement of targets and expenditures to maintain transparency in the system.

#### **Procurement: Key Observations and Mitigation Measures**

11. The assessment of the fiduciary systems needs to confirm whether Program systems provide reasonable assurance that the financing proceeds will be used for intended purposes, with due attention to the principles of economy, efficiency, effectiveness, transparency, and accountability. Based on the current FSA, the following necessary actions were identified and should be prioritized through 'a plan for improvement':

- (a) Create a comprehensive Procedures Manual that will provide guidance on procurement process, procedures, handling of procurement complaints, maintenance of records, procurement progress monitoring and reporting, disclosure management, and so on.
- (b) Put in place a framework for procurement monitoring and oversight through a risk-based audit that includes procurement review and through a functional procurement complaints handling mechanism.
- (c) Maintain procurement records and information in a manner such that relevant data for procurement progress monitoring for overall procurement and contract management and for audits is made available accurately, easily, and promptly.
- 12. The PAP includes the actions listed in table 5.3 to mitigate the identified risks.

Action	Who Will Do	Time Line	<b>Completion Measurement</b>
Preparing and publishing Annual	ITI, State	During Program	Year 2: 20% of target achieved
Procurement Plans on project	Directorates,	implementation	
website	DGT		Year 4: Another 40% of target
			achieved
Functional procurement complaint	DGT	Within Year 1 of	Availability on project website
handling and redressal mechanism		effectiveness	and reports generated from the
			system

#### Table 5.3. Program Action Plan

## Financial Management Arrangements

13. **Planning and budgeting.** With some exceptions, the process of annual budgeting follows a top-down approach with the consolidated budgetary requirements sent by departments to the Finance Department in December and the amount allocated in April to the directorates. The grant amounts for schemes are allotted by the directorate during the course of a financial year. Overall, there is an absence of multiyear/strategic perspective in planning and unclear linkages between planning and budgeting.

14. The main risks under the Program include inadequate budget allocations at both the national and state levels resulting in delays in fund releases by the DGT making it difficult for the states and the ITIs to achieve results and qualify for grants under the Program.

15. To mitigate the fiduciary risk, it is envisaged that the funding agreements with the ITIs will be based on five-year ISPs, and agreed targets in the ISP will serve as financing triggers for disbursement under the PB Grant Agreement. Similar result-based funding arrangements will be applied to the states as well. The design of the PforR will act as an incentive for the DGT to allocate adequate budgetary resources and ensure that the DLIs are achieved.

16. **Treasury management and fund flow arrangements.** By and large, all states have functional computerized FM systems which facilitate fund flows and management of sanctions, allotments and movement of funds. The states follow a centrally mandated classification system for budgeting, accounting, and reporting which is detailed and allows tracking of expenditure at the Program level.

17. The Program will be embedded within the national- and state-level public financial management systems. Following the PPP 1396 scheme principle, it is envisaged that grants will be directly disbursed by the DGT into the bank accounts of the selected IMCs/ITIs. This will help mitigate the risks associated with the delays in fund releases from the state to IMCs/ITIs.

18. **Accounting and financial reporting.** Accounting policies and procedures for Central Government ministries and agencies and State Directorates who have key roles in implementation of the Program, are robust and well documented. Program expenditure at the national and state levels will be tracked and reported from the country systems.

19. The key risks are associated with the accounting and financial reporting arrangements at the IMCs/ITIs, which are registered as separate autonomous societies and operate outside the state's treasury systems. Significant weaknesses have been noted in the maintenance of books of accounts and preparation of monthly/quarterly/annual financial statements, attributed largely to the absence of qualified accounting staff.

20. To mitigate the risk, the Program design envisages the following two measures: (a) submission of unaudited financial statements for the last quarter immediately preceding the release of the PB Grant Agreement as an eligibility criteria and, thereafter, for release of subsequent grants; and (b) requirement of dedicated qualified accountant at each ITI/IMC as an eligibility requirement for the PB Grant Agreement.

21. **Internal controls and internal audit arrangements.** The findings of the assessment indicate significant internal control weaknesses across the directorates and the ITIs. This is

also confirmed in the auditor general's audit reports due to factors like lack of updated stock registers/absence of stock registers, lack of records for physical verification of assets, and absence of structured financial MIS to track overall financial and physical performance. It has also been noted that multiple bank accounts are held at the level of the CFI, ITI, and State Directorates for various centrally sponsored schemes' funds and local revenues from fees, deposits, and so on. A common weakness noted across the Program is the absence of internal audits as an important tool for internal control. Internal audit function across the national and state levels are relatively understaffed and, where available, follow the basic transaction-based audit processes.

22. As a mitigation measure, the Program design envisages engagement of chartered accountant firms at the state level to conduct integrated procurement and financial management of internal audits on a quarterly or six-monthly basis. The audits will cover all Program-funded ITIs and will be conducted according to the agreed terms of reference (ToR) documented in the Program OM. An Audit Committee will be established at each State Directorate to review the audit reports and ensure compliance with the auditors' recommendations.

23. **External audit and oversight.** The Office of the CAG which is the supreme audit institution has the constitutional mandate to audit all public funds and entities. The annual audit for the DGT and the State Directorates will be conducted by the CAG Office according to the ToRs issued by the Ministry of Finance (Department of Economic Affairs) through their Office Memo F. No. 17/7/2006-FB-II on March 20, 2009, prescribing ToRs to be adopted for all audits conducted by the CAG on the financial statements of World Bank-assisted projects. The submission of ITI/IMC and SSDM/Skill Development Initiative Scheme (SDIS) state societies' audited financial statements to the World Bank will not be required for the following reasons: (a) the funds disbursed to the ITIs and SSDM/SDI state societies will be reflected as performance-based grant transfers in the DGT, MSDE audited financial statements; and (b) the ITI/IMC and SSDM/SDI state societies' audit reports will be tracked and monitored as the minimum conditions and performance measures for eligibility of the ITIs/IMCs and state for performance-based grants. Timely ITI/IMC audit is pertinent for the operation of the PB Grant Agreement and the safeguards it provides.

24. The findings of the assessment indicate three significant weaknesses with respect to external audits and oversight: (a) large pendency in compliance of audit observations; (b) delays in conduct of external audit of the ITI/IMC and state societies; and (c) absence of disclosure of annual audit reports at all levels—national, state, and ITI/IMC.

25. To mitigate the risks, the following measures will be taken: (a) Audit Committee will be established at the level of State Directorate to review the internal and external audit reports (including audit reports of the ITIs/IMCs) and to ensure compliance; (b) State Directorates will engage chartered accountant firms to conduct audit of all Program-funded ITIs/IMCs in the state according to the agreed ToRs. The audit reports will be compiled at the state level in a manner that a single audit report for each state is prepared and submitted to the DGT, MSDE, in compliance with the covenants for the Program; and (c) the annual audit reports will be uploaded on the external website of the ministry, State Directorates, and the ITIs/IMCs within 30 days of their finalization.

26. The PAP includes further actions to mitigate the identified risks and includes development of a detailed OM, which shall contain the financial management guidelines,

manuals, and procedures, as required, including benchmarks for internal controls and auditing arrangements at various levels of implementation.

27. **Program audit arrangements.** The construct of the auditing arrangements is according to table 5.4:

Scope of Audit	Responsibility	Due Date
DGT, MSDE	CAG	Within nine months of close of
		each financial year
All CFIs, including RDATs, ATIs	CAG	Within nine months of close of
		each financial year

 Table 5.4. Program Audit Arrangements

28. **Governance and accountability systems.** Overall existing governance and accountability arrangements provide good underpinnings for improving transparency and accountability of the Program. At the ministry level, the chief vigilance officer who reports to the secretary, MSDE, is responsible for the vigilance function together with the grievance officer for VTIP. There is no separate Vigilance Cell at VTIP. The complaints redressal mechanism at the NPIU could become an effective system to address and manage complaints. It would be important to ensure that it allows for the identification and tracking of Program-related complaints. Effectiveness of governance and accountability arrangements on the ground varies from state to state. In general, the vigilance function of line departments is fulfilled by a chief vigilance officer, and Vigilance Committees are also established at the block, district, and gram panchayat (village council) levels with various degrees of effectiveness. Grievance redressal mechanisms are present in every state. However, in practice, these systems would need to be strengthened so they are more accessible and complaints are properly registered and managed.

29. Grievance redressal mechanism. The complaints redressal mechanism at the NPIU could become an effective system to address and manage complaints. It would be important to ensure that it allows for the identification and tracking of Program-related complaints. According to the GoI guidelines, all grievances received from the public as well as employees are required to be redressed by the concerned ministry/department/organization arising from the work of ministries/departments/organizations in the GoI. The guideline further mandates that a person of the rank of joint secretary should head the grievance redress system at the ministry. At the national level, grievances can be raised by the State Directorates, ITIs, and individual students. The grievances raised by the states usually include project-related issues like delays in disbursement of funds and so on. Some issues are also faced at the ITI level like nonreceipt of admit cards for students before examinations and so on. There have been no instances of any student raising grievances at the national level. One of the major gaps in the system is that there are no records of any grievances raised on project issues and the issues are disposed of at the level of the project director. Thus even issues raised by the ITIs are dealt with as and when they come, and there is little evidence of these issues recorded in any systematic manner.

30. **State and ITI level.** According to Government norms, all states have institutional mechanisms for grievance redress. At the state level, it is normally a person of the rank of a director who deals with these issues. The ITIs, principals, instructors, and students can raise grievances at the state level. The issues raised by the ITIs are mainly operational around fund constraints, lack of instructors, and so on. Issues raised by the ITI principals and instructors are mainly on postings, transfers, and other personnel-related issues. Records are maintained at the state level in files on these issues together with notes on actions taken. Students can

also raise issues at the state level, but there is little evidence of this. ITIs lay down elaborate guidelines on who can form a grievance redress committee and the entire redressal mechanism. It lays down clearly that a complaint has to come in a written form and a proper register should be maintained for all complaints. Each complaint would be looked into first by the instructor and then, if not satisfied, taken up to the principal.

31. The assessment pointed out that, at the ITI level, the grievance redress process that is practiced is inadequate. If any student has any complaint, the first point of appeal is the instructor. If the instructor is not able to solve a problem he/she brings it up to the principal and not the aggrieved party. Similarly, at the level of the principal, there were no written records, and it was mostly a verbal settlement of grievance.

32. At the industry, the process of grievance redress for the apprentices is according to the system in the particular company. Thus bigger companies with a structure have provisions for grievance redress, whereas smaller enterprises usually do not. Thus apprentices may not have adequate insurance of social protection cover while they are serving as apprentices. Thus grievance redress depended on the individual initiative of the human resource person in the industry.

33. **Transparency.** The RTI (2005) offers a valuable tool to enhance the transparency of the Program. Under this act, access to information from a public agency has become the statutory right of every citizen. In the MSDE and DGT, there is a portal to file RTI applications/first appeals online along with a payment gateway. The state governments also have their own RTI system where one person in the department is designated as the point person to answer any questions that come through the RTI. At the ITI level, normally one person (usually the principal) is designated to deal with all queries under the RTI.

5. The DGT has proactively made a lot of information on its schemes and funding public on its website for greater transparency. One public information officer is appointed to answer RTI-related questions. The states have also tried to make the system transparent by having a section on RTI on the state website. Information about the ITIs and schemes are also posted on the website, which is updated from time to time. Apart from that, each State Directorate has a designated point person to answer RTI queries about the ITIs relating to the schemes, courses, opportunities, and so on. At the ITI level, the implementation mechanism of the RTI is not uniform. The larger ITIs located in the urban areas receive more RTI queries than the ones located in remote areas. Hence in larger ITIs, the system is more transparent with one person (usually the principal) who is in charge of answering all the questions. In these ITIs, records are also properly maintained. However, smaller ITIs do not have any system for the RTI and they hardly get any RTI queries.

#### Annex 6: Summary Environmental and Social Systems Assessment

1. The interventions planned under STRIVE are expected to result in substantial social and environmental benefits to the society at large, especially to the poor and vulnerable sections. Adverse impacts that are sensitive, diverse, and unprecedented on the environment and/or people are not foreseen. However, planned efforts are essential to ensure that the proposed interventions do result in sustainable social and environmental benefits. Further, the lending instruments adopted for the purpose are twofold: one, the PforR Program which covers the bulk of the credit; and the other an IPF, meant to support the TA component. Consequently, the social and environmental management have been planned separately for the two lending streams.

2. This note describes the assessments made for the PforR stream which has the following four key results: (a) improved Performance of Industrial Training Institutes; (b) increased Capacities of State Governments to Support the Industrial Training Institutes and Apprenticeship Training; (c) improved teaching and learning; and (d) improved and Broadened Apprenticeship Training. The Program has six specific DLIs:

- DLI 1: Increase in the number of graduates from ITIs that have signed PB Grant Agreements
- DLI 2: Improvement in industrial training and employment outcomes for trainees and graduates of ITIs that have signed PB Grant Agreements
- DLI 3: Reduction in ITIs' trainer vacancies and improvements in training of trainers
- DLI 4: Number of Participating States that have conducted tracer studies
- DLI 5: Number of ICs that have introduced at least 2 different apprenticeship programs within their participating (member) industries
- DLI 6: Increase in female enrollment rate in ITIs with PB Grant Agreements and ICs receiving IAI Grants

3. For the PforR lending stream, the World Bank task team has carried out an ESSA as part of the Program preparation, to gauge the adequacy of environmental and social systems at national, state, as well as ITI levels against the six core principles. This has enabled assessing the extent to which the Program systems promote environmental and social sustainability; avoid, minimize, or mitigate adverse impacts on natural habitats and physical cultural resources; protect public and worker safety; consider issues related to indigenous peoples and vulnerable groups; and avoid social conflicts. Further, the team has identified the gaps and actions for enhancing the Program systems and mitigating environmental and social risks.

4. Stakeholder Consultations and Disclosure: Toward the preparation of the ESSA, the task team visited some 25 ITIs across the country in the states of Maharashtra, Jharkhand, Telangana, Assam, Delhi, Haryana, Tamil Nadu, Odisha,<sup>34</sup> and Uttarakhand and held

<sup>&</sup>lt;sup>34</sup> States were chosen to represent the various geographical as well as socioeconomic and cultural and ecological representations. Tamil Nadu and Odisha have been covered as a part preparing the SIMO project, and Uttarakhand in the context of the preparation of the state skill development project.

consultations with various stakeholders including Government officials and industry partners at the states who take in apprentices as well as trainers and trainees. As part of appraisal, the draft ESSA along with the action plan was discussed with, and buy-in secured from the borrower through a national workshop on November 8, 2016, as well as electronically on the MSDE website on June 30<sup>th</sup>, 2016 and through the World Bank's InfoShop.

#### **Environment Assessment**

5. The Environment Assessment included a combination of discussions with stakeholders, visits to workshops, other facilities, and the campus of ITIs. Also, visits were made to an ATI and private sector players and their shop floors where apprentices may work, and a review of relevant existing regulatory frameworks was conducted. Based on observations from these sources of information, potential impacts of the Program actions were assessed. The key findings and action plan are given in the following paragraphs.

#### Key Strengths of System

6. National and state regulations to safeguard the environment are in place. Legislation exists for environment-related actions that are likely to occur as a part of STRIVE activities. Institutional systems to monitor and implement environment legislation are well defined. ITIs provide flexibility in management resulting in some ITIs with active IMCs or principals taking up various activities which support both good management of the ITI and address some environmental sustainability concerns, such as solar power generation, water recycling and harvesting, and trying to construct green buildings. The activities under this Program are expected to have low to moderate environmental impacts, with most of these impacts localized to the ITIs.

#### Key Concerns and Opportunities

7. Actual implementation of required environmental actions and regulations and their monitoring is relatively weak. Therefore, some concerns were identified by the assessment and would need to be addressed as a part of STRIVE's actions.

	Risks		Opportunities
Ins	titutional system		
• • •	Inadequate systematic attention to the environment and environmental management is dependent on individual initiatives Monitoring at the national and state level only looks at limited areas and there is no monitoring of environment-related actions Apprenticeship quality is dependent upon individual industries and their systems Safety management and systems inadequately addressed Systems for waste management poor, resulting in weak implementation of waste-related environment regulations	•	Create a robust monitoring system that includes key environmental issues and also reduces the environmental footprint of ITI education Make apprenticeship system to ensure basic standards for all industries Develop appropriate safety management systems for the ITIs Create a robust waste management system that addresses regulatory requirements, improves environmental management, and creates a safe learning environment
Inf	rastructure and management of systems develop	ment	, water supply, sanitation, and drainage
•	Disaster preparedness inadequately addressed. Sanitation infrastructure given little attention; some ITIs do not have separate toilets for girls	•	Create appropriate infrastructure, including safety alarms; ensure escape routes identified and available

 Table 6.1. Environmental Assessment - Risks and Opportunities

•	Water supply usually identified, but in water scarce areas, water availability a concern Issues of solid and liquid waste not adequately addressed, and spillage and pollution from poor waste storage systems a concern Infrastructure design, including toilet design not considering physically handicapped	<ul> <li>E</li> <li>iii</li> <li>O</li> <li>u</li> <li>I</li> <li>n</li> <li>c</li> <li>A</li> <li>r</li> <li>t</li> </ul>	Ensure appropriate sanitation for all students, ncluding girls separately Consider water harvesting, recycling, and wise use of water on campuses Identify appropriate solid and liquid waste management system that creates a healthy campus and reduces risk of pollution All infrastructure design developed to consider requirements of handicapped students to ensure heir access to ITI education
Saf	ety and learning		
•	Inadequate attention paid to safety in workshops and on OHS on ITI campuses; trainers with limited understanding of OHS Apprenticeship partners vary, so safety to students may not always be adequate during apprenticeship Construction site management poor and risks of accidents to labor and campus users alike No emergency or disaster management plan or system in place	<ul> <li>Caas</li> <li>a</li> <li>F</li> <li>F</li> <li>Saar</li> <li>Saar</li> </ul>	Create a safe environment in ITIs, and during apprenticeship, resulting in overall increased safety on shop floor for industries employing apprentices and those passing out from ITI orograms Reduce accidents and mishaps at construction sites Staff adequately trained to address safety issues and emergency or disaster situations, resulting in reduced risk and accidents
Ma	terial and waste management		
•	No systematic waste management system in place, resulting in poor disposal of waste and inadequate compliance to existing legislation Hazardous and toxic waste poorly managed and therefore, risk of pollution, injury, or other health and environment pollution concerns Material management variable resulting in risk of accidents and wastage due to poor storage	<ul> <li>A</li> <li>d</li> <li>r</li> <li>F</li> <li>s</li> <li>r</li> </ul>	All states from directorate level have a well- developed waste management system that reduces waste and pollution, creates healthier campuses, and ensures compliance to legislation Reduced wastage of material with improved storage systems, and more efficient use of resources

#### **Recommendations**

8. To ensure compliance to required environmental standards, there is a need to identify a standard process that may be used, regardless of capacity and interest of individual ITI staff members and principals. Such a process is suggested in figure 6.1. To ensure an environmentally robust system some areas that would need to be addressed include the following:

- Creation of capacities and monitoring system at the directorate level and at each ITI level to address environmental management
- Robust system for management of construction and modernization activities planned under the Program
- Introduction of OHS and safety education as a part of ITI education to ensure that all trainees follow safety norms
- Appropriate infrastructure and waste management system that includes ensuring all identified regulations are followed



**Figure 6.1. Environmental Management Process** 

#### **Program Actions**

9. To address identified concerns and ensure a basic understanding of safety and appropriate implementation of material, waste, and other required environmental standards and adherence to the existing legal environmental framework, suggested Program actions are given in table 6.2.

Action	Timeline	Responsibility	Completion Measurement
Robust environmental management system developed and functioning	Start within 6 months of effectiveness, through Program duration	State Directorates, ITIs State Directorate,	Each ITI should have a designated nodal person on environmental and safety management who would be responsible to undertake broad environmental management in the respective ITIs. These include onsite construction management covering aspects of the OHS of workers, students, teachers, and other staff in the ITI; appropriate construction debris disposal; drainage along the ITI campus; hazardous waste management, sanitation, and water supply; and taking due care to monitor these aspects. A nodal person shall also be designated at the directorate level for environmental monitoring to ensure compliance to systems established in each ITI. Existing national and state environmental regulations for OHS management along with environmental management of above aspects is to be adhered to.

 Table 6.2. Environmental Assessment - Program Actions

Action	Timeline	Responsibility	Completion Measurement
students of each ITI on	semester of	ITIs	appreciation of environmental
OHS and environment	courses, and		management aspects, OHS, and
including hazardous	yearly		sanitation aspects
waste completed	appreciation		
	course		
Construction management system in place for all construction and modernization activities under project	For all construction activities through Program life	State Directorate, ITIs	Well-managed construction sites, to minimize accidents and other risks from construction to labor and those on ITI campus. All construction sites comply with existing national regulations, including site, labor, safety, and construction waste management.
Building infrastructure and systems created and functioning to ensure a good and safe learning environment to students	Start in 6 months of effectiveness, and continue through Program duration	State Directorates, ITIs	All ITIs with working order basic safety equipment like fire extinguishers and alarms, and signage for escape routes. Required water supply, sanitation, and drainage systems in place and functional, including handicapped friendly access. Waste management systems are in place and functional

#### **Social Assessment**

10. Social Assessment was carried out through extensive stakeholder consultations at various levels—national, state, and ITI. Areas of enquiry hovered around availability of lands for civil construction; functioning and performance of training and apprentice activities as reflected in inclusion and equity; and skill development in conflict areas. Salient findings discovered are as follows:

- **Lands.** Most ITIs and/or Directorates of Training and Employment in all the states have surplus lands on their campuses. So, no land need to be acquired involuntarily for civil construction works.
- **Inclusion.** In India, the society is quite diverse and heterogeneous comprising several sub-groups based on resource endowment, gender, caste, ethnicity, religion, and geographical positioning (rural/urban/hill/forests/coastal areas and so on). Ensuring inclusion of all the sub-groups is a major challenge. Normally excluded sub-groups are women, SCs, STs, religious minorities, rural poor, and differently abled persons. Ensuring inclusion of all these sub-groups is a major challenge, given a variety of barriers—geographical, social, economic, and cultural—and other difficulties and deficiencies. Recognizing this, the State and Central Governments have provided for discriminatory targeting provisions.
- Accordingly, certain seats are reserved for women, SCs, STs, and other backward communities (OBCs) in all education institutes of the country including the ITIs. The states do strive to achieve the Government norm for reservations. However, the results are below expectations. Enrollment relative to the seats existing, overall, falls short by about 15 percent. Women enrollment varies substantially across the states, a good number of them are quite low. So is the case with SCs and STs. Women in mainstream engineering trades are almost

negligible. Their enrollment is confined to non-engineering trades like dressmaking, computer operations and program assistant, surface ornamentation, and so on. This has led to a gendered dichotomy wherein there are some trades which have only male students and others with all female students. Even women-only ITIs have not been able to sustain themselves and have begun to enroll men as well.

- **ST representation in the ITIs is low.** There are ITIs established in tribal areas, who perform at sub-optimal levels due to the following: (a) choice of courses available does not match fully with the market requirements; (b) inadequate infrastructure facility to enable proper hands-on training; and (c) non-availability of well-trained instructors. The ITIs meant for minorities do not suffer from number of enrollments. But, the skills/trades offered are not only very few but also in most cases may not meet the full/desired requirements. Consequently, many of them prefer studying at ITIs far away, which may entail travelling distances as high as 80 km one way.
- The tribal departments of the states pay stipends to the students admitted in ITIs. However, the amount of the stipend varies from state to state. In Maharashtra, the Tribal Department pays a stipend of INR 500 per month to tribal girls for residential courses and INR 600 per month for non-residential courses.
- In Maharashtra, there is unique program known as 'Ashram School ITIs' for tribals. These ITIs are located in the Ashram residential schools for the tribals and cater only to girls. The location of the ITI within the girls' school campus gives a level of 'comfort' for the ITI students. Thus it is easy for them to mobilize students from nearby areas as the environment is 'non-threatening'. As a result, these Ashram School ITIs are able to achieve admission of girls.
- Lok Seva Kendra is another interesting innovation of the Government of Maharashtra for the ITIs located in the tribal areas. Under this scheme, the ITIs are used as a common facility for the local youth who have received ITI training to use it as a production center with payment of nominal fees. Though conceptualized for the ITI students to take up self-employment with very little capital cost, the scheme has not been very successful due to lack of proper implementation.
- The ITIs are also very poor in fulfilling the quota of inclusion of people with disabilities mostly due to poor and inappropriate infrastructure. There are very few instructors trained to train this category of persons.
- **Vacancy.** There are a large number of staff vacancies in almost all the ITIs. This has meant hiring of temporary and/or contractual staff on a part-time basis who are not sufficiently paid. Likewise, there are very few personnel at the state department level, rendering monitoring and mentoring very poor.
- **Curriculum.** The present curriculum of the ITIs has a mandatory employability module which is included in every curriculum. However, there is a lack of appropriately trained teachers to teach this information to students.

- **Training of trainers.** Trainers in the ITIs are rarely trained because, one, regular staff are very few and cannot be spared; and two, temporary/ contractual staff are not considered for training. This is compounded by the lack of availability of short-term training for trainers. As a result, training is ad hoc and without any institutional perspective development planning.
- **Involvement of private sector.** Active involvement of the private sector in various capacities has a very positive impact on the ITIs. This is visible in terms of availability of equipment and machinery in PPP ITIs as well as training quality and placement. However, successful PPPs are very few.
- **Apprenticeship.** The number of students securing apprenticeship varies between 20 percent and 50 percent, average being 30 percent. However, women apprentices are very few (about 7 percent). The range of programs is not attractive for women. Under the amendment of the Apprenticeship Act, the range of training programs has expanded beyond engineering programs which is likely to increase the participation of women as has been shown in many other countries. Post placement monitoring and mentoring, by the ITI and/or RDAT is very rare, with the result that, assessing working conditions and work satisfaction and feedback remain in the dark.
- **Conflict/LWE areas.** These areas suffer from geographical isolation, difficult terrain, poor connectivity, low social and economic development, and lack of local-level employment opportunities. Apart from the inadequate infrastructure and lack of trained full-time staff, relevance and utility of the courses offered needs a thorough revisit.

	Status/Issues	<b>Opportunities/ Risks</b>			
Land	Civil works are envisaged in the Program. Sufficient lands are available for civil construction works on the Government campuses.	The Program need not and will not resort to involuntary land acquisition. Civil works will be carried out either on the lands owned by the Government or other government agencies.			
	The Program recognizes that the targeted clientele is quite diverse and heterogeneous and comprises several sub-groups. Strategies need to be drawn to ensure inclusion and equity as well as in providing institutional platforms for participation by the SCs, STs, women, religious minority groups, differently abled, and other poor and vulnerable persons including the residents of LWE areas.	Strong national and state political as well as legal support exists for implementing the Inclusion agenda. IAIs to be supported under the Program are expected to expand the inclusion outreach.			
Inclusion	The ESSA also reveals that the key to success depends upon the performance of the ITIs, which currently is not uniformly good. While some have excelled in attracting the trainees and enabling their placements, many are struggling hard to keep the institution muning. I ask of advances to ff and	Greater synergy between ITIs and local industry through their active participation in the IMCs and/or providing guest lectures to the ITI students.			
	infrastructure as well as financial resources is quite common to almost all the ITIs. Likewise, private	Key risk relates to the staffing and adequacy of infrastructure.			

#### Status/ Issues/ Opportunities

Cable 6.3. Social Assessment	– Risks and Opportunities
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	Status/Issues	<b>Opportunities/ Risks</b>
	sector participation helps in enhancing the	
	effectiveness of the training and post-training	
	interventions. Linkage with the industries	
	ultimately determines the nature and extent of	
	success.	
	There are areas beset with conflicts in India,	The Program will not result in
	commonly known as the LWE areas.	exacerbating conflicts. Rather, special
Conflict	National and state governments have focused and	interventions will be planned for
Connet	planned development focus with substantial	developing appropriate skills in such
	financial resources set apart for these areas.	areas, thus contributing toward
		harmonious development.

#### **Recommendations** (Social)

- 13. Key recommendations include the following:
  - **Market scoping.** A fixed/regular menu of trade options decided from above would not suffice. Location-specific market scoping as part of developing the ISP should be undertaken to unearth the skill requirements corresponding to local priorities as well as employment potential within and outside the country.
  - **Institutional development.** Staffing and other equipment as well as consumables and infrastructure are essential. Corresponding to the trades chosen, full-time regular qualified and trained staff should be available in requisite number in each institution. IMCs are to be revisited and formed anew/afresh and made fully functional with an explicitly drawn mandate and a set of powers.
  - Strategy for inclusion as part of ISP. As a part of the overall Institutional Development Plan, institutions should detail out the strategy for conducting market scoping, institutional strengthening, outreach, quality maintenance and upgrading, concurrent monitoring and mentoring including psycho-social counseling, training of trainers, and so on, linkage with industries for placement and roping them as resource persons/agencies and post passing out tracking. ISPs should specify the incremental increase in enrollment and passing out, the institute would achieve in respect of the SCs/STs, women, OBCs, differently abled, and other minorities. Arrangements should be made for creation and continuous updating of disaggregated data on these lines. Means as well as resources required to achieve these self-driven targets also should find a place in this plan.
  - **Outreach strategies.** At present very few ITIs make special efforts to reach out to the community, as a result, people who know about the course through friends and relatives enroll for the same. It is suggested that a more creative mobilization strategy should be designed which will enable the community to understand the courses offered and future career progression. This could include convening local political and other leaders as well as prospective students' parents to the institute and give them a detailed tour. This meeting can also have participation by the local industries and other business houses/associations.
  - In the Fifth Schedule (tribal) areas, the ISP should be preceded by consultations with tribal leaders at village as well as district levels and other agencies as well as departments. Biannual monitoring through local participation (tribal leaders

and parents) is also recommended. Residential hostel facilities would boost, especially, women participation in the Fifth Schedule areas.

- In the Sixth Schedule (tribal) areas, apart from the tribal leaders and government agencies, consultations should be held with Autonomous District Councils.
- Women participation. Women normally are offered courses like cutting, sewing and so on, which have limited relevance in the labor market. So, encouraging ITIs, as a part of their ISP, to launch new market-oriented courses will go a long way to promote women development. The state may consider reimbursing transport charges for all women candidates. All Program ITIs should have separate toilets for women with water connection. A study understanding the constraints to women participating in skills program and transitioning into the labor force will also be undertaken.
- **Introduction of** *Vishaka* **Guidelines.** According to law, all ITIs should have a committee against sexual harassment. This is not presently followed. The Program should facilitate this.
- **Stipends.** Different departments of the Government offer stipends for women, SCs, STs, and minorities. The stipends for SCs, STs, and minorities, are quite low and disbursements are not on time. States may plan how to facilitate and ensure disbursements on time.
- **LWE areas.** Institutional development planning is critical to the success of skill development in these areas. Two pronged interventions are recommended: one, providing external help for the development of institutional plans; and two, reviewing of these plans by an expert committee to ensure that courses offered are purposeful and that infrastructural facilities as well as trainers are adequate and appropriate.
- **Apprenticeships.** The host industries perceive the ITI trainees in an altogether negative way. Questions are raised about their attitude, discipline, work ethics, and so on. So, ITI during training should plan for special efforts at organizing corporate counseling and prepare students for their next phase of life.

#### Action Plan

Action	Who Will Do	Time Line	<b>Completion Measurement</b>
<b>Inclusion</b> . All ISPs to include a plan for inclusion of vulnerable groups	ITIs, State Directorates, MSDE	As part of the PB Grant Agreements to be signed with the ITIs	ISPs to lay out strategies for enhancing inclusion: mobilization, placement, and apprenticeship opportunities for women, SCs, STs, OBCs, minorities, and persons with disabilities disclosed
<b>Gender.</b> Study to understand the demand and supply-side constraints for women to enter skills training and subsequently, transition into the labor market	MSDE	Within a year of effectiveness	Study completed and shared with the World Bank
<b>MIS.</b> Develop a system to	State	Ongoing	ToRs for tracer studies to include

#### Table 6.4. Social Assessment - Action Plan

Action	Who Will Do	Time Line	<b>Completion Measurement</b>
disaggregate data pertaining to SCs,	Directorates,		requirement for disaggregation of
STs, OBCs, women, minorities, and	MSDE		data pertaining to SCs, STs,
persons with disabilities as part of			OBCs, women, minorities, and
tracer studies for ITI graduates to be			persons with disabilities
implemented by states under the			
Program			

Annex 7:	Systematic	Operations	<b>Risk Rating</b>	(SORT)
	•	1		· · · ·

<b>INDIA:</b>	Skills	Streng	gtheni	ng for	Indu	ustrial	Value	Enhancement	0	peration	<b>Stage</b> :	: Boa	rd
		···· 6							_				

Systematic Operations Risk-Rating Tool (SORT)					
	Risk Category	Rating (H, S, M, L)			
1.	Political and Governance	L			
2.	Macroeconomic	L			
3.	Sector Strategies and Policies	М			
4.	Technical Design of Project or Program	М			
5.	Institutional Capacity for Implementation and Sustainability	S			
6.	Fiduciary	S			
7.	Environment and Social	М			
8.	Stakeholders	S			
9.	DLI	М			
OVER	ALL	М			
# Annex 8: Program Action Plan

Action Description	DLI*	Covenant*	Due Date	Responsible Party	Completion Measurement**		
Program Related							
PMC in place		$\boxtimes$	Within one year of effectiveness	MSDE	Award of consultancy contract		
OM, including ITI PB Grant Agreement Scheme Guidelines, State Performance- Based Funding Scheme Guidelines, and IAI Grant Mechanism Guidelines, completed			April 30, 2017	MSDE			
<b>Procurement Arrangen</b>	nents						
Functional procurement complaint handling and redressal mechanism			Within one year of effectiveness	MSDE	Availability on project website and reports generated from the system		
Preparing and publishing Annual Procurement Plans on project website			Throughout Program implementation	ITI, State Directorates, MSDE	Year 2: 20% of target achieved Year 4: Another 40% of target achieved		
Social and Environmen	tal Rela	ted					
<b>Inclusion.</b> All ISPs to include a plan for inclusion of vulnerable groups			As part of the PB Grant Agreement to be signed with the ITIs	ITIs, State Directorates, MSDE	The ISPs to lay out strategies for enhancing inclusion: mobilization, placement, and apprenticeship opportunities for women, SCs, STs, OBCs, minorities, and persons with disabilities disclosed		
Gender. Study to understand the demand- and supply- side constraints for women to enter skills training and subsequently transition into the labor market			Within a year of effectiveness	MSDE	Study completed and shared with the World Bank		
MIS. Develop a system to disaggregate data pertaining to SCs, STs, OBCs, women, minorities, and persons with disabilities as part of tracer studies for ITI graduates to be implemented by states under the Program			Ongoing	State Directorates, MSDE	ToRs for tracer studies to include requirement for disaggregation of data pertaining to SCs, STs, OBCs, women, minorities, and persons with disabilities		

Action Description	DLI*	Covenant*	Due Date	Responsible Party	Completion Measurement**
Robust environmental management system developed and functioning in ITIs			Within 6 months of signing of the PB Grant Agreement with ITIs	State Directorates, ITIs	Each ITI should have a designated nodal person on environmental and safety management who would be responsible to undertake following broad environmental management in respective ITI. These include onsite construction management covering the aspects of OHS of the workers students, teachers, and other staff in the ITI, such as appropriate construction debris disposal, drainage along the ITI campus, hazardous waste management, sanitation, and water supply and taking due care to monitor these aspects. A nodal person shall also be designated at the Directorate level for environmental monitoring to ensure compliance to system established in each ITI. Existing national and state environmental regulations for OHS management along with environmental management of the above aspects is to be adhered to. Water harvesting and conservation and water-saving systems should be in place.
Students aware of and practice good safety norms in ITI			Start with first semester of each course, and repeat appreciation course every 6 months	State Directorates, ITIs	Training to staff and students of each ITI on OHS and environment, including hazardous waste, completed. The PB Grant Agreement to include provisions to ensure that students use safety gear in workshop, are clearly communicated OHS measures, and use required measures in their day-to-day working
Apprenticeship enforce good OHS and waste management standards			Beginning of apprenticeship and repeat every 6 months	ICs	Grant agreement on IAIs to include provisions to ensure that apprentices are aware of and practice good OHS measures, and proper waste management systems in place and functional

#### **Annex 9: Technical Assistance Component**

1. A TA component will be an IPF credit for an amount of US\$5 million. The IPF project involves Program Management Support for Strategic Technical Assistance for Improving Efficiency and M&E. The TA component will complement the PforR by supporting the MSDE to develop and implement monitoring and assessment tools required to ensure a well-targeted and robust Program. The TA component will also support the MSDE in developing and documenting best practices.

## **TA Areas for Implementation**

2. The Operation will provide TA to support a coordinated, coherent, and evidence-based approach to the critical activities that are expected to be change agents in skills development. Specifically, the Operation will provide direct TA for implementation support of policy reforms and systems development, and for improving M&E of long-term skills development reforms. This includes:

- (a) Program implementation support, including strengthening the NPIU's and SPIU's institutional capacities and the recruitment of a PMC. This includes the responsibility to coordinate and facilitate the implementation of STRIVE and provide overall fiduciary guidance at the ministerial level rests with the existing NPIU, originally established to facilitate the implementation of VTIP. The NPIU has a total strength of 21 posts; however only 11 are filled. To ensure success in the achievement of state-level activities, providing fiduciary guidance, monitoring, and facilitation tasks, the existing SPIU need to be strengthened. The VTIP implementation revealed considerable capacity constraints both at central and state levels for the implementation of large-scale reform programs in the skills development sector. Under STRIVE, national and state PIUs will therefore be supported through a dedicated PMC directly funded through IPF TA support. The PMC is a consultancy team comprising key experts in project management, M&E, skills development, and apprenticeship training. It will assist the NPIU and SPIUs in their tasks of Program management, facilitation of support, supervision of Program implementation as well as M&E. For assisting the monitoring of progress against indicators defined in PB Grant Agreements, MoUs between states and the MSDE and grant agreements on IAIs, an IVA will be hired.
- (b) Facilitation of policy development and the implementation of regulatory reforms in the skills sector. This includes studies and consultative processes in the fields of apprenticeship system reform, further development of the teacher training system, strategies to raise capacities of private ITIs, improvement of socioemotional and employability skills training, and others. By using prospective randomized impact evaluations, the evaluations will provide robust and timely feedback to the Government for improving the design of the new and innovative interventions.
- (c) Piloting innovative interventions focused on improving training and employment outcomes for girls, including introducing stipends to foster women

**participation in the labor market and collection of information on labor market returns to different trades.** The interventions will also include assessing alternative mechanisms for providing employability skills as part of the ITI curricula. The current employability module will be reviewed. Based on those findings, a prospective randomized impact evaluation will be implemented to identify the most effective program to improve work readiness of ITI trainees.

- (d) Carrying out of M&E activities including impact evaluations and qualitative assessments of Program results. TA funding will be used to provide international expertise for the further development and staff capacity building of a comprehensive MIS system that is able to capture and integrate data from sources at the central, state, and training provider levels. In addition, the TA will support in-depth review of the effectiveness of new interventions including the grading scheme, the program to use direct-to-home technology for distance learning, schemes focused on vulnerable areas (skill development in LWE districts and establishment of ITIs in north-east states and Sikkim), and stipend support for apprentices.
- (e) **Carrying out of beneficiary feedback studies, examining demand and supply challenges faced by youth and vulnerable/marginalized groups, with specific focus on girls.** Qualitative studies would examine the demand- and supply-side challenges faced by youth who have participated in the Program. Because women and other marginalized population groups tend to be underrepresented in the labor force, studies will also be undertaken to understand what factors, in addition to access constraints, also strongly influence the chances for successful education-to-work transition of vulnerable groups even after participating in skilling programs. Such constraints include distance to markets, accessibility of information, assistance in making the right career choices, networks to identify and make use of labor market opportunities, as well as cultural barriers.
- (f) **Carrying out of third-party validation of the Program results.** As part of this, the Program will ensure that this countrywide MIS architecture is collecting all data required for effective Program monitoring and that a special-purpose data analytics dashboard is established to enable regular Program monitoring against the specific monitoring requirements of the Results Area Framework and the DLIs. This data will be subject to periodic randomized audits and third-party validation to ensure its accuracy.

#### **Financial Management**

3. **Budget and flow of funds.** The Program will be budgeted on the expenditure side at the union level under an identifiable budget head item (separate from the PforR component) under STRIVE of the MSDE. At the detailed head level, the budget coding system followed by the GoI will allow for Program-specific activities to be incorporated in a manner that will facilitate the accounting and reporting of expenditures from the Principal Accounts Office's consolidated 'Monthly Accounts' itself. The detailed heads will be aligned to the Program's detailed cost tables and this will facilitate monitoring of actual expenditures against the Program allocations.

4. **Internal controls.** The internal processes for obtaining technical and financial sanctions and making individual payments requires multiple levels of approvals and follows several steps—these are, however, well established and time-tested procedures. All primary supporting documentation will be appropriately maintained to facilitate ex post reviews and the annual external audits. The GoI's GFR 2005 provides the required control framework for procedural transaction control over individual items of expenditure and receipts. The GFR also provides detailed guidance on internal controls including safeguarding of cash, control over inventories, segregation of duties and delegation of authority for approvals and operating the bank accounts. The same will apply to the Program. Internal audit is conducted by the Internal Audit Unit headed by the Chief Controller of Accounts on a biannual basis.

5. Accounting and reporting. The primary accounting for expenditures and maintenance of records at the central level is done by the Pay and Accounts Office and Principal Accounts Officer. After the end of each month, the Principal Accounts Office sends a consolidated 'Monthly Accounts' for the DGT, MSDE to the Controller General of Accounts. The monthly accounts statement reports the budget code-wise expenditure incurred/disbursed during the said month along with the cumulative figures from the start of the current financial year. At the end of each financial year the principal accounts officer compiles the 'Annual Accounts' of the DGT, MSDE and sends the same to the Controller General of Accounts.

6. **Interim and annual reporting.** The DGT, MSDE, will be responsible for submission of quarterly interim unaudited financial reports for the purpose of reimbursement of expenditure incurred under the TA component. These will contain information by component and activity. Reports will be prepared on a cash accounting basis and will be submitted to the World Bank no later than 45 days after the end of each quarter.

7. **Disbursement procedures.** Disbursements from the IDA credit for the TA (project) component would be based on quarterly interim financial reports.

8. **External audit.** The annual financial statements of the DGT, MSDE, are audited by CAG. Since the PforR funds are proposed to be released through the annual budget channel of the GoI, the same auditing arrangements shall apply. The annual audit will be conducted by the CAG Office according to the ToRs issued by the Ministry of Finance (Department of Economic Affairs) through their Office Memo F. No. 17/7/2006-FB-II on March 20, 2009, prescribing 'ToR' to be adopted for all audits conducted by CAG on the financial statements of World Bank-assisted projects.

9. The financial management activities of the PMC shall include but not be limited to preparing the consolidated annual budget and revisions thereto for the DGT, MSDE, based on the annual implementation plans submitted by the states; providing grant management support to the performance-based schemes for ITIs and states, managing the overall fund flow, and coordinating the sanction of funds to the states and partner agencies; carrying out financial and procurement audits and preparation of financial disclosures for the IPF component; and provision of related training and support services.

## **Procurement Arrangements for the TA Component**

10. The TA will complement the PforR by supporting policy development and regulatory reform, Program implementation support through national and state PMCs, piloting innovative interventions focused on improving training and employment outcomes for girls, and M&E activities including impact evaluations, tracer studies, qualitative assessments, and third-party validation studies to allow for improving scheme design.

11. Procurement of all goods and services under the TA component will be carried out in accordance with the World Bank's 'Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers', dated January 2011, revised July 2014 (Procurement Guidelines) and 'Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers', dated January 2011, revised July 2014 (Consultancy Guidelines) and the agreed procedures described in the Legal Agreements.

12. **Model documents.** The World Bank's Standard Request for Proposal document shall be used for all procurement of consultancy services to be procured for consulting contracts above US\$300,000. Standard Bidding Documents of the World Bank as agreed with the GoI Task Force (as amended from time to time) will be used for procurement of goods under National Competitive Bidding (NCB). For International Competitive Bidding (ICB) contracts, the World Bank's latest Standard Bidding Documents will be used, as agreed between the World Bank and the project.

13. Selection of consulting services and methods of procurement. The methods of procurement and selection to be used are specified in Table 9.1 and Table 9.2.

Category	Method of Selection	Threshold [US\$ Equivalent]	
Consultancy	Selection based on Consultants'	Up to 300,000	
Services	Qualifications (CQS)		
	Single-Source Selection (SSS)	According to paragraph 3.8–3.11 of	
		Consultant Guidelines	
	Individual Consultants	According to Section V of the Consultant	
		Guidelines	
	QCBS/QBS/FBS/LCS	For all other cases	
	For contracts less than US\$800,000, shortlist may comprise national consultants		

 Table 9.1. Methods of Procurement - Consultancy Services

Note: QCBS = Quality- and cost-based selection; QBS = Quality-based selection; FBS = Selection under a fixed budget; LCS = Least-cost selection.

Category	Method of Procurement	Threshold [US\$ Equivalent]
Goods, IT	ICB	≥ 3,000,000
and NCS	LIB	Wherever agreed by the World Bank
	NCB	Up to 3,000,000 (with NCB Conditions)
	Shopping	Up to 100,000
	Direct Contracting	According to paragraph 3.7 of Procurement
		Guidelines
	Framework Agreements (FAs)	According to paragraph 3.6 of Procurement
		Guidelines

Category	Method of Procurement	Threshold [US\$ Equivalent]
	Procurement from United Nations Agencies	According to paragraph 3.10 of Procurement
		Guidelines
	Procurement under Public Private Partnership	According to paragraph 3.14 and 3.15 of
	(PPP) Arrangements	Procurement Guidelines

14. **NCB provisions.** All NCB contracts shall be awarded in accordance with the provisions of paragraph 3.3 and 3.4 of the Procurement Guidelines. In this regard, all NCB contracts to be financed from the proceeds of the Credit shall follow the following procedures:

- (a) Only the model bidding documents for NCB agreed with the GoI's Task Force (and as amended from time to time) shall be used for bidding.
- (b) Invitations for bid shall be advertised in at least one widely circulated national daily newspaper (or on a widely used website or electronic portal with free national and international access along with an abridged version of the said advertisement published in a widely circulated national daily, among other things, giving the website/electronic portal details from which the details of the invitation to bid can be downloaded), at least 30 days before the deadline for the submission of bids.
- (c) No special preference will be accorded to any bidder either for price or for other terms and conditions when competing with foreign bidders, state-owned enterprises, small-scale enterprises, or enterprises from any given state.
- (d) Except with the prior concurrence of the Association, there shall be no negotiation of price with the bidders, even with the lowest evaluated bidder.
- (e) Extension of bid validity shall not be allowed with reference to contracts subject to the Association's prior review without the prior concurrence of the Association for (i) the first request for extension if it is longer than four weeks and (ii) all subsequent requests for extension irrespective of the period (such concurrence will be considered by the Association only in cases of force majeure and circumstances beyond the control of the purchaser/ employer).
- (f) Rebidding shall not be carried out with reference to contracts subject to the Association's prior review without the prior concurrence of the Association.
- (g) The system of rejecting bids outside a predetermined margin or 'bracket' of prices shall not be used in the project.
- (h) Rate contracts entered into by the Directorate General of Supplies and Disposals (DGS&D)<sup>35</sup> will not be acceptable as a substitute for NCB procedures unless agreed

<sup>&</sup>lt;sup>35</sup> DGS&D rate contracts may be used as the FA, subject to the following conditions:

<sup>(</sup>a) Use of DGS&D rate contracts as the FA must be reflected on the Procurement Plan agreed by the Association for particular goods.

<sup>(</sup>b) Before issuing the purchasing order, the implementing agency will carry out a price analysis on the specific goods that are intended to be purchased. If after this due diligence the implementing agency concludes (and the Association agrees) that the DGS&D rate contracts are more advantageous, DGS&D rate contracts may be used as the FA.

with the Association on a case-to-case basis. Such contracts will be acceptable, however, for any procurement under the shopping procedure, Framework Agreements using DGS&D rate contracts can be used to procure goods up to NCB thresholds subject to incorporation of Right to Audit, and, Fraud and Corruption clauses.

- (i) Two or three envelope system will not be used (except when using an e-procurement system assessed and agreed by the Association).
- (j) No negotiations are conducted even with the lowest evaluated responsive bidders.

15. **Procurement staffing.** The day-to-day procurement functions (procurement planning and monitoring, coordination with states, reporting and coordination with the World Bank, implementation of the PAP under the Program) will be looked after by a procurement expert, who will be part of the NPIU. The selected official would undergo procurement training on World Bank procurement procedures. The ToR for the procurement specialist(s) under the PMC will also be reviewed by the World Bank.

16. **Disclosure of procurement information.** The following documents shall be disclosed on the project website: (a) Procurement Plan and updates; (b) invitation for bids for goods for all ICB and NCB contracts; (c) request for expression of interest for selection/hiring of consulting services; (d) shortlists of consultants; (e) contract award of all consultancy services; (f) contract awards of goods procured following ICB/NCB procedure; (g) list of contracts/purchase orders placed following shopping procedures on a quarterly basis; (h) list of contracts following direct contract, CQS, or SSS on a quarterly basis; (i) monthly physical and financial progress report of all contracts; and (j) action taken report on complaints received on a quarterly basis.

17. The following details shall be sent to the World Bank for publishing in the United Nations Development Business Online World Bank external website: (a) invitation for bids for procurement of goods using ICB procedures; (b) request for expression of interest for consulting services with estimated cost more than US\$300,000; (c) contract award details of all procurement of goods using the ICB procedure; (d) contract award details of all consultancy services with estimated cost more than US\$300,000; and (e) list of contracts/purchase orders placed following SSS or CQS or direct contracting procedures on a quarterly basis.

18. Further the implementing agencies will also publish in their websites, any information required under the provisions of suo moto disclosure as specified by the RTI Act.

19. **Procurement Plan.** Based on the activity to be executed under each contract to be financed by the proposed Credit, appropriate procurement and consultant selection methods shall be adopted. The estimated costs, prior review requirements, and implementation time frame agreed between the recipient and the Association's Program team is reflected in the Procurement

<sup>(</sup>c) To meet the Association's requirements for right to audit and F&C, these clauses may be included in the purchase orders (in case the purchasers are directly placing the purchase orders to DGS&D rate contract holders). On the other hand, if indent is placed through DGS&D, the purchaser has the option to sign a separate undertaking with DGS&D rate contract holder, where Association's right to audit and F&C clauses could be mentioned.

Plan. The Procurement Plan would be updated at least annually or as required to reflect the actual Program needs during implementation. All Procurement Plans, their updates, or modifications shall be subject to the Association's prior review and 'no objection' before implementation. The Procurement Plan for the first 18 months will be inputted in the Association's Systematic Tracking of Exchanges in Procurement (STEP) system, and published on the World Bank's external website and made available in the Operations file, by negotiations.

20. **STEP.** An online STEP shall be adopted to prepare the Procurement Plan once the initial Procurement Plan has been agreed. It is a web-based tool owned by the World Bank, which helps in tracking dates of the different stages of procurement activities and contract management that are planned or under implementation. The system establishes a new, easy to use, and more efficient way for World Bank teams and clients to interact, while at the same time providing an audit trail of the process. The World Bank will make arrangements to train the staff of the NPIU of the DGT in operating STEP.

21. **Complaint handling mechanism.** The NPIU of the DGT shall establish a functional procurement complaint and redressal system to address complaints/grievances from contractors/suppliers more effectively. On receipt of complaints, immediate action will be initiated to acknowledge the complaint and redress it within a reasonable timeframe. All complaints during the bidding/award stage as well as complaints during the contract execution along with the analysis and response of the NPIU shall invariably be submitted to the Association for review.

22. **Prior or post review.** According to the agreed thresholds specified in the Procurement Plan, procurements shall be prior reviewed by the Association. All contracts not covered under prior review by the Association will be subject to post review during implementation support missions and/or special post review missions including missions by consultants hired by the World Bank.

23. **Frequency of procurement supervision.** The World Bank will normally carry out the implementation support mission on a semiannual basis. The frequency of the mission may be increased or decreased based on the procurement performance of the Program.

24. Use of government institutions and enterprises. Government-owned enterprises or institutions in India may be hired for unique and exceptional nature if their participation is considered critical to Program implementation. In such cases, the conditions given in clause 1.13 of Consultant Guidelines shall be satisfied and each case will be subject to prior review by the World Bank.

25. **Procurement risk assessment.** Based on the present broad assessment, the procurement risk rating is Substantial due to limited and weak procurement capacity with regard to selection of consultancy services, lack of effective coordination between multiple implementing agencies and weak oversight and monitoring of results, and slow implementation due to the multistate nature of the Program. A few mitigation measures to reduce the risk have been built into the Operation.

## **Annex 10: Implementation Support Plan**

#### Main focus of Implementation Support

## Strategy and Approach for Implementation Support

1. The strategy for implementation support has been developed based on the nature of the Program and its risk profile. It aims to make implementation support to the client flexible and efficient, and focuses mainly on implementation of the risk mitigation measures defined in the SORT.

2. The World Bank's approach to implementation support strongly emphasizes open and regular communication with all actors directly involved in the Program, constant information exchange, and adequate flexibility to accommodate the specificities of the Program.

3. The implementation support strategy is based on several mechanisms that will enable enhanced implementation support to the Government and timely and effective monitoring. The implementation support thus comprises (a) Joint Review Missions; (b) regular technical meetings and field visits by the World Bank between the formal joint review missions; (c) NPIU reporting based on the performance agreements; and (d) internal audit and FM reporting.

## **Implementation Support Plan**

4. The World Bank will provide timely implementation support to the Program's results areas as well as guidance to the relevant agencies regarding technical, fiduciary, social, and environmental issues. Formal implementation support and field visits will be carried out as required and will focus on the following:

- (a) **Technical inputs.** The World Bank will solicit inputs from two international experts in vocational training and ICT to support the results areas under the Program.
- (b) **Fiduciary requirements and inputs.** The NPIU for the Program has also been responsible for the implementation of the World Bank's VTIP, and is therefore familiar with World Bank FM and procurement procedures. In addition, the World Bank's FM specialist and procurement specialist will provide training before Program effectiveness and during Program implementation. This will allow building capacity among implementing agencies, especially in matters of FM and procurement in a PforR Program. Supervision of FM and procurement arrangements will be carried out as required as part of the Program needs. The World Bank staff will work very closely with the NPIU in identifying key TA needs and provide assistance in developing ToRs and procurement strategy for the same.
- (c) **Safeguards.** The World Bank will monitor compliance with the Social Management Framework and environment-related courses during the implementation support missions, and technical guidance will be provided accordingly.
- 5. The main focus of implementation support is summarized in Table 10.1.

Time	Focus	Skills Needed	Resource Estimate
First 12 months	<ul> <li>Technical review/support</li> <li>procurement training and supervision</li> <li>FM training and supervision</li> <li>Environmental and social monitoring and reporting</li> <li>Institutional arrangement and Program supervision coordination</li> </ul>	Technical; M&E procurement; financial management; institutional; environmental and social	<ul> <li>Technical and vocational education and training (TVET) specialist: 10 weeks</li> <li>ICT specialist: 5 weeks</li> <li>MIS specialist: 4 weeks</li> <li>Operations specialist: 10 weeks</li> <li>M&amp;E specialist: 5 weeks</li> <li>Procurement specialist: 4 weeks</li> <li>FM specialist: 4 weeks</li> <li>Environmental specialist: 2 weeks</li> <li>Social specialist: 2 weeks</li> <li>Co-task team leaders: 12 weeks</li> </ul>
12–48 months	<ul> <li>Technical review/support</li> <li>procurement management</li> <li>FM and disbursement</li> <li>Environmental and social monitoring and reporting</li> <li>Institutional arrangement and Program supervision coordination and team leadership</li> </ul>	Technical; M&E procurement; financial management; institutional; environmental and social	<ul> <li>TVET specialist: 4 weeks</li> <li>ICT specialist: 3 weeks</li> <li>M&amp;E specialist: 2 weeks</li> <li>Procurement specialist: 4 weeks</li> <li>FM specialist: 4 weeks</li> <li>Environmental specialist: 1 week</li> <li>Social specialist: 1 week</li> <li>Co-task team leaders: 12 weeks</li> </ul>

#### Table 10.1. Implementation Support Plan

6. The task team skills mix requirements for implementation support are given in table 10.2.

Table 10.2. Task Team Skills Requi
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Skills Needed	Number of Staff Weeks	Number of Trips	Comments
TVET specialist	10 weeks annually	Two	Externally based
ICT specialist	5 weeks annually	Two	Externally based
MIS specialist	4 weeks annually	Two	Country office based
Operations specialist	10 weeks annually	Field trips as required	Country office based
M&E specialist	5 weeks annually	Field trips as required	Country office based
Procurement specialist	4 weeks annually	Field trips as required	Country office based
Social specialist	2 weeks annually	Field trips as required	Country office based
Environment specialist	2 weeks annually	Field trips as required	Country office based
FM specialist	4 weeks annually	Field trips as required	Country office based
Co-task team leaders	16 weeks first year, then 12 weeks annually in the following years	Field trips as required	Country office based