



Technical Assistance Report

Project Number: 39293
Capacity Development Technical Assistance (CDTA)
December 2012

Democratic Socialist Republic of Sri Lanka: Human Capital Development Capacity and Implementation Support

CURRENCY EQUIVALENTS

(as of 15 October 2012)

Currency unit	–	Sri Lanka rupee (SLRs)
SLRe1.00	=	\$0.078
\$1.00	=	SLRs125.45

ABBREVIATIONS

ADB	–	Asian Development Bank
HCD	–	human capital development
NPD	–	National Planning Department
PFM	–	public financial management
TA	–	technical assistance
TVET	–	technical education and vocational training

TECHNICAL ASSISTANCE CLASSIFICATION

Type	–	Capacity development technical assistance (CDTA)
Targeting classification	–	General intervention
Sector (subsectors)	–	Education (upper secondary education, tertiary and higher education, technical education and vocational skills training)
Themes (subthemes)	–	Social development (human development), economic growth (widening access to markets and economic opportunities), capacity development (organizational development)
Location (impact)	–	National (high)

NOTE

In this report, "\$" refers to US dollars.

Vice-President	X. Zhao, Operations 1
Director General	J. Miranda, South Asia Department (SARD)
Director	S. Ra, Human and Social Development Division, SARD
Team leader	S. Shakil, Social Sector Specialist, SARD
Team members	G. Song, Senior Social Development Specialist, SARD D. Ablett, Social Sector Specialist, SARD
Peer reviewer	J. Sarvi, Advisor and concurrently Practice Leader (Education), Regional and Sustainable Development Department

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I. INTRODUCTION

1. Human capital development (HCD) is a critical priority for positioning Sri Lanka as a competitive economy and society based on knowledge and innovation. Sustainable growth is possible if based on strong education, skills development, and research. During country programming discussions in May–August 2012, and during special consultation missions for human development, the government asked the Asian Development Bank (ADB) to support a coordinated effort to improve the planning and implementation of various HCD programs in the long-term perspective. Accordingly, a proposed multitranche financing facility for the Human Capital Development Investment Program is being prepared to build human capital, through improved learning and employability of school-leavers and graduates, and strengthen research and innovation for productivity.

2. This \$1.5 million capacity development technical assistance (TA) for Human Capital Development Capacity and Implementation Support was included in the 2012 nonlending program for Sri Lanka.¹ The proposed TA aims to improve results-oriented planning based on medium-term expenditure frameworks and increase and rationalize investments in HCD in Sri Lanka. The government concurs with the TA impact, outcome, outputs, implementation arrangements, cost, financing arrangements, and terms of reference.² The design and monitoring framework is in Appendix 1.

II. ISSUES

3. Sri Lanka is on a trajectory in terms of HCD that is unique in South Asia. As a middle-income country emerging from a long conflict, it aims to become a competitive, knowledge-based, and innovative economy, as emphasized in its long-term national vision, *Mahinda Chintana*.³ The government recognizes that high-quality human capital is key to achieving this long-term vision. Sri Lanka has made commendable gains in basic education since the 1970s, having achieved 99% (effectively universal) primary net enrollment with gender parity. Sri Lanka's average school attainment of around 10 years is much higher than the South Asian average of 6 years, and Sri Lanka fares well on several global competitiveness indicators compared to its other South Asian counterparts.⁴

4. However, the quality of secondary education is a concern, as weak learning outcomes contribute to low rates of secondary school completion. While participation in senior secondary education has steadily improved, it is still only at 65%. This is largely attributable to low completion rates at grades 11 and 13 and low passing rates for the General Certificate of Education in ordinary and advanced levels, with only half of students passing the ordinary level examination and 60% passing the advanced level exam. At both levels, pass rates are significantly lower in the science, mathematics, and english subject streams than in the arts and commerce, reflecting poor performance in subjects that are essential for preparing Sri Lankan graduates for a knowledge-based economy.⁵

¹ ADB. 2012. *Country Operations Business Plan: Sri Lanka, 2012–2014*. Manila.

² The TA first appeared in the business opportunities sections of ADB's website on 22 November 2012.

³ Department of National Planning, Ministry of Finance and Planning. 2010. *Sri Lanka, The Emerging Wonder of Asia: Mahinda Chintana—Vision for the Future*. Colombo.

⁴ <http://reports.weforum.org/global-competitiveness-2011-2012/>

⁵ Government of Sri Lanka. Ministry of Education. *Sri Lanka Education Information 2010*. http://www.moe.gov.lk/web/images/stories/statistic/sri_lanka_education_information_2010.pdf

5. This situation is further exacerbated by limited opportunity for tertiary education and weak transitions and pathways from secondary education to skills training. In 2011, only 142,000 students, or 41% of the 345,000 students enrolled in the school system, successfully completed their advanced level exams and so qualified to compete for university admission.⁶ Restricted capacity in tertiary education means only 22,000, or 6% of this cohort, was able to enter university in Sri Lanka, and a further 8,500, or 2%, went to study overseas. This left 314,500 students who had acquired basic education up to high school and were available to enroll in skills programs or enter the job market. With capacity in the skills training system currently limited to only 200,000,⁷ many young people are entering the job market without substantial employment skills. In sum, gains in basic education are not translating into comparable outcomes at the postsecondary level, and the skills-development system does not address the needs of the growing economy. The demand for skills in growth sectors is increasing, and employers are beginning to experience significant shortages. The current technical education and vocational training (TVET) system does not respond quickly to labor market challenges, and the supply and demand are mismatched.

6. To address graduates and school-leavers being insufficiently prepared to enter the workforce, and to build on gains in basic education, Sri Lanka aims to ensure equitable access to high-quality and relevant secondary education and demand-driven skills training. It emphasizes science and technology as key to socioeconomic transformation, which starts with a solid foundation in science education. Guided by this long-term vision, the Government of Sri Lanka has developed several policy frameworks and strategies to address the HCD challenge, including (i) its National Human Resources and Employment Policy;⁸ (ii) its Education Sector Development Framework and Program, 2012–2016;⁹ (iii) A Road Map for Technical and Vocational Education and Training;¹⁰ and (iv) its Science, Technology, and Innovation Strategy for Sri Lanka, 2011–2015.¹¹

7. Implementing these policies and strategies requires coordinated effort and solid technical capacity to effectively plan, design, and implement a wide range of initiatives and government programs for secondary and postsecondary education, including skills training. While government agencies have led efforts to prepare medium-term expenditure program frameworks in school education and vocational skills training, a much stronger effort to link sectoral programs with national planning is necessary to ensure that individual sector results contribute to the outcome of a stronger workforce that supports national economic goals. Further, public financial management (PFM) and procurement capacities and monitoring systems need to be strengthened to improve program efficiency. A focus on quality, effective implementation, and results; expanded private sector participation to ensure relevance; and synergy among sectors will drive a paradigm shift in HCD. This paradigm shift will be stimulated by a coordinated effort that enables sector-specific achievements to be linked more closely to the growth agenda and help transform Sri Lanka into a competitive, knowledge-based economy.

⁶ Government of Sri Lanka, Ministry of Education. 2011. (Figures from a pre-published 2011 data).

⁷ Ministry of Finance and Planning, National Planning Department. 2012. (Figure from a working paper on skills).

⁸ Government of Sri Lanka, Secretariat for Senior Ministers. 2012. *The National Human Resources and Employment Policy for Sri Lanka*. Colombo.

⁹ Government of Sri Lanka, Ministry of Education. 2011.

¹⁰ Government of Sri Lanka, Ministry of Youth Affairs and Skills Development. 2012. (Draft to be endorsed and approved by Government of Sri Lanka).

¹¹ Government of Sri Lanka, Ministry of Technology and Research. 2010. *Science, Technology, and Innovation Strategy for Sri Lanka, 2011-2015*. Colombo.

8. In response to the government, ADB will take a longer-term approach to supporting HCD. It will make secondary education and skills training more competitive and responsive to the needs of industry and economy, with a greater focus on research and education to create a knowledge-based economy. The government has a strong vision but requires ADB to add value in terms of innovative approaches, strategic planning, and implementation support in selected areas. As achieving HCD outcomes requires long-term commitment, ADB will adopt a phased, sector-wide approach over a long period to finance the government's programs in education, skills development, and research and innovation. The TA will support and augment capacities to better plan, implement and monitor these programs in the human development sectors. The TA will also draw upon the findings of recent analytical work conducted in the area of higher education and TVET,¹² and from lessons of past and ongoing project experience.

9. While long-term multi-sectoral financing of an HCD Investment Program will enable ADB to support and strengthen policy frameworks founded on sound strategy and backed by government financing, it will challenge the capacity of various implementing agencies to develop, plan, implement, and systemically monitor their medium-term sector expenditure frameworks and achievement of results, as well as strain PFM and procurement capacity. The TA will strengthen capacity to support and work closely with the line ministries' sector programs. It will align with the HCD Investment Program and support the country's HCD needs in secondary and postsecondary education, including TVET, and toward system innovation, promoting growth that is socially and gender inclusive. The TA will respond to the government's request that ADB support be longer term and more flexible, with lower transaction costs. It will improve efficiency by reducing staff resources devoted in processing and administration and by sharing consultant inputs across subsectors.

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

10. The impact will be enhanced human capital in Sri Lanka toward a productive knowledge-based economy.

11. The outcome will be enhanced government capacity to plan, coordinate, and implement results-oriented human capital development, with greater synergies across subsectors. The TA will help the National Planning Department and other government agencies to ensure that ensuing sector plans are technically sound, results-oriented, and based on stakeholder consensus; have appropriate implementation arrangements, including plans for sustainable long-term financing; and have built-in plans for institutional strengthening and capacity development.

12. The outputs are as follows:

- (i) **Improved policy and technical capacity for planning human capital development sector programs.** This output aims to provide substantive policy advice on such technical areas of secondary education reform as curriculum review, teacher training, and assessment reform; the TVET areas of financing skills training including an expanded role for the private sector, skills for disadvantaged groups, and overseas labor markets; and technologies relevant to priority industries, industry partnerships for research and development, and

¹² ADB. 2006. *Technical Assistance for the Development Partnership Program for South Asia*. Manila.

establishing science parks. It will also build technical capacity to implement policy on education, skills training, and research.

- (ii) **Strengthened institutional and fiduciary capacity for planning, coordinating, and implementing human capital development sector programs.** The TA will help implementing agencies prepare and implement medium-term sector plans and sector-wide approaches; improve systems and capacity in PFM, procurement, monitoring, and evaluation; and strengthen systems for implementing and monitoring results.
- (iii) **Research on human capital development programs to guide better design.** The TA will provide resources to identify new HCD initiatives; conduct action-oriented research; and mount small pilot projects for replication through larger investments in new and ongoing projects, feasibility studies, and due diligence.

13. These outputs will support the efficient implementation of programs, including those supported by ADB loans; and the design of new projects and programs that align with the human capital development objectives and strategies of Sri Lanka.

B. Methodology and Key Activities

14. The TA will improve the design, preparation, and quality of HCD programs through analyses of salary reform, expanded public–private partnerships (PPP), expenditures, and how to improve the policy and technical capacity of line ministries. It will strengthen capacity for planning and implementation, focusing on fiduciary and monitoring aspects. It will conduct (i) fiduciary assessments of HCD subsectors, (ii) institutional assessments of line ministries, (iii) quarterly monitoring of sector results indicators, (iv) two third-party validation reports, (v) hands-on workshops and field interviews that are socially and gender inclusive, (vi) training on sector plans and expenditure management; (vii) in-depth sector assessments and research; (viii) targeted studies in areas linked to improving and expanding education and skills training; and (ix) feasibility studies and research on new program development for science and innovation.

C. Cost and Financing

15. The TA is estimated to cost \$1.7 million, of which \$1.5 million will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-other sources: \$1 million; TASF-IV: \$500,000). The government will provide in-kind support such as counterpart staff and office space. The cost estimates and financing plan are in Appendix 2.

D. Implementation Arrangements

16. The TA executing agency is the National Planning Department (NPD) under the Ministry of Finance and Planning. The implementing agencies are the Ministry of Education for secondary education, Ministry of Youth Affairs and Skills Development for skills training, Ministry for Research and Technology, and any other designated agency. A TA steering committee comprised of secretaries of the implementing agencies will guide and direct the TA, conducting regular consultative meetings with all stakeholder agencies. Three working groups will help NPD coordinate TA activities by developing annual and quarterly work plans, monitoring implementation progress, and guiding consultant teams for specific subsectors. The steering committee will meet two times a year. The working groups will meet quarterly and on request by any member or ADB. The working groups will be assisted by a team of consultants. The joint secretary of NPD will lead a secretariat with the assistance of consultants. NPD has dedicated

staff for overseeing various subsectors, who will be supported by the human development economist and team leader engaged under the TA.

17. The TA will be conducted over 24 months from the fielding of consultants, which is anticipated in January 2013, placing completion in December 2014. The TA will engage consultants to provide 130 person-months of inputs: 22 person-months of international consultancy and 80 person-months of national consultancy to be engaged through firms, and 28 person-months of pool consultancy (10 international and 18 national). The terms of reference will reflect the requirements of the executing and implementing agencies, subject to ADB review and agreement. ADB will engage consulting firms using quality- and cost-based selection with a quality-to-cost ratio of 80:20 and simplified technical proposals. It will engage individual experts by single source selection in accordance with ADB's Guidelines on the Use of Consultants (2010, as amended from time to time). All TA-financed goods will be procured in line with ADB's Procurement Guidelines (2010, as amended from time to time). Disbursements under the TA will accord with the *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). Indicative consultant requirements and terms of reference are in Appendix 3.¹³

18. The expected outputs of the TA will be disseminated twice a year at a consultative meeting called by the Ministry of Finance and Planning and will be linked closely to the planning and budget preparation cycle. The findings of specific studies, assessments, and reports will be shared at appropriate forums and disseminated widely to subsector staff in line ministries and implementing agencies. The TA will guide country and sector dialogue, and findings will be shared with the country economic and operational team. A final workshop will be conducted at the end of TA implementation to assess lessons, findings, and recommendations.

IV. THE PRESIDENT'S DECISION

19. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$1,500,000 on a grant basis to the Government of Sri Lanka for Human Capital Development Capacity and Implementation Support, and hereby reports this action to the Board.

¹³ The terms of reference in this report will be revised in consultation with the executing and implementing agencies at the inception stage, including the requirement for packaging contracts. The revised terms of reference and contract packaging will be discussed later and agreed with ADB's Central Operations Services Office.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p>Impact Enhanced human capital in Sri Lanka for a productive knowledge-based economy</p>	<p>By 2017 (for all indicators): 10% increase in expenditures for the HCD sectors education, postsecondary education, and skills training from the 2012 baseline^a</p> <p>10% of secondary school graduates, with gender equity, enrolling in higher education from 6% in 2011</p> <p>10% increase in people completing skills training, from baseline 200,000 in 2011</p> <p>Reduced unemployment rates for youths to 15% from 20% in 2011</p> <p>10% increase in patents in priority sectors (baseline to be determined by 2013)</p>	<p>Annual budget, Ministry of Finance and Planning</p> <p>Annual school census, MOE</p> <p>Labor force survey, Government of Sri Lanka; tracer and impact studies</p> <p>Labor force survey, Government of Sri Lanka</p> <p>Ministry of Research and Technology reports</p>	<p>Assumptions National commitment to finance HCD</p> <p>Sustained economic growth to create job opportunities for youths entering the workforce</p>
<p>Outcome Enhanced government capacity for planning, coordinating, and implementing results-oriented HCD with greater synergies across subsectors</p>	<p>By 2014, revised 5-year rolling MTEF for education in place</p> <p>By 2014, 5-year rolling MTEF incorporating results orientation in place for skills development</p> <p>By 2014, an MTEF for higher education and research approved by MOF</p>	<p>Ministry of Finance MTEF for education</p> <p>Ministry of Finance MTEF for skills development</p> <p>Ministry of Finance MTEF for higher education and research</p>	<p>Assumption Sound fiscal management to support the implementation of the MTEF for each subsector</p> <p>Risk Uneven pace of implementation and capacity in various subsector ministries</p>
<p>Outputs 1. Improved policy and technical capacity for planning HCD programs</p>	<p>By 2014 (for all indicators): Medium-term sector frameworks with gender considerations formulated for general education, TVET, and higher education and research</p> <p>At least 3 policy studies completed in priority areas</p> <p>Strategy paper on options for structuring PPPs developed</p> <p>Management information systems for ministries of education and skills development strengthened with sex-disaggregated information</p>	<p>Ministry of Finance and Planning; MOE, MYASD, and MOTR budgets and planning documents</p> <p>Consultants' policy research reports</p> <p>Consultants' reports; line ministries' strategy documents</p> <p>Consultants' management information system reports</p>	<p>Assumptions Line and subsector ministries and agencies demonstrating ownership in the process of coordinating their plans under a national framework</p> <p>The government developing a strong monitoring and reporting system that ensures implementing agencies report success in achieving</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
2. Strengthened institutional and fiduciary capacity for planning, coordinating, and implementing HCD sector programs	<p>By 2014 (for all indicators): Fiduciary management assessment of implementing agencies completed</p> <p>Gender-sensitive institutional strengthening plans put in place</p> <p>At least 150 male and female staff in the education and skills-training departments of each province, totaling 1,350, trained in financial management and procurement</p> <p>Disbursement-linked indicator reports and verification completed twice a year</p> <p>Two third-party validation reports on sample of disbursement-linked indicators completed, one in the 3rd quarter of 2013 for education, and one in the 2nd quarter of 2014</p> <p>At least 30 male and female ministry officials trained in sector planning, expenditure management, and fiduciary aspects</p>	<p>Consultants' report on country fiduciary capacity</p> <p>Line ministry, National Planning Department, and other committee annual plans and budgets</p> <p>Consultant and NPD quarterly progress and training reports</p> <p>Specific subsector and program reports for tranche reporting; line ministries; ADB</p> <p>Consultant validation reports</p> <p>Consultant and NPD quarterly progress reports and training reports</p>	government policy objectives
3. Research on HCD programs to guide better design conducted	<p>Appropriate, gender and socially responsive sector analyses conducted and annually embedded in sector plans</p> <p>At least 3 sector-specific studies on program performance and future project opportunities completed</p> <p>2 study tours with 30 male and female participants completed, one to review industry skill levies experience, and the other to review "building as a learning aid" models in India</p> <p>2 gender-disaggregated surveys completed in priority industry sectors to strengthen skills training and research for innovation</p> <p>At least 3 feasibility reports conducted for specific subsector programs</p>	<p>Line ministry sector plans</p> <p>Consultants' sector-specific reports</p> <p>NPD summary report on study tours</p> <p>Project surveys on industry sectors</p> <p>Feasibility reports</p>	

Activities with Milestones	Inputs														
1. Improved policy and technical capacity for planning HCD programs	ADB: \$1.5 million														
1.1. Review of medium-term sector expenditures for the line ministries MOE, MYASD, MOTR, and MOHE, as relevant (6-monthly, June 2013, December 2013, June 2014, in line with budget preparation) and provision of recommendations	<table border="1"> <thead> <tr> <th data-bbox="1138 254 1279 306">Item</th> <th data-bbox="1349 254 1455 306">Amount (\$'000)</th> </tr> </thead> <tbody> <tr> <td data-bbox="1138 306 1279 338">Consultants</td> <td data-bbox="1349 306 1455 338">1,230</td> </tr> <tr> <td data-bbox="1138 338 1279 369">Equipment</td> <td data-bbox="1349 338 1455 369">8</td> </tr> <tr> <td data-bbox="1138 369 1279 478">Workshops, training, seminars, and conferences</td> <td data-bbox="1349 369 1455 478">90</td> </tr> <tr> <td data-bbox="1138 478 1279 531">Surveys and field studies</td> <td data-bbox="1349 478 1455 531">85</td> </tr> <tr> <td data-bbox="1138 531 1279 640">Miscellaneous administration and support costs</td> <td data-bbox="1349 531 1455 640">7</td> </tr> <tr> <td data-bbox="1138 640 1279 672">Contingencies</td> <td data-bbox="1349 640 1455 672">80</td> </tr> </tbody> </table>	Item	Amount (\$'000)	Consultants	1,230	Equipment	8	Workshops, training, seminars, and conferences	90	Surveys and field studies	85	Miscellaneous administration and support costs	7	Contingencies	80
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Contingencies	80														
1.2. Analysis of incentives and pay structures toward preparing a report recommending reform of incentives for teachers, trainers, and researchers and of career structure (by July 2013)	The government will provide counterpart support in the form of office space, staff time, basic secretarial assistance, arranging logistics for workshops and meetings, and other in-kind contributions.														
1.3 Strategy paper for enhancing PPPs (draft discussed during June–August 2013, finalized by October 2013, and reviewed by ministries and implementation supported during 2013 and 2014)															
1.4 Review of existing management information systems and recommendations for strengthening them (January–March 2013, with implementation during May 2013–June 2014)															
1.5 Review of government policies and framework for innovation and research conducted and shared with ministries and agencies (May 2013)															
2. Strengthened institutional and fiduciary capacity for planning, coordinating, and implementing HCD sector programs															
2.1. Fiduciary assessment conducted for HCD subsectors and report outlining recommendations for capacity building and action plan prepared and disseminated at national workshop including provincial authorities (by June 2014)															
2.2. Institutional assessments of line ministries conducted and updated (initial assessments prepared by March 2013 and updated annually)															
2.3 Quarterly monitoring of disbursement-linked indicators conducted and reported twice a year (based on financing facility tranche schedules)															
2.4 Sample prepared to validate results and disbursement-linked indicators; survey conducted (in October 2013 and June 2014)															
2.5 Hands-on workshops and field reviews with social and gender-inclusive approach and training (April 2013–December 2014)															
2.6 Training on sector plans and expenditure management (March 2013–December 2014)															
2.7 Pre- and post-tests conducted for participants of all training															
3. Research on HCD programs to guide better design conducted															
3.1. Sector analyses and assessments for education, skills development, and research and technology sectors (periodic as needed)															
3.2. Sector-specific studies (periodic as needed) to update National Skills Development Strategy (annually) and on industry-based skills financing (by October 2013); overseas labor market study (October 2013); gender impact of training (June 2014); and review of examination and curriculum (April 2013–October 2013)															
3.3 Questionnaires prepared and pre-tested and surveys conducted in priority industry sectors for promoting the science and research strategy (January–June 2013)															
3.4 Identify institutions for study visit (June 2013)															
3.5 Topics of feasibility reports selected and required assessments prepared for selected subsector programs (by September 2014)															

ADB = Asian Development Bank, HCD = Human Capital Development, MOE = Ministry of Education, MOFP = Ministry of Finance and Planning, MOHE = Ministry of Higher Education, MOTR = Ministry of Technology and Research, MTEF = medium-term expenditure framework, MYASD = Ministry of Youth Affairs and Skills Development, NPD = Department of National Planning, PPP = public–private partnership, TA = technical assistance, TVET = technical and vocational education and training.

^a The baseline will be provided by NPD after government budget finalization in December 2012 and will be included in the TA design and monitoring framework during the inception mission.

Source: ADB.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount
Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants (22 person-months)	360
ii. National consultants (80 person-months)	500
iii. Pool (28 person-months) ^b	250
b. International and local travel	110
c. Reports and communications	10
2. Equipment ^c	8
3. Workshops, training, seminars, and conferences ^d	90
4. Surveys and field studies	85
5. Miscellaneous administration and support costs	7
6. Contingencies	80
Total	1,500

Note: The technical assistance (TA) is estimated to cost \$1.7 million, of which contributions from the Asian Development Bank are presented in the table above. The government will provide counterpart support in the form of office space, staff time, basic secretarial assistance, logistics for workshops and meetings, and other in-kind contributions. The value of government contribution is estimated to account for 11.76% of the total TA cost.

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-other sources: \$1 million; TASF-IV: \$500,000).

^b Including international and national consultants.

^c Equipment will be handed over to the implementing agencies at the end of the project.

^d Including resource persons as needed.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The technical assistance (TA) will be anchored in the efforts of the National Planning Department (NPD) to strengthen policy and planning for human capital development (HCD) sectors and target resources to strengthen implementation and monitoring capacity in the Ministry of Education (MOE), the Ministry of Youth Affairs and Skills Development (MYASD), the Ministry of Technology and Research (MOTR), and related agencies. Consultants will work closely with the NPD to strengthen coordination and outreach with line ministries and work with them on governance, fiduciary aspects, and public–private partnership frameworks. The multisectoral scope of work makes effective implementation more likely if undertaken by a combination of firms and individuals: (i) a firm focused on crosscutting services on policy, fiduciary, and management information systems, as well as technical and implementation support for education and skills development; (ii) a firm that specializes in science and technology; (iii) individual consultants for specialized areas such as information and communication technology for blended learning; and (iv) other technical aspects to be identified based on the evolving needs and emerging priorities of the implementing agencies and their sector programs.

2. All team members and experts will report to the team leader. A detailed work plan for implementing the TA will be prepared during the inception mission, allowing detailed terms of reference, procurement packages, and deliverables to be reviewed and confirmed.

A. Consulting Firms

1. Human Development Crosscutting Aspects

3. **Senior human development economist and team leader** (national, 18 person-months). The consultant will provide leadership and coordination for multisector policy, planning and coordination, and research and development activities to strengthen HCD programs and planning in Sri Lanka. The consultant will undertake economic analysis for HCD and provide input to support the national planning cycle and sector plans, as well as coordinate the updating of sector strategies. The consultant will preferably have at least 10 years' experience in public sector planning and economic analysis and a master's degree in economics or a related field. The consultant will maintain a national network of resource persons from the public and private sectors that can participate in advisory and capacity-building efforts and create linkages with national, regional, and international research and training institutions. The consultant will be responsible for designing and coordinating third-party validation to verify the achievement of disbursement-linked indicators in ADB-financed sector operations. The consultant will prepare quarterly progress reports for the TA and coordinate the dissemination of TA outputs.

4. **Senior advisor and policy and planning specialist** (international, 4 person-months). The specialist will advise on policy to the team and the government on medium-term expenditure frameworks and develop the strategy of HCD programs as part of a national framework. With a master's degree in a relevant field, the specialist will preferably have at least 15 years' experience in public management, having worked with ministries of planning and finance to plan medium-term expenditure, and be familiar with the fiscal dimensions of HCD. The specialist will (i) strengthen the annual planning process and line ministries' ownership of it through regular consultations, (ii) analyze the fiscal framework and establishing a framework to monitor HCD expenditures, (iii) guide the updating of the national skills strategy and other sector plans, (iv) guide the development of terms of reference for various studies and policy research under the TA, and (v) advise on sector analysis and studies to be carried out by the TA.

5. **Public sector pay reform specialist** (international, 2 person-months). The specialist will review public service rules and assess constraints on staff recruitment and retention and on HCD. The specialist will preferably have a master's degree in law or public administration, 12–15 years of experience with civil service systems in South Asia and other regions, and the knowledge to ensure that international best practice is applied by Sri Lanka's public sector. The specialist will (i) undertake a comprehensive review of regulations and service rules relating to staff in education; (ii) engage key officials at various levels to discuss pay reform and staff development; (iii) prepare a report with recommendations for strengthening the structure of incentives and career development for public sector teachers, trainers, and researchers.

6. **Public financial management specialist** (international, 2 person-months). The specialist will undertake and update risk-based assessment of public financial management (PFM) capacity in HCD sectors and identify areas for capacity building. The specialist will preferably have 12–15 years' experience in public sector financial management in several countries, with a professional degree in the area of PFM, audit, or a related field. The specialist will have knowledge and experience of procurement arrangements, including diagnostics. Responsibilities include developing a capacity-building program and action plan for specific subsectors, designing in consultation with national specialists workshops in provinces and districts, and preparing 6-monthly progress reports.

7. **Public procurement specialist** (international, 2 person-months). The specialist will review procurement processes and systems; assess the procurement capacity of the executing and implementing agencies; prepare a strategy for streamlining procurement of works and services, including more efficient procurement packaging; and provide a guiding framework for the national financial management and procurement specialists. The specialist will help line ministries to develop procurement reform plans to reduce transactional costs and improve the quality and timeliness of service and goods procurement. The specialist will preferably have 12 years' experience in public procurement, preferably in South Asia, and at least a master's degree. The specialist will work closely with the PFM specialist and national consultants to determine the capacity-building needs of staff.

8. **Public financial management and procurement specialists** (national, 18 person-months). The specialists will support line ministries in planning capacity building in financial management; help design training programs; conduct national, provincial, and district staff workshops. The specialists will support the line ministries' implementation of procurement reform plans and strengthen procurement capacity. They will be PFM specialists with recognized and current professional qualification in accounting, ideally combined with auditing experience, 8 years' experience with at least one of the ministries, and familiarity with PFM systems in Sri Lanka.

9. **Public–private partnership financing specialist** (international, 2 person-months). The specialist will advise line ministries in implementing and structuring PPP in education, skills training, and science and technology. The expert will preferably have 12–15 years' experience in PPP in social sectors, including structuring and fund management to support private participation in service delivery. The specialist will review existing PPPs in education, skills development, and post-secondary research and tertiary sectors, as well as prepare advisory notes to guide the further improvement of the environment for PPP, with concrete recommendations for line ministries' structuring and financing of PPPs. The specialist will assess ways to strengthen industry participation through the use of skill levies and/or taxation reform and other cost-sharing systems to increase industry ownership and participation.

10. **Management information systems and monitoring specialists** (national, 12 person-months). The specialists will review ministries' existing monitoring and reporting systems and design improvements to streamline them and enable governments to better track and report results in a timely manner. They will work closely with the team leader to design and oversee the third-party validation of sector results and disbursement-linked indicators. They will strengthen quarterly results monitoring and reporting in line ministries. They will preferably have at least 8 years' experience working with education management information systems and a professional degree in management systems.

2. Basic and Secondary Education Sector (MOE)

11. The Education Sector Development Framework and Program, 2012–2016¹ is the education strategy document reflecting the vision of the government “to enable future Sri Lankan citizens with knowledge, attitudes, skills, and values to fulfill the requirements of a modern national and global knowledge economy.” ADB provides financing to the Education Sector Development Framework and Program, but other needs are focused support to strengthen the medium-term expenditure framework and its implementation and technical advice on emerging areas such as examination reform and transforming education into blended learning with greater use of information and communication technology.

12. **Results monitoring specialist** (national, 12 person-months). The specialist will support implementation and monitoring to ensure that sector results and disbursement-linked indicators are on track and regularly reported. The specialist will be a core member of the MOE planning and monitoring team and provide support during quarterly progress reviews and annual planning. The specialist is expected to have at least 5 years' experience in education and, preferably, a bachelor's degree in social sciences.

13. **Education quality curriculum and examination specialist** (international, 2 person-months). The specialist will review the national examination system and curriculum to strengthen the professional and vocational subject stream in secondary schools. The specialist will preferably have at least 15 years' experience with national examination systems and in curriculum development and reform, as well as a master's degree in education or a related field. Working closely with MOE and MYASD, the specialist will organize a study tour for policy makers and technical specialists to review models of technical and vocational education in secondary schools and produce a report providing concrete recommendations for strengthening the curriculum.

3. Technical Education and Training (MYASD)

14. ADB is currently working with the government to prepare a long-term program of assistance to strengthen TVET, but some immediate priorities are proposed that would help the government orient the skills-training system toward achieving policy objectives. Critical areas that need strengthening are (i) annual and medium-term planning and frameworks and (ii) implementation and monitoring results indicators in TVET.

15. **Results monitoring specialist** (national, 12 person-months). The specialist will support monitoring and implementation to ensure that sector results and disbursement-linked indicators are on track and regularly reported. The specialist will be a core member of MYASD's planning

¹ Government of Sri Lanka, Ministry of Education, 2011.

and monitoring team and provide support during quarterly progress reviews and annual planning. The specialist will have at least 5 years' experience in service delivery and, preferably, with a bachelor's degree in social sciences.

16. **Sector and expenditure planning specialist** (national, 4 person-months). The specialist will guide MYASD to prepare, update, and review the medium-term expenditure framework on annual and rolling bases. The specialist will have at least 8 years' experience in public expenditure planning, preferably with a master's degree in economics or a related field.

17. **Gender monitoring specialist** (national, 4 person-months). The specialist will track the impact and results of training on women, and ensure gender-aware monitoring. The specialist will preferably have a minimum of 10 years' experience and a master's degree in social sciences or other related field.

4. Science and Technology (MOTR and Other Related Agencies as Relevant)

18. Sri Lanka faces several challenges in realizing its potential to harness science and technology to transform itself into a more innovative, knowledge-based economy: (i) limited and fragmented investment in R&D, at only 0.13% of gross domestic product; (ii) weak research capacity, with only 190 scientists and researchers per million of population; and (iii) an economic structure heavily reliant on light industry, as 63% of exports are garments, foods, and beverages, and the export of commodities such as tea and rubber. Developing innovation has been on the national agenda in many developed countries, which invest tremendous public and private resources in it. A system of innovation requires well-coordinated and planned interventions in multiple areas including HCD through education and skills training, R&D, industrial development, and financing. As a developing country, Sri Lanka needs to develop its own model by benchmarking best practices and lessons learned from successful countries in light of resource potential.

19. The TA outputs will (i) review policies and the regulatory environment for science, technology, and innovation (STI); (ii) review the government's medium-term expenditure plan across STI initiatives for strategic overview; (iii) review and update HCD plans in STI; (iv) identify priority industries or sectors to support under national strategy for STI; (v) identify existing and new programs to enhance the strategy for promoting innovation through research, including through incubation centers, common R&D facilities, and various R&D financing options including science park initiatives; (vi) design interventions that can be supported by ADB; and (vii) conduct a feasibility study and the assessments required for ADB financing.

20. **Science and technology policy expert** (international, 3 person-months). The expert will help the government prepare a long-term STI roadmap based on existing policy frameworks and identify areas for ADB intervention. The expert will advise on areas needing review in the existing policy and strategic frameworks and help establish selection criteria for priority industries and sectors to demonstrate models for a national innovation system. The expert will help the government define the roles of the agencies and institutions involved and facilitate dialogue among stakeholders by conducting assessments of key industries or sectors in terms of current competitiveness in global market and future perspectives. The expert will have a minimum of 15 years' experience in science and innovation and an advanced degree in research and policy combined with general science or a relevant field.

21. **Research and innovation expert** (international, 2 person-months). The expert will provide technical inputs to enhance Sri Lanka's national innovation and research system in

science and technology; assess existing and proposed programs to promote innovation in publicly financed research institutions, business incubation, technology transfers and commercialization, PPP for R&D, and competitive research funds; and recommend how to strengthen effectiveness by analyzing successful models around the world with special attention to the enabling environment for success and feasibility in Sri Lanka. The expert will have a minimum of 10 years' experience in R&D initiatives; be familiar with models from around the world; and have an advanced degree in science, research, or a related field.

22. **Science, technology, and innovation park planning specialist** (international, 2 person-months). The specialist will help the government prepare (i) a needs analysis; (ii) the functional specifications, infrastructure needs, and business model for an STI park; (iii) organizational arrangements for STI park development and management, including corporate governance structure, the roles and responsibilities of different parties, and human resource requirements; and (iv) recommendations on procurement packages.

23. **Science, technology, and innovation legal expert** (international, 1 person-month). The expert will assist the government in preparing the necessary legal and regulatory framework for establishing a science park for business incubation, technology transfer and commercialization, and business development services. Working closely with the other consultants, including the PPP, procurement, and public finance specialists, the legal expert will advise on risk sharing between the government and any private entity involved in the STI park and other collaboration utilizing the STI park services and facilities.

B. Individual Consultants

24. **Education sector pool of consultants** (international, 4 person-months; national, 4 person-months). The pool of consultants will handle activities relating to capacity development; policy and technical advice; and monitoring for quality, access, and governance in education sector, to be based on the evolving needs and priorities of the Education Sector Development Framework and Program. One area is economic analysis and policy assessment to transform the education system and strengthen the use of information and communication technology in learning. Detailed terms of reference will be developed at TA inception.

25. **Skill training pool of consultants** (national, 4 person-months). The pool of consultants will undertake sector results monitoring and capacity development and policy advisory work as needed for the skills development program. Specific areas will be identified at the inception stage of the TA, and detailed terms of reference will be developed with the government.

26. **Science and technology pool of consultants** (international, 6 person-months; national, 10 person-months). A pool of science and technology consultants will be recruited to meet the evolving needs of the government and stakeholders following the initial TA outputs from the firm experts. Detailed terms of reference will be developed in consultation with the implementing agencies. Consultants will be required to provide (i) inputs for specific industry and sector assessments, (ii) recommendations for project design regarding science and technology research and innovation, and (iii) due diligence for a selected program for STI.²

² The assessments and procurement plan will draw on consultants engaged for crosscutting aspects. Economic and financial analysis will draw on inputs from the economist and PFM specialist. Environment and social due diligence will be conducted using pool of consultants, for which terms of reference will be developed later.