



Technical Assistance Report

Project Number: 47227-001
Capacity Development Technical Assistance (CDTA)
March 2014

Republic of the Union of Myanmar: Skills
Development for Inclusive Growth
(Financed by the Japan Fund for Poverty Reduction)

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 14 February 2014)

Currency unit	–	kyat/s (MK)
MK1.00	=	\$0.001019
\$1.00	=	MK981.000

ABBREVIATIONS

ADB	–	Asian Development Bank
CBMSC	–	competency-based modular short course
CESP	–	costed education sector plan
CESR	–	Comprehensive Education Sector Review
M&E	–	monitoring and evaluation
MOI	–	Ministry of Industry
MOST	–	Ministry of Science and Technology
NSSA	–	National Skills Standard Authority
TA	–	technical assistance
TVET	–	technical and vocational education and training

TECHNICAL ASSISTANCE CLASSIFICATION

Type	–	Capacity development technical assistance (CDTA)
Targeting classification	–	Targeted intervention–household
Sector (subsector)	–	Education (technical education and vocational skills training)
Themes (subthemes)	–	Social development (human development), economic growth (widening access to markets and economic opportunities), gender equity (gender equity in [human] capabilities), capacity development (institutional development)
Location (impact)	–	Rural (medium), urban (medium), national (medium)
Partnership	–	Japan Fund for Poverty Reduction

NOTES

- (i) The fiscal year (FY) of the Government of Myanmar begins on 1 April and ends on 31 March. “FY” before a calendar year denotes the year in which the fiscal year starts, e.g., FY2013 begins on 1 April 2013 and ends on 31 March 2014.
- (ii) In this report, “\$” refers to US dollars.

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CONTENTS

	Page
I. INTRODUCTION	1
II. ISSUES	1
III. THE TECHNICAL ASSISTANCE	3
A. Impact and Outcome	3
B. Methodology and Key Activities	3
C. Cost and Financing	4
D. Implementation Arrangements	5
IV. THE PRESIDENT'S RECOMMENDATION	5
APPENDIXES	
1. Design and Monitoring Framework	6
2. Cost Estimates and Financing Plan	9
3. Outline Terms of Reference for Consultants	10
SUPPLEMENTARY APPENDIX (available on request)	
A. Indicative Equipment Summary	

I. INTRODUCTION

1. The Government of Myanmar recognizes that skills development is critical in promoting inclusive growth and poverty reduction, assisting Myanmar to meet rapidly evolving labor market needs, rebalancing and equipping the labor force and the economy to modernize and advance technologically into higher value-added sectors, and enhancing equity of access to new opportunities. Under the Comprehensive Education Sector Review (CESR)—initiated by the government in July 2012, with harmonized support from development partners—the Asian Development Bank (ADB) has been a lead partner supporting analysis and policy dialogue on technical and vocational education and training (TVET) and other post-primary education subsectors in Myanmar. Building on dialogue under the CESR, during the 2013 country programming mission, the government requested ADB to provide technical assistance (TA) to pilot test new skills development models and provide related capacity development and policy and planning support. TA reconnaissance and fact-finding discussions (1–3 July and 16–20 September 2013) reached agreement on the TA design, including the impact, outcome, outputs, implementation arrangements, cost estimates and financing arrangements, and consultant terms of reference. The design and monitoring framework is in Appendix 1.¹

II. ISSUES

2. Myanmar's socioeconomic transformations present opportunities and challenges. Recognizing that an educated population and skilled workforce is a prerequisite for successful navigation of these transformations and for sustained economic growth and poverty reduction, the government has stepped up efforts to bolster the education sector, including the TVET subsector.² Myanmar's ongoing CESR is playing a critical role in pinpointing gaps and identifying “quick wins” (interventions that can deliver results quickly) to be pilot tested for scale-up under the forthcoming costed education sector plan (CESP). To be developed in the final phase of the CESR in 2014, the CESP will provide a unified framework for evidence-based, prioritized, and sequenced sector investments by the government and development partners.³

3. Despite its large and young workforce, Myanmar faces significant skills shortages and misalignment. Analysis supported by ADB under the CESR's rapid assessment (phase 1) shows an inverted skills pyramid. Amid overall gaps in skilled labor, young workers with basic skills are urgently needed to strengthen the foundations of the skill pyramid. Household survey data suggest that only 1.7% of 16–19 year-olds are enrolled in various forms of skills training, with access to training largely limited to affluent urban populations and niche skill areas such as those related to computers and languages.⁴ Only 0.3% of rural males and 0.1% of rural females in that age group reported enrolment in any form of industrial, mechanical, or primary sector-related training, with virtually no poor respondents enrolled.⁵ Women (especially in rural or peri-

¹ The ADB vice-president, Operations 2 approved the TA concept paper on 2 September 2013. The TA first appeared in the business opportunities section of ADB's website on 28 October 2013.

² In addition to national development, rapid retooling of the workforce will be critical to support Myanmar's successful entry into global markets and the Association of Southeast Asian Nations Economic Community in 2015.

³ The CESP is expected to include (i) a two-year plan covering FY2014–FY2015; and (ii) interim planning for education sector investments over FY2016–FY2021, to be integrated into the national multisector sixth five-year plan.

⁴ Participation rate estimates are based on ADB-supported CESR analysis of the 2009–2010 Integrated Household Living Conditions Survey. See <http://www.adb.org/projects/documents/cesr-p1-rapid-assessment-annex-secondary-education-tacr>

⁵ Shares of 20–25 or 26–30 year-old rural males and females reporting they have completed training in such fields are only marginally (if at all) higher.

urban areas) are particularly underrepresented in these types of skill training.⁶ The absence of workers with foundational skills undermines the ability of more highly-skilled workers to function efficiently, and obstructs balanced modernization in both the urban and rural sectors.

4. CESR analysis also highlights the lack of capacities and systems for providing applied short courses and other forms of training accessible to disadvantaged youth and workers. Public sector TVET provision in Myanmar has focused on advanced, multiyear degree or diploma programs, with admission based on the same matriculation exam used for university entrance.⁷ Private training is expanding, but remains limited and heavily targeted at more affluent urban niche markets (e.g., computer and language training). The TVET subsector also faces quality and management issues, which need to be addressed to support Myanmar's socioeconomic transformation. These include the need for TVET to shift from a supply-side, academic orientation toward demand-driven and competency-based programs, while addressing gaps in (i) the quality and relevance of curricula and materials, methodology, and overall program design in the face of shifting demands; (ii) links to labor market needs, especially in expanding sectors and skill areas; (iii) instructional and managerial staff capacity and professional support systems, in addition to physical facilities; and (iv) related institutional capacities. TVET has received very limited international support, as development partner project, policy, and other support to education remains concentrated in primary, preprimary, and nonformal education.⁸

5. To help address these challenges, phase 1 of the CESR recommended (i) continued analysis and policy support under CESR phase 2 (in-depth analysis) in areas such as the development of an updated policy framework for TVET; and (ii) more focused quick win interventions. Such interventions include the formulation and pilot testing of competency-based modular short courses (CBMSCs). The Ministry of Science and Technology (MOST) and Ministry of Industry (MOI)—key agencies in TVET and the CESR—have sought ADB support to develop CBMSCs and strengthen their capacities in areas such as responsiveness to employer demands.⁹ New to Myanmar, CBMSCs would provide a mechanism to quickly expand the supply of foundational skills urgently needed to modernize Myanmar's urban and rural economies while advancing equity and inclusive growth by extending skills development opportunities to disadvantaged youth and workers who are unable to access higher education and existing forms of TVET. Complementing policy-level support under the CESR, the proposed TA will assist the government in operationalizing this quick win intervention by developing and pilot testing CBMSCs in several urgently demanded skill areas, and building related institutional capacities. Support under the TA is expected to feed back into the CESR, by providing proven models that can be integrated into the 2016–2020 sub-plan of the CESP and be replicated to a broader array of skill areas and institutions under MOST, MOI, and other agencies.¹⁰

⁶ Female enrolments are largely concentrated in computers, languages, and hospitality, where they appear to at least marginally outnumber male trainees. Female participation in fields like welding is extremely limited.

⁷ Taken at the end of grade 11, this exam is the basis for both certification of high school completion and selection for higher education and some forms of TVET. Since 2009, about 66% of exam takers have failed, blocking access to many education and skills training pathways.

⁸ Limited development partner project support to date has focused on advanced, typically multiyear TVET programs. Development partners supporting CESR TVET analysis have included ADB, German development cooperation through GIZ, and the United Nations Educational, Scientific and Cultural Organization. The Japan International Cooperation Agency is also engaged in the CESR and plans continued support related to engineering disciplines.

⁹ MOST is the lead agency for TVET in Myanmar, in cooperation with the Ministry of Education (which has a mandate for sector-wide policy making and oversees the CESR) and other agencies.

¹⁰ The TA will also promote a strategic thrust identified in Myanmar's Framework for Economic and Social Reforms on overhauling TVET to ensure alignment with market demands and trends.

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

6. The impact will be an enhanced skills foundation for balanced and inclusive growth. The outcome will be models for equipping disadvantaged young adults with job-ready, highly demanded skills demonstrated to be successful and adopted.

B. Methodology and Key Activities

7. The TA will have three roughly sequential outputs: (i) institutional structures and capacities strengthened, (ii) high-quality program content developed and delivered, and (iii) evidence disseminated and replication models prepared.

8. **Output 1: Institutional structures and capacities strengthened.** The TA will support activities to build the institutional capacity of MOST and MOI, other key agencies, and participating training institutions to support pilot testing (para. 9) of CBMSCs, ensure that the pilot test feeds back into broader policy dialogue and reform processes, and provide a stronger base for expansion and replication of models demonstrated to be successful.¹¹ Support will include strengthening the management capacities of agencies and participating institutions throughout the skills development cycle, including engaging the private sector in assessing local labor markets; and identifying skill and competency demands, trainee recruitment, final skill certification, and job placement for graduates.¹² The output will also support MOST and MOI in developing strategies, operational guidelines, and assessment frameworks for CBMSCs.

9. **Output 2: Competency-based modular short course (CBMSC) program content developed and delivered.** The main cluster of activities under output 2 will focus on the preparation and pilot testing of CBMSCs in three MOST government technical high schools and two MOI industrial training centers selected to participate in two parallel pilot tests.¹³ The MOST pilot test will cover government technical high schools in Mandalay, Naypyitaw, and Yangon; and focus on four CBMSCs on building and construction.¹⁴ The MOI pilot test will cover industrial training centers in Mandalay and Pakokku, and focus on three CBMSCs on welding and small rural-use machinery.¹⁵ For each CBMSC, support will include (i) the development of a gender-sensitive curriculum and learner assessment mechanisms, based on engagement with local employers to pinpoint skill gaps; (ii) capacity building for instructors; (iii) provision of the required equipment and materials; and (iv) technical support for program delivery. At least 1,000 trainees will successfully complete CBMSCs, which will be up to 3 months in duration and provide training certificates, allowing trainees to enroll in CBMSCs successively and be certified in multiple skill areas (e.g., different types of welding) to diversify their skill sets. The TA will also support interventions to promote (i) access by young adults from poor and disadvantaged families, and (ii) females' participation in skill areas typically dominated by males.¹⁶ The second

¹¹ These include, in particular, the National Skills Standard Authority.

¹² Recruitment efforts (including local social marketing) will largely target disadvantaged groups, including school dropouts and young adults who have not completed high school, while tackling gender biases.

¹³ Training institutions and CBMSC focus were selected largely based on pressing skill gaps in key economic zones.

¹⁴ The MOST CBMSCs will focus on road construction and concrete technologies, cement shuttering, bar-bending (for concrete reinforcement), and bricklaying.

¹⁵ The MOI CBMSCs will focus on MIG-MAG welding; arc welding; and maintenance and repair of farm equipment, motorcycles, and other common machinery. Additional CBMSCs in linked skill areas may be added under the MOST and/or MOI pilot tests during the second half of TA implementation.

¹⁶ CBMSCs will be free of charge, while the TA and government contribution will support basic accommodation and food for trainees from rural areas. Per the design and monitoring framework (Appendix 1), at least 250 females will

cluster of output 2 activities will support MOST and MOI in developing libraries of print and electronic resource materials—distilling from international best practice models of short courses in skill areas critical to Myanmar—as well as further capacity building for core officials and staff to support the development of a broader array of CBMSCs for rollout after TA completion.

10. **Output 3: Evidence disseminated and replication models prepared.** Support under output 3 will include (i) monitoring and evaluation (M&E) of both pilot tests, including limited baseline and endline studies focused on local skill gaps faced by employers, and a small tracer study to assess trainees' ability to find employment; (ii) development of knowledge products and other materials, as well as multi-stakeholder dialogue and dissemination of findings and recommendations relevant to CBMSC replication and broader policy formulation; and (iii) analytical and capacity development support to MOST and MOI to promote post-TA replication of CBMSC models.¹⁷ Linked to ADB support under the CESR, this will include support to MOST and MOI to develop costed models for replication in the form of projects to be included in the 2016–2020 sub-plan of the CESP. The TA will also distill international experience on cost-sharing models and other cooperation with the private sector, identifying options for Myanmar.¹⁸

11. **Risks.** The risk of a reversal in Myanmar's political and socioeconomic policy reforms or of the new government's commitment to strengthen the education sector appears low.¹⁹ Similarly, government ownership of the TA is very strong, as the introduction of CBMSCs is a high priority. Risks and challenges include those related to government institutional capacities as well as coordination across public and private sector stakeholders. TA interventions will seek to build capacities, including those linked to coordination and dialogue with employers and other stakeholders. Through the CESR, the education sector has been recognized as the leading example of intra-government coordination and development partner harmonization in Myanmar. The TA will benefit from linkages to the CESR process, including dissemination of findings and dialogue toward the replication of CBMSC models in institutions under other ministries. The TA will not involve any significant adverse environmental or social impacts. CBMSCs pilot tested during the TA will utilize existing facilities and be free of charge, so costs will not discourage participation. Overcoming traditional norms on gender roles will pose a challenge, but MOST and MOI are committed to promoting gender equity. M&E will carefully track implementation.

C. Cost and Financing

12. The TA is estimated to cost \$2,500,000, of which \$2,000,000 will be financed on a grant basis by the Japan Fund for Poverty Reduction and administered by ADB. The government will provide counterpart support in the form of counterpart staff (including trainers at the participating pilot institutions), meeting venues and work space for consultants and ADB missions, training classrooms and venues and other costs of fee-free training provided during the TA, administrative support, and other in-kind contributions.

successfully complete CBMSCs during the pilot test, including at least 125 in CBMSCs in non-traditional skill areas (those typically dominated by males).

¹⁷ While the pilot test's small scale will preclude a more rigorous and precise impact evaluation, quantitative analysis under the M&E strategy will include a difference-in-difference approach to measure relative changes in employer-reported shortages in skill areas covered by the CBMSCs and comparator skill areas not covered under the pilot.

¹⁸ In the Myanmar context, public training institutions are expected to play a key role in provision of training for more disadvantaged groups (with most private providers focused on more affluent urban niches) in the immediate future.

¹⁹ This is reflected in the government's launch of the CESR (following presidential endorsement in July 2012) as well as a tripling of the education budget in the last 2 fiscal years.

13. The TA will finance (i) expert inputs (para. 15), (ii) equipment needed to support the pilot testing of CBMSCs, (iii) costs of training activities and other workshops, (iv) print and electronic resource materials and minor computer equipment to support resource material libraries at MOST and MOI, and (v) other allowable expenditures as agreed by ADB (Appendix 2).²⁰

D. Implementation Arrangements

14. MOST will be the executing agency. Two implementing agencies—the MOST Department of Technical and Vocational Education and the MOI Human Resource Department—will oversee two parallel pilot tests to be implemented in participating training institutions (para. 9). The TA will be implemented from April 2014 to April 2016. To support implementation and replication, MOST will establish and chair a TA advisory committee, including representation from MOI, the National Skills Standard Authority, other agencies, and industry representatives.²¹ To facilitate implementation of training and other workshops and activities, an advance payment facility will be established for MOST.²² MOST and MOI will procure locally available items (such as hand tools, materials and supplies, and minor computer equipment) subject to prior approval and in accordance with ADB procedures. ADB will procure more complex equipment required for CBMSCs (e.g., welding apparatus).²³ In all cases, ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time), *Procurement Guidelines* (2013, as amended from time to time), and other ADB guidelines will be followed.

15. The TA will support 43 person-months of international consultants (four positions) and 22 person-months of national consultants (one position) with expertise in relevant types of TVET. Outline terms of reference and key deliverables are in Appendix 3. ADB will engage the consultants as individuals in accordance with its *Guidelines on the Use of Consultants* (2013, as amended from time to time). The international expert on skills development will be the overall lead consultant, leading development of the TA's M&E strategy and an overall knowledge plan for disseminating TA deliverables. The TA will also mobilize short-term resource persons to provide expertise as needed for activities such as training of trainers and events. In addition to national and local stakeholder dialogue (including with the private sector) and linkages with the CESR process, the TA will maintain dialogue and pursue knowledge sharing cooperation with development partners supporting TVET in Myanmar and other institutions in-country or abroad, particularly in neighboring members of the Association of Southeast Asian Nations.²⁴

IV. THE PRESIDENT'S RECOMMENDATION

16. The President recommends that the Board approve ADB administering technical assistance not exceeding the equivalent of \$2,000,000 to the Government of Myanmar to be financed on a grant basis by the Japan Fund for Poverty Reduction for Skills Development for Inclusive Growth.

²⁰ These will include resource persons, venue, materials and supplies, logistics, and other allowable costs.

²¹ These will include (among others) the Ministry of Education, Ministry of National Planning and Economic Development, and Ministry of Labor, Employment and Social Security.

²² The ADB team leader provided in-depth orientations on ADB guidelines during reconnaissance and fact-finding.

²³ TA-financed equipment will be dedicated for TA use, and turned over to MOST and MOI after TA completion. The ADB TA supervising unit will ensure close consultation on procurements with the Office of Administrative Services, Operations Services and Financial Management Department, Controller's Department, and other offices.

²⁴ In addition to development partners' support for the CESR, this will include and planned Japanese support to MOST to develop highly-skilled engineers, focused on technological universities in Yangon and Mandalay.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p>Impact</p> <p>Enhanced skills foundation for balanced and inclusive growth</p>	<p>By end of 2020:</p> <p>Share of 20–25 year-olds who have completed some form of training in fields related to industry, mechanical repair, and machinery operation rises by at least 5 percentage points in rural and urban areas (baselines 0.2% in rural areas and 1.3% in urban areas in 2009), among males and females (baselines 0.8% for males and 0.2% for females), and among the poor (baseline 0.0%)^a</p> <p>Policy framework, strategy, and priority investments for a demand-driven national TVET system that is equipped to meet evolving labor market needs adopted and implemented</p>	<p>Fourth IHLCS round (with data collection expected to commence in 2019 and be completed in 2020); data from the MOLESS, MOST, and MOI</p> <p>Policy decrees; approvals and implementation reporting for CESP and national five-year plan, 2016–2020; annual reports of MOST, MOI, and other agencies</p>	<p>Assumptions</p> <p>No major reversal or disruption of political, economic, and social policy reforms</p> <p>Continued rapid growth of total government revenues and government prioritization of education sector development yield continued rises in budgetary resources for TVET</p> <p>Risk</p> <p>Breakdown of dialogue processes (including under CESR) linking multiple agencies, private sector, and other stakeholders to advance TVET subsector reforms</p>
<p>Outcome</p> <p>Models for equipping disadvantaged young adults with job-ready, highly demanded skills demonstrated to be successful and adopted</p>	<p>By April 2016:</p> <p>Final M&E findings on successful CBMSC implementation endorsed by MOST and MOI</p> <p>Strategies, operational guidelines, and assessment frameworks approved by MOST and MOI to guide development and implementation of CBMSCs nationwide, targeting disadvantaged groups and promoting equitable opportunities for males and females</p> <p>Expansion of CBMSCs reflected in CESP and included in MOST and MOI budgets for FY2016</p>	<p>MOST and MOI comments on TA project's M&E final report</p> <p>MOST and MOI decrees and reports</p> <p>CESP (disseminated by Ministry of Education); MOST and MOI annual reports; approved budget figures</p>	<p>Assumptions</p> <p>Pilot findings and recommendations endorsed by senior MOST and MOI leaders</p> <p>Timely intra-government approvals of CESP, and MOST and MOI budget proposals</p> <p>Risks</p> <p>Breakdown of mechanisms for coordination across agencies and institutions involved in the pilot test as well as other key stakeholders (e.g., NSSA, private industries)</p> <p>Breakdown of linkages between CESP preparation and broader national planning processes</p>
<p>Outputs</p> <p>1. Institutional structures and capacities strengthened</p>	<p>By April 2016:</p> <p>MOST and MOI strategies, operational guidelines, and assessment frameworks developed to guide provision of CBMSCs</p>	<p>MOST and MOI decrees promulgating guidelines for pilot use</p>	<p>Assumptions</p> <p>ADB staff engagement, and sustained engagement and orientation for government agencies (new to cooperation with ADB) prove effective</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p>2. CBMSC program content developed and delivered</p> <p>3. Evidence disseminated and replication models prepared</p>	<p>Participating training institutions establish local technical sector committees and launch local employer outreach strategies</p> <p>Participating training institutions develop and implement plans to promote equitable access and outcomes by gender and for disadvantaged groups ^b</p> <p>At least 20 trainers (including at least 10 females) from participating institutions complete capacity development programs for technical skills and vocational pedagogy ^c</p> <p>Gender-sensitive curricula and related materials developed for at least seven new CBMSCs ^d</p> <p>At least 750 male and 250 female trainees receive certification for completing pilot CBMSCs, including at least 125 females certified in nontraditional skill areas ^e</p> <p>M&E (including tracer study and endline survey of local employers) completed and disseminated</p> <p>Endline M&E report shows at least (i) 600 male and 200 female trainees employed within 3 months of course completion, including at least 100 females employed in nontraditional skill areas; ^d and (ii) 20% improvement in local availability of workers with basic skills in fields targeted by pilot tests vis-à-vis comparator fields (baseline values to be determined early in the TA)</p> <p>MOST and MOI allocate budget resources for post-TA continuation of CBMSCs in five participating institutions, and costing prepared for models for broader replication</p>	<p>Records of local committee meetings (expected to be conducted quarterly); biannual progress reports</p> <p>Plan implementation included in biannual progress reports</p> <p>Periodic reviews of overall implementation by MOST, MOI, and ADB</p> <p>Draft curriculum reviewed during workshops</p> <p>Biannual progress reports capture quantitative and qualitative progress</p> <p>Endline M&E report launched at final workshop</p> <p>Tracer study, local employer surveys, and other elements of endline M&E report</p> <p>MOST and MOI budget-related and other documents</p>	<p>Local employers willing to participate in skill needs dialogue and other outreach activities, and to hire certified trainees</p> <p>Young adults willing to enroll in CBMSCs (which are new to Myanmar)</p> <p>Risks</p> <p>Breakdown in coordination between TA activities and related support provided by other development partners</p> <p>Traditional norms on gender and other social dimensions not responsive to social marketing, capacity building, and other interventions</p>

Activities with Milestones	Inputs														
<p>Output 1: Institutional structures and capacities strengthened</p> <p>1.1 Institutional capacity assessment of units in MOST and MOI, NSSA, other agencies, and participating training institutions completed by May 2014</p> <p>1.2 Capacity building program to strengthen management capacities of agencies and participating institutions completed by July 2014</p> <p>1.3 Interim guidelines and assessment framework to guide pilot testing of CBMSCs under output 2 developed and endorsed by MOST and MOI by August 2014, with final MOST and MOI strategies, operational guidelines, and assessment frameworks for CBMSCs developed by April 2016 to support replication</p> <p>1.4 Best practice procedures and guidelines for employer outreach developed by June 2014; training institutions establish local technical sector committees and launch by August 2014 local employer outreach strategies to engage employers throughout the cycle of skill needs identification through recruitment of certified trainees</p> <p>1.5 Procedures and guidelines to support training institutions' development and implementation of plans to promote equitable access and outcomes by gender and for disadvantaged groups developed by August 2014 and launched by September 2014</p> <p>Output 2: CBMSC program content developed and delivered</p> <p>2.1 Preliminary skill needs assessment of employers in target localities completed by May 2014</p> <p>2.2 Curricula, materials, and learner assessment mechanisms developed for seven CBMSCs by September 2014, with necessary equipment provided by October 2014</p> <p>2.3 Initial capacity building program for instructors completed by October 2014, with subsequent refresher sessions every six months through October 2015</p> <p>2.4 Courses launched by November 2014 (first batch), with batches 2–6 completed by March 2016</p> <p>2.5 Resource libraries established at MOST and MOI, and capacity development and curricula and materials development support provided during July 2015–April 2016 to facilitate replication of CBMSC models to related fields</p> <p>Output 3: Evidence disseminated and replication models prepared</p> <p>3.1 M&E strategy developed and baseline study completed by September 2014, with interim (batch 1) assessment in January 2015, midterm assessment in June 2015, and endline M&E report in April 2016</p> <p>3.2 Materials developed and disseminated and broader capacities built by April 2016 to support replication of key elements demonstrated to be successful</p> <p>3.3 Midterm and final workshops in June 2015 and April 2016 to support multi-stakeholder dialogue and dissemination of findings and recommendations relevant to replication as well as broader policy formulation</p> <p>3.4 Indicative costing drafted by May 2015 and completed by December 2015 for models for CBMSC replication (via government and/or development partner-financed projects) to be included in the 2016–2020 sub-plan within the CESP</p>	<p>Japan Fund for Poverty Reduction: \$2,000,000</p> <table border="1" data-bbox="1105 342 1432 646"> <thead> <tr> <th data-bbox="1105 342 1432 373">Item</th> <th data-bbox="1105 342 1432 373">Amount (\$'000)</th> </tr> </thead> <tbody> <tr> <td data-bbox="1105 373 1432 405">1. Consultants</td> <td data-bbox="1105 373 1432 405">1,175.0</td> </tr> <tr> <td data-bbox="1105 405 1432 436">2. Equipment</td> <td data-bbox="1105 405 1432 436">470.0</td> </tr> <tr> <td data-bbox="1105 436 1432 468">3. Workshops</td> <td data-bbox="1105 436 1432 468">190.0</td> </tr> <tr> <td data-bbox="1105 468 1432 499">4. Surveys and Studies</td> <td data-bbox="1105 468 1432 499">25.0</td> </tr> <tr> <td data-bbox="1105 499 1432 531">5. Miscellaneous administration</td> <td data-bbox="1105 499 1432 531">20.0</td> </tr> <tr> <td data-bbox="1105 531 1432 562">6. Contingencies</td> <td data-bbox="1105 531 1432 562">120.0</td> </tr> </tbody> </table> <p>Note: The government will provide counterpart support in the form of counterpart staff, training venues and provisions for additional costs of fee-free CBMSC training, basic accommodation and food for disadvantaged trainees who require boarding, meeting venues and work space for consultants and ADB missions, administrative support, and other in-kind contributions.</p>	Item	Amount (\$'000)	1. Consultants	1,175.0	2. Equipment	470.0	3. Workshops	190.0	4. Surveys and Studies	25.0	5. Miscellaneous administration	20.0	6. Contingencies	120.0
Item	Amount (\$'000)														
1. Consultants	1,175.0														
2. Equipment	470.0														
3. Workshops	190.0														
4. Surveys and Studies	25.0														
5. Miscellaneous administration	20.0														
6. Contingencies	120.0														

ADB = Asian Development Bank; CBMSC = competency-based modular short course; CESP = costed education sector plan; CESR = comprehensive education sector review; IHLCS = Integrated Household Living Conditions Survey; M&E = monitoring and evaluation; MOI = Ministry of Industry; MOLESS = Ministry of Labor, Employment, and Social Security; MOST = Ministry of Science and Technology; NSSA = National Skills Standard Authority; TA = technical assistance; TVET = technical and vocational education and training.

^a For this indicator, defined as living in a household with income below the estimated poverty line, using IHLCS data.

^b Disadvantaged groups include those suffering from income-related and broader forms of poverty, including youth who have dropped out of formal education.

^c Capacity development programs include face-to-face training and other structured support as well as mentorship from consultants, etc.

^d Pilot tested CBMSCs will cover the following skill areas: (i) road construction and concrete technologies; (ii) cement shuttering; (iii) bar-bending (for concrete reinforcement); (iv) bricklaying; (v) MIG-MAG welding; (vi) arc welding; and (vii) maintenance and repair of farm equipment, motorcycles, and other common machinery.

^e Targets related to nontraditional skill areas refer to female participation in skill areas typically dominated by males in Myanmar. Of the seven targeted CBMSC skill areas, six (excluding bricklaying) are considered nontraditional.

Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount
Japan Fund for Poverty Reduction^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	989.0
ii. National consultants	66.0
b. International and local travel	115.0
c. Reports and communications	5.0
2. Equipment ^b	470.0
3. Policy forums, seminars, and other workshops	
a. Facilitators and other resource persons	65.0
b. Other workshop-related costs ^c	125.0
4. Surveys and studies ^d	25.0
5. Miscellaneous administration ^e	20.0
6. Contingencies	120.0
Total	2,000.0

Note: The technical assistance (TA) is estimated to cost \$2,500,000, of which contributions from the Japan Fund for Poverty Reduction (JFPR) are presented in the table above. The Government of Myanmar will provide counterpart support in the form of counterpart staff, training venues and provisions for additional costs of fee-free competency-based modular short course training, basic accommodation and food for disadvantaged trainees who require boarding, meeting venues and work space for consultants and ADB missions, administrative support, and other in-kind contributions. The value of government contribution is estimated to account for 20% of the total TA cost.

^a Administered by the Asian Development Bank.

^b Subject to refinement after TA approval, equipment requirements are summarized in the Indicative Equipment Summary (Supplementary Appendix). Among these, ADB will procure equipment kits for five training institutions to support short courses. Subject to prior ADB approval and in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time) and other ADB procedures and guidelines, the executing and/or implementing agencies are expected to procure (i) locally available hand and power tools; and (ii) basic information and communication technology equipment (e.g., computers, printers, and scanners) for use in the five training institutions and two resource libraries.

^c Includes venues, transport, and other costs for midterm and final workshops, as well as materials, supplies, and miscellaneous costs for training of trainers and short courses.

^d Includes transport, accommodation, and other non-salary expenses for counterpart staff for participation in field visits; other support for data collection and compilation; research assistants; etc.

^e Includes translation, printing and/or reproduction, report dissemination, etc.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The technical assistance (TA)—to be administered by the Asian Development Bank (ADB)—will mobilize the services of international and national experts to support capacity development, development of curriculum and other aspects of competency-based modular short courses (CBMSCs), and other agreed activities. To meet varied (and likely evolving) needs for international best practice and in-depth local knowledge, expert inputs will consist of (i) formal consultants, to be recruited as individuals by ADB in dialogue with the Ministry of Science and Technology (MOST) and Ministry of Industry (MOI); and (ii) resource persons needed to provide focused, short-term inputs (up to 10 working days maximum). Partnerships will also be sought with development partners and other organizations and institutions to support experience exchange and cross-fertilization.¹

2. The expected inputs from four international consultants and one national consultant needed to support TA implementation are detailed below. The consultants will be recruited by ADB as individuals in accordance with its Guidelines on the Use of Consultants (2013, as amended from time to time). MOST and/or MOI will provide suitable office arrangements for consultant use in Naypyitaw—where the consultants will be based while in Myanmar—as well as during periodic visits to participating training institutions.

A. International Consultants

3. **Skills development expert** (international, 16 person-months). The expert will act as overall team leader for the consultants, in addition to providing technical inputs. As team leader, his or her core tasks will include the following:

- (i) Act as consultant team focal point, maintaining close dialogue with MOST, MOI, and ADB throughout the TA, as well as broader dialogue, coordination, and experience sharing with other government agencies and development partners involved in technical and vocational education and training (TVET).
- (ii) Dialogue closely with ADB, MOST, and MOI to propose any refinements to approaches foreseen in the TA design as deemed necessary, based on a review and sound understanding of the country and subsector context; develop and propose to ADB and the implementing agencies detailed strategies for the TA, including preparation and implementation of the pilot test and strategies for subsequent dissemination and replication; develop a knowledge plan for the TA.
- (iii) Develop and periodically update detailed work plans for the consultant team; guide, supervise, and coordinate team member inputs, and take overall responsibility for the quality and timeliness of outputs.
- (iv) Propose to ADB, MOST, and MOI additional inputs (such as participating in workshops, preparing and presenting written inputs to module “writeshops” and other seminars, etc.) from short-term resource persons to be recruited by ADB and research assistants; explore potential partnerships and experience sharing opportunities with other organizations and institutions.²
- (v) Coordinate inputs from other consultants; support the executing and implementing agencies in the preparation and conduct of workshops and seminars, including midterm and final workshops, to support multi-stakeholder

¹ This may include linkages to support MOST by the Japan International Cooperation Agency and the United Nations Educational, Scientific and Cultural Organization; and support via German development cooperation through GIZ to MOI.

² Writeshops refer to workshops or other meetings aimed at developing materials such as training modules to be used in CBMSCs.

- dialogue and dissemination of findings and recommendations relevant to replication as well as broader policy formulation.
- (vi) Prepare an overall plan for developing resource libraries for MOST and MOI to support in post-TA replication of CBMSCs in related areas; work with the other experts to populate these resource libraries jointly.
 - (vii) Prepare concise quarterly progress reports as well as comprehensive midterm and final reports on TA implementation.
 - (viii) Support the executing agency, implementing agencies, and ADB in other aspects of TA management and implementation (including preparing proposals to ADB for activities, procedures, and documents for TA-funded procurements), ensuring consistency with ADB rules, procedures, and guidelines.
4. In terms of technical inputs, the expert will lead the following tasks, as well as others as may be reasonably requested by ADB, MOST, or MOI:
- (i) Undertake an institutional capacity assessment, and develop and implement capacity development strategies for key agencies, focusing on relevant units in MOST and MOI, while providing selective support to the National Skills Standard Authority (NSSA) and/or other key agencies, as well as government technical high schools and industrial training centers participating in the pilot test.³ These strategies will be multimodal (including formal and informal training, as well as ongoing mentoring) and multi-phased, spanning the duration of the TA (from conceptualization of CBMSCs for pilot testing, to pilot test implementation, and support for the replication of successful models to other related skill areas).
 - (ii) Support MOST and MOI in developing interim guidelines and an assessment framework to guide pilot testing of CBMSCs under output 2, and (later in the TA) MOST and MOI strategies, operational guidelines, and assessment frameworks for CBMSCs covering a broader array of competency areas; assist MOST and MOI in considering options for external accreditation.
 - (iii) Work closely with MOST, MOI, and participating government technical high schools and industrial training centers to develop strategies and approaches for local skill needs assessments and employer outreach, including the establishment of local technical sector committees; provide technical inputs to support skill needs assessment work, to ensure that CBMSCs effectively target local skill demands.
 - (iv) Support the implementing agencies and training institutions in developing and launching plans to promote equitable access and outcomes by gender and for disadvantaged groups. Take overall responsibility for ensuring that analysis, designs of various initiatives, and final recommendations take into account and are appropriate to gender and other socioeconomic dimensions.
 - (v) Provide technical input to formulating and implementing capacity development interventions, development of CBMSC curriculum and related resource materials, developing final lists and specifications for necessary equipment and materials for procurement, support for CBMSC delivery, quality control checks, and other tasks based on his or her expertise and a detailed division of labor across experts to be stipulated in the work plan to be agreed early in the TA and updated periodically.

³ This will include assessing needs for equipment, management and pedagogical capacity building, and other support to assist government technical high schools (which provide 2-year high school TVET programs) and industrial training centers (which provide advanced courses lasting at least 1 year) in introducing CBMSC approaches, which are new to Myanmar.

- (vi) Support participating training institutions in developing and implementing plans to promote equitable access and outcomes by gender and for disadvantaged groups. Interventions under these plans will include social marketing and advocacy to potential trainees and employers.
- (vii) Develop and oversee implementation of the TA's monitoring and evaluation (M&E) framework and its various elements (e.g., baseline and endline local employer surveys, trainee tracer study).
- (viii) Take a lead role in providing broader technical and policy-level guidance to MOST, MOI, and other agencies. Toward TA completion, incorporate pilot test experiences and broader analysis into support to MOST and MOI in conceptualizing and developing indicative costing for replicating CBMSC models, for inclusion in the costed education sector plan (CESP) for potential financing by the government and/or development partners.

5. The expert should possess a master's degree (or higher) in a relevant field and have at least 10 years of relevant experience spanning various aspects of the terms of reference above. This should include experience and demonstrated expertise in (i) leading and/or coordinating teams in international development projects, (ii) development and operationalization of similar short course training programs in countries with a similar socioeconomic context, (iii) building the capacity of training institutions and trainers to plan and implement applied skills training, and (iv) assessing and addressing gender aspects.

6. **Short course training experts.** The experts will take charge of (i) building and construction (11 person-months), (ii) welding (9 person-months); and (iii) small machinery repair (7 person-months). Coordinated by the team leader (expert on skills development), the three experts will provide technical inputs to support the development and delivery of one or more CBMSCs in his or her area of expertise, as well as other aspects of TA implementation.⁴ Subject to delineation of labor and specific tasks in the agreed work plan (developed at the start of the TA and updated as needed), each expert will carry out the following tasks, as well as others as may be reasonably requested by ADB, MOST, or MOI:

- (i) Guided by the team leader and in cooperation with the other consultants, dialogue closely with MOST, MOI, and ADB, as well as participating training institutions to develop approaches for the CBMSCs to be pilot tested, including the CBMSC(s) in his or her area of expertise.
- (ii) Contribute to the team-based development and delivery of capacity development strategies for MOST, MOI, and relevant agencies as well as participating training institutions. These will be multimodal (including formal and informal training, ongoing mentoring) and multi-phased, spanning the duration of the TA (from conceptualization of CBMSCs for pilot testing, to pilot test implementation, and support for replication of successful models to other related skill areas).
- (iii) Under output 2, take a lead in technical aspects related to the CBMSC(s) in the expert's skill area, including those related to (a) identification of core skill competencies targeted, and pedagogies for CBMSCs in his or her skill area, to ensure they target local skill demands; (b) development of detailed curricula, learning assessment frameworks, and related resource materials; (c) formulation and implementation of capacity development interventions, including training of

⁴ While the final division of labor will likely include some breakdown by type of tasks (e.g., training materials development), the first expert will principally be responsible for 4 CBMSCs on building and construction, with the second expert focused on 2 CBMSCs on welding, and the third expert focused on the CBMSC on maintenance and repair of small rural-use machinery.

- trainers and ongoing mentoring; (d) support to participating training institutions and trainers for CBMSC implementation (particularly at early stages of the pilot test) as well as quality control; and (e) review of CBMSC implementation (particularly following batch 1) and identification of refinements needed in technical content and/or pedagogical approaches.
- (iv) Provide support to the development and rollout of other CBMSCs under the TA-supported pilot test, based on the agreed division of labor, supporting cross-fertilization and consistency of approaches.
 - (v) Later in the TA, support the development of resource libraries to support MOST and MOI in post-TA replication of CBMSCs in related areas.
 - (vi) Based on the division of labor set out in the agreed work plan and coordinated by the team leader, support other crosscutting tasks noted above such as those related to local skill needs assessment and the employer outreach strategy, work to assess and address equity across gender and other dimensions, M&E framework development, and support for implementation. Develop final lists and specifications for necessary equipment and materials for procurement.
 - (vii) Propose to ADB, organize, and oversee necessary inputs from research assistants to support data collection, compilation, and translation of materials.

7. The experts should possess a master's degree (or higher) related to TVET instruction and/or program delivery, engineering and/or other relevant fields, and should have at least 7 years of relevant experience, including the development and operationalization of comparable short course training programs in countries with a similar socioeconomic context, as well as capacity development for trainers and training institutions to plan and implement applied skills training.

B. National Consultants

8. **Skills development specialist** (national, 22 person-months). The specialist will work closely with the international expert on skills development to provide overall support to TA implementation. Subject to delineation of labor and specific tasks in the agreed work plan (developed at the start of the TA and updated as needed), the specialist will carry out the following tasks, as well as others as may be reasonably requested by ADB, MOST, or MOI:

- (i) Support the team leader, MOST, and MOI in overall planning and management of TA interventions.
- (ii) Support the consultants and ADB in maintaining continuous and effective dialogue and coordination with MOST, MOI, and other agencies (e.g., NSSA); and take a lead role in coordination with individual training institutions throughout the TA's duration.
- (iii) Support the team leader in organizing and conducting crosscutting output 1 tasks noted above, including those related to agency- and institution-level assessments, and formulating and undertaking capacity development strategies and interventions for MOST, MOI, and other related agencies.
- (iv) Based on the division of labor set out in the agreed work plan and coordinated by the team leader, support output 2 tasks noted above such as those related to (a) local skill needs assessment (including close engagement with local technical sector committees, surveys, and other approaches to ensure that CBMSCs effectively target local skill demands); (b) formulation and implementation of capacity development interventions; (c) development of CBMSC curriculum and related resource materials; (d) formulation and launch of the employer outreach strategy; (e) work to assess and address equity across gender and other

- dimensions; and (f) preparations for procurement of necessary equipment and materials.
- (v) Work closely with the international short course training experts to support the development and delivery of CBMSCs. Carry out frequent visits to participating government technical high schools and industrial training centers to assess program quality continually, and provide mentoring and other support to trainers.
 - (vi) Under output 3, work closely with the other experts to develop the TA's M&E framework, and take a lead in on-the-ground implementation of M&E interventions specified in the M&E framework, mobilizing and coordinating inputs from research assistants as needed.
 - (vii) Support the consultant team, MOST, and MOI in promoting post-TA replication of pilot CBMSCs and those in other skill areas.
 - (viii) Provide additional coordination-related and technical inputs as needed to facilitate overall TA operations (e.g., providing or arranging translation of materials). In dialogue with the team leader, identify the need for research assistants, translators, etc. to support related tasks, and manage their inputs.

9. The specialist should have a master's degree (or higher) in a relevant field and at least 5 years of relevant experience, preferably including experience in (i) development and delivery of training programs in related skill areas, and (ii) working in projects supported by international agencies. He or she should also have strong English language capacity, including oral and written translation where needed.