

PROJECT PREPARATORY TECHNICAL ASSISTANCE

A. Introduction

1. ADB will provide project preparatory technical assistance (PPTA) in the amount of \$1,450,000 to prepare the project. The PPTA will prepare a project design and detailed costings in line with government policy and strategies and Asian Development Bank (ADB) requirements. The design will include a competitive research fund, a pilot student loan scheme an assessment of the regulatory framework for higher education and a feasibility study of the use of PPPs to deliver the campus at Savannakhet University. It will also identify and undertake site preparation at the new campus of Savannakhet University, in order to speed up project implementation.

B. Justification

2. Continued modernization, the shift to a more knowledge- and technology-based economy, and increasing economic integration are placing increased pressure on the government of the Lao People's Democratic Republic (Lao PDR) to improve the performance of its higher education sector. The country has made considerable progress in lifting access to tertiary education, albeit from a very small base. However, poor quality and relevance remain significant issues for the Lao PDR higher education sector. A 2011 analysis identified an increasing lack of educated and skilled human resources as a critical constraint to inclusive growth in Lao PDR's transforming economy and a constraint private sector growth and economic diversification.¹ The proposed second strengthening higher education project (the project) aims to support the government of Lao PDR by providing assistance to enhance quality and relevance of higher education, upgrade the academic and research capacity of the higher education system, and deliver a new campus at Savannakhet University.²

3. A PPTA is required in order to undertake technical work on the design of the project, including design of the pilot student loan scheme, the involvement of private higher education institutions (HEIs), and architectural and preparatory work on the new campus at Savannakhet University. Given the range of interventions proposed under the project will also require considerable consultation with the Ministry of Education and Sports (MOES) and stakeholder groups such as public and private HEIs, employers and private sector to determine the scope of interventions to lift access, quality and relevance. Lessons learned from the ongoing strengthening higher education project (SHEP) will inform the design work and implementation arrangements.

C. Major Outputs and Activities

4. The outputs of the PPTA will include (i) assessing and documenting of progress made under SHEP and its implications for the project; (ii) preparing an assessment of the higher education sector in Lao PDR, including benchmarking against Greater Mekong Subregion and other Asian countries, and identification of higher education sector constraints and issues; (iii) designing a project in line with government policy and strategies and ADB requirements, and prepare detailed project costings; (iv) identifying proposed program areas for HEI centers of teaching and research excellence; (v) developing an innovation fund for extra-curricular activities and a competitive research fund; (vi) developing a pilot student loan scheme and

¹ ADB. 2011. *Critical Constraints to Growth in the Lao PDR*. Vientiane.

² The project is included in Asian Development Bank (ADB). 2013. *Country Operations Business Plan: Lao People's Democratic Republic, 2014-2016*. Manila. Project title has been changed to provide greater continuity with the previous ADB support for higher education, the Strengthening Higher Education project.

scholarship program; (vii) assessing the existing legislative framework for private higher education, including recommendations for reform to the existing framework; (viii) identifying possible development partner cofinancing for the project and possible development partners and/or foreign HEIs to participate in the matching scholarship scheme; (ix) identifying requirements for long- and short-term visiting scholars; (x) identifying a program for policy studies to be undertaken during the project; (xi) assessing the feasibility of using PPPs for the finance and delivery of all or part of the campus at Savannakhet University and preparing output specifications and other relevant documentation required for using infrastructure PPPs at Savannakhet University, and any other infrastructure development under the project, and/or prepare campus design and architectural activities for the development of the campus at Savannakhet University, including developing a campus concept, and schematic engineering and architectural drawings; (xii) identifying and undertaking site preparation required at the new campus of Savannakhet University, and for other infrastructure development under the project; (xiii) reviewing safeguards assessments for environment, indigenous peoples, and involuntary resettlement prepared for the new site at Savannakhet University, and any other infrastructure development under the project; (xiv) undertaking a feasibility study on the use of a PPP modality for the delivery of all or part of the Savannakhet University campus; (xv) assessing gender issues in the higher education sector in Lao PDR; (xvi) identifying possible academic partnerships; (xvii) assessing the needs for support to external quality assurance and internal quality assurance systems, and the establishment of internal quality assurance cells at public and selected private HEIs; (xviii) undertaking activities related to the dissemination and mainstreaming of the national human resource development (HRD) strategy; (xix) conducting a stakeholder analysis and management framework; and (xx) establishing baseline data for the design and monitoring framework.

5. The major outputs and activities are summarized in Table A3.1.

Table A3.1: Summary of Major Outputs and Activities

Major Activities	Expected Completion Date	Major Outputs	Expected Completion Date
A. Inception			
1. Consultant mobilization	February 2015	Contracts with consultants	February 2015
2. Prepare detailed work program	February 2015		
3. Initial stakeholder analysis, consultation and inception workshop	February 2015	Inception report	February 2015
4. Assessment of sector/gaps	February 2015	Sector assessment	March 2015
5. Undertake environmental and social safeguards assessments	March 2015		
6. Identify possible project cofinancing	March 2015		
7. Assess feasibility of using PPP for Savannakhet University	March 2015		
8. Site preparation work at Savannakhet University campus	April 2015	Soil testing, geological survey	
9. Design of Savannakhet University campus	July 2015	Campus design	
B. Midterm			
10. Assess procurement and institutional capacity, and prepare risk assessment	May 2015	Draft interim report	June 2015
11. Develop initial design and monitoring framework	May 2015		
12. Develop capacity building and human resource development plan	May 2015		
C. Final			
13. Prepare detailed implementation strategies for all project programs	July 2015		

Major Activities	Expected Completion Date	Major Outputs	Expected Completion Date
14. Prepare cost estimates and financing plan	July 2015		
15. Assess economic and financial viability and sustainability	July 2015		
16. Finalize SPRSS, etc.	July 2015	Draft final report	August 2015
17. Develop detailed implementation arrangements and procurement plan	July 2015		
18. Prepare detailed PAM	August 2015	PAM	August 2015
19. Finalize program documents including PAM	August 2015	Final report	August 2015

SPRSS = summary poverty reduction and social strategy, PAM = project administration manual.
Source: Asian Development Bank.

D. Cost Estimate and Proposed Financing Arrangement

6. The TA is estimated to cost \$1,450,000 equivalent, \$1,289,000 of which will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-V), and \$161,000 from TASF-Others. The government will provide support in the form of counterpart staff, office accommodation, office supplies, domestic transportation, office space, communication facilities for consultants, and other in-kind contributions. The detailed cost estimate is presented in Table A3.2.

Table A3.2: Cost Estimates and Financing Plan
(\$'000)

Item	Total Cost
Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants (37.5 person-months)	828.4
ii. National consultants (55 person-months)	210.5
b. International and local travel	158.0
c. Reports and communications	10.0
2. Equipment (computer, printer, etc.) ^b	21.0
3. Workshops, training, seminars, and conferences ^c	
a. Facilitators	20.0
b. Training program	27.5
4. Vehicle ^d	5.0
5. Surveys	15.0
6. Miscellaneous administration and support costs ^e	15.0
7. Contingencies	139.6
Total	1,450.0

^a \$1,289,000 will be financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-V), and \$161,000 will be financed by ADB's TASF-Others.

^b Equipment

Type	Quantity	Cost
Desktop computers	6	\$6,000
Laptop computers	4	\$6,000
Photocopier	1	\$3,000
Laser printers	6	\$6,000

^c Any equipment purchased will be turned over to the executing agency at the conclusion of the PPTA.

^c ADB staff may be used as facilitators during workshops, training, seminars, and conferences.

Purpose	Venue
Inception workshop	Vientiane

Workshops with MOES, other ministries and stakeholders	Vientiane/Savannakhet
Thematic workshops	Various
Midterm workshop	Vientiane
Final workshop	Vientiane
^d Vehicle	
Justify the use of and the need to purchase or lease a vehicle	Expected length of use
Leased vehicle may be required for field trips by PPTA team members and government officials.	Occasional
^e Will be used primarily to cover office costs and the costs of administrative staff to assist the PPTA team leader.	

Source: Asian Development Bank.

E. Implementation Arrangements

7. The PPTA will commence on 2 February 2015 and will be completed on 30 September 2015. Proceeds of the PPTA will be disbursed in accordance with the Technical Assistance Disbursement Handbook (2010 as amended from time to time). Workshops, training, seminars and conferences including surveys, will be managed by the consultants.

F. Consulting Services

8. Individual consultants will be engaged to undertake the PPTA, indicatively including 37.5 person-months of international consultant inputs, and 55 person-months of national consultant inputs. For some tasks, ADB will select and engage individual consultants through Individual Consultant Selection in accordance with ADB's Guidelines on the Use of Consultants (March 2013, as amended from time to time). Consultants may procure equipment through shopping in accordance with ADB's Procurement Guidelines (March 2013, as amended from time to time). Some consultants will be engaged through a firm using quality and cost-based selection (90:10). Some contingency funds will remain unallocated for individual or firm-based consultants, to be allocated for identified needs as they arise. The consultants to be engaged are set out in Table A3.3. Upon completion of the PPTA, equipment procured under the PPTA will be transferred to the executing agency. Inputs by the consultant firm may be augmented by resource persons as needed, to be recruited by ADB in accordance with ADB procedures.

Table A3.3: Summary of Consulting Services Requirement

Positions	Person-Months Required
International	
<i>Individual</i>	
Strategic planning, monitoring and evaluation specialist and team leader	6
Higher education specialist	3.5
University infrastructure procurement specialist	3.5
PPP legal and regulatory specialist	2
Higher education curriculum development and academic review specialist	2
Higher education quality assurance specialist	2
Higher education human resource and capacity development specialist	2
Student finance specialist	2
Education economics and project costing specialist	3
Gender and social safeguards specialist	2
<i>Total Individual</i>	28

Positions	Person-Months Required
<i>Firm-based</i>	
Architectural and engineering design specialist	6
Environmental safeguards specialist	2
Quantity surveying specialist	1.5
<i>Total Firm-based</i>	<i>9.5</i>
Total International	37.5
National	
<i>Individual</i>	
Strategic planning, monitoring and evaluation specialist and deputy team leader	6
Higher education specialist	6
Gender and social safeguards specialist	3
Procurement specialist	3
Financial management specialist	3
<i>Total Individual</i>	<i>21</i>
<i>Firm-based</i>	
Architectural and engineering design specialists, including civil, structural, mechanical, electrical and hydraulic engineering (10 X 2 person-months)	20
Topographical and site survey and soil testing specialist	3
Geological and hydrological survey	3
Involuntary resettlement specialist	2
Environmental safeguards specialist	3
Quantity surveying specialist	3
<i>Total Firm-based</i>	<i>34</i>
Total National	55

Source: Asian Development Bank.

9. The outline terms of reference for the project preparatory TA consultants are described in paras. 11 to 36.

V. OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

10. The consultants will work closely with counterparts designated by the Government of the Lao PDR. International consultants will lead and plan in their respective areas of expertise in collaboration with national consultants and government counterpart staff. A small number of national consultants will assist in project design and data collection. They will also provide advice on the local context in Lao PDR to ensure that project recommendations reflect local conditions. Consultants will help the international team leader prepare and conduct workshops and seminars, prepare reports, and carry out other tasks in their areas of expertise, which will be identified during project implementation, in addition to specific tasks assigned to them.

A. Individual Consultants

International

11. **Strategic planning, monitoring and evaluation specialist and team leader** (6 person-months). The strategic planning, monitoring and evaluation expert and team leader

should have an advanced degree in education, economics or related discipline, at least 10 years' experience in the higher education sector, and experience as a team leader, preferably on ADB supported projects. Experience working on projects in Lao PDR or Greater Mekong Subregion countries would be an asset. The specialist will work in collaboration with MOES and representatives of higher education institutions (HEIs) and will be responsible for the overall implementation of the PPTA.

12. The specialist will (i) work closely with the MOES and public and private HEIs and will consolidate PPTA findings into cohesive inception, midterm, draft final, and final reports. The final report will be delivered in ADB RRP and linked documents formats, suitable for submission to the government and the Asian Development Bank (ADB); (ii) carry out a stakeholder analysis and develop a stakeholder management framework with an overall work plan and participation strategy for ensuring the inputs of major sector stakeholders, including government counterparts, the private sector, and development partners; (iii) oversee the development of a project design that includes strategies to improve the performance of the higher education sector across a range of aspects including access, research, quality assurance, institutional and sector management and governance, and quality and relevance of programs; (iv) with the national HRD commission secretariat, develop strategies for the dissemination and mainstreaming of the national HRD framework and action plan being developed under ADB TA 8277-LAO; (v) review ADB and other funding agencies' past, ongoing, and planned assistance to higher education and draw lessons for preparing a feasible project design and implementation arrangements; (vi) identify possible development partner cofinancing for the project and possible development partners and/or foreign HEIs to participate in the matching scholarship program; (vii) identify requirements for visiting scholars; (viii) working with the education economics and finance specialist, identify a program for policy studies to be undertaken during the project; (ix) prepare an appropriate project design and monitoring framework; (x) oversee preparation of detailed project cost estimates and financing plan; (xi) oversee the preparation of safeguards and gender assessments and preparation of all relevant safeguards documents and a gender action plan; (xii) coordinate the development of the campus at Savannakhet University, including site preparation, architectural design and delivery of campus infrastructure; (xiii) preparing a revised and updated higher education master plan; and (xiv) assessing and documenting of progress made under the SHEP and its implications for the project.

13. **Higher education specialist** (3.5 person-months). The higher education specialist should have an advanced degree in education, economics or related discipline and at least 15 years' experience in undertaking assessments and designing projects in the higher education sector. Experience in developing countries and in Asia would be an asset. The specialist will work closely with the strategic planning, monitoring and evaluation expert and team leader, the education economics and finance specialist, and other specialists to develop a project design that includes strategies to improve the performance of the higher education sector across a range of aspects including access, research, quality assurance, institutional and sector management and governance, and quality and relevance of programs. This will include: (i) developing an innovation fund for extra-curricular activities; (ii) developing a competitive research fund; (iii) assessing the higher education sector in Lao PDR, including benchmarking it against countries in the Greater Mekong Subregion and elsewhere in Southeast Asia and identifying higher education sector constraints and issues. The specialist will also contribute to the work of other specialists, including: (i) identifying a program for policy studies to be undertaken during the project; (ii) developing a pilot student loan scheme and scholarship program; (iii) identifying proposed program areas for HEI centers of teaching and research excellence; (iv) assessing the existing legislative framework for private higher education,

including recommendations for reform to the existing framework; and (v) preparing a revised and updated higher education master plan.

14. **University infrastructure procurement specialist** (3.5 person-months). The university infrastructure procurement specialist will have at least 10 years' experience in procurement of civil works, plant and equipment, including providing public-private partnership (PPP) transaction advisory services and development of large infrastructure projects on a PPP basis. Experience in Lao PDR and/or Southeast Asia would be an asset. This will include experience in project structuring, risk management, project agreements and tendering arrangements, as well as successful preparation of PPP projects.³ Experience in the development of education or social sector PPPs would be an advantage. The specialist will be responsible for overall coordination of tasks including, but not limited to:

- (i) Prepare a feasibility study and provide transaction advice on the use of a PPP modality for the delivery of the campus at Savannakhet University, including undertaking any required technical/financial studies.
- (ii) Identify and analyze alternative PPP options for undertaking campus development at Savannakhet University, including the degree to which PPP can be used to deliver all or part of the campus, and the scope of their benefits and disadvantages and recommend a preferred PPP model.
- (iii) Recommend project structure and procurement plan.
- (iv) Prepare a project marketing document and undertake market sounding.
- (v) Assess and identify human and institutional capacity building requirements for MOES, including establishment of PPP unit within MOES and HEIs, organizational structure for PPP unit and training requirements.
- (vi) In collaboration with Savannakhet University, MOES officials and other specialists including the Architectural and Engineering specialist, prepare a strategic brief and reference design for development of the Savannakhet University campus. The strategic brief will capture the project objectives, including education and research objectives, asset performance objectives, and descriptions of functional relationships and space allocation.
- (vii) Prepare and submit all reports.
- (viii) Facilitate all workshops, meetings and stakeholder consultations.
- (ix) Liaise with MOES, HEIs and ADB.

15. **PPP legal and regulatory specialist** (2 person-months). The consultant should have a legal qualification from a recognized university and experience in legal and regulatory issues related to PPPs, preferably with experience in the social sectors. Tasks include, but are not limited to (i) reviewing institutional requirements for implementing PPPs both generally, and in the education sector, in Lao PDR from a legal and regulatory perspective; (ii) assessing the capacity of the MOES to undertake PPPs in the higher education sector; (iii) recommend possible institutional changes to improve the capacity of the MOES and other agencies to undertake PPPs in the higher education sector in Lao PDR; (iv) contribute to the assessment of the feasibility of using a PPP modality for the delivery of all or part of the campus at Savannakhet University or at other HEIs; (v) prepare and review all documentation related to identified PPP projects, including: (i) bid documents (requests for qualification and for proposal) and draft contractual agreements; (ii) project marketing and prebid consultations; (iii) bidder qualification and bid evaluation criteria; (iv) monitoring and evaluation frameworks; (v) required

³ This would include several activities consisting of preparation of feasibility studies, financial modeling, development of various PPP options and project structuring, management of the PPP bidding process, preparation of contractual documentation and assistance in signing of contracts and assistance until financial close.

due diligence documents for potential financiers; and (vi) bid process, bid evaluations, and contract negotiations; and (vii) contract management. The PPP legal and regulatory specialist will also provide Lao PDR law and international best practice advice on project design, including, but not limited to:

- (i) Review of risk allocation regime.
- (ii) Interface with tax and insurance advisors.
- (iii) Licensing, permitting, land acquisition and other legal risks, and in particular providing assistance related to land acquisition concerns and developing systems to secure land tenure for Savannakhet University.
- (iv) Applicable procurement requirements.
- (v) Advice on mechanisms to maximize competition while avoiding unrealistic bids and project vulnerability from overly aggressive bidding.
- (vi) Information to be provided by the Government to bidders.

16. Higher education curriculum development and academic review specialist (2 person-months). The curriculum development and academic review specialist should have an advanced degree in a relevant academic discipline and at least 10 years' experience working on curriculum development in the higher education sector. Experience in designing projects is essential. The specialist will (i) assess the level and content of current curricula, academic programs, and diplomas and degrees in specializations against those of top-ranked universities in Southeast Asia, and then design a framework for new or revised curricula and academic programs, and diploma and degree programs; (ii) analyze the availability of textbooks in the Lao language and propose fields in which new textbooks should be developed; and mechanisms for publishing those textbooks under the ensuing project; (iii) design curriculum and academic programs in relevant disciplines and fields and strengthen international and domestic networking at the undergraduate and postgraduate levels; (iv) prepare long and short-term staff development programs in curriculum development and academic review; (v) prepare evaluation criteria and methods for teaching effectiveness and research quality and performance; and (vi) develop a format for utilizing and maintaining facilities, laboratories, and equipment.

17. Higher education quality assurance specialist (2 person-months). The higher education quality assurance specialist should have an advanced degree in education, economics or related discipline, and at least 10 years' experience working on quality assurance issues in the higher education sector. Experience in designing projects is essential. Experience in developing countries and in Asia would be an asset. The specialist will (i) assist the strategic planning, monitoring, and evaluation specialist/team leader and deputy team leader in conducting an analysis of the higher education sector and preparing a higher education master plan; (ii) prepare a plan for developing institutional capacity for quality assurance and accreditation functions for the higher education system, with special reference to quality assurance mechanisms and organizations at MOES, as well as public and private HEIs; (iii) work with the quality assurance to review existing quality assurance arrangements for public and private HEIs, including quality standards (with international benchmarking for research and teaching), recognition of higher education degrees, government quality assurance system, university-internal quality assurance system, student selection procedures, monitoring, and reporting (accountability); and (iv) propose areas that require strengthening.

18. Higher education human resource and capacity development specialist (2 person-months). The higher education human resource and capacity development specialist should have an advanced degree in education, economics or related discipline and at least 10 years' experience working on human resource and capacity development issues in the higher

education sector. Experience in designing projects is essential. The specialist will (i) in coordination with strategic planning, monitoring, and evaluation specialist/team leader and deputy team leader, analyze the availability of quality teaching staff, that is, the ratio of postgraduate teaching staff to undergraduate students and compare it with that of neighboring countries and best practice of developing member countries; assess the capacity of MOES and administrative staff of public HEIs in administering and managing higher education and universities, and the research and teaching capacity of academic staff of public HEIs, focusing on undergraduate programs; and (ii) develop a short-term and long-term (degree programs) staff development plan for MOES and university staff (both administration and teaching) to be supported by the proposed project on a priority basis, and review and revise current criteria for selecting candidates to be included in the staff development plan.

19. **Student finance specialist** (2 person-months). The student finance specialist should have an advanced degree in economics, finance or related discipline, and at least 10 years' experience in undertaking higher education projects, including designing student loan and scholarship programs. Experience in developing countries and in Asia would be an asset. The specialist will examine the feasibility of setting up a pilot student loan program, including identifying potential sustainable student loan program designs; administrative arrangements, including loan distribution and collection mechanisms, and potential financial partners.

20. **Education economics and costing specialist** (3 person-months). The education economics and costing specialist should have an advanced degree in economics, finance or related discipline, and at least 10 years' experience in designing or implementing projects in the higher education sector. Experience in developing countries and in Asia would be an asset. The specialist will (i) assist the higher education specialist in analyzing the higher education sector, and preparing an outline of the master plan for higher education sector development; (ii) as inputs to the sector analysis, assess the labor market demand for postsecondary education using tracer studies with special reference to newly established public HEIs; (iii) assess the economic and financial rationale for encouraging private sector development of HEIs by examining the potential job market demand for the HEIs' prospective graduates; (iv) conduct a detailed economic (cost-benefit) analysis of the impacts and outputs of the proposed project; (v) conduct a financial analysis to determine the level of available resources for the Government (central and provincial governments) to manage any recurrent costs of the project investments; (vi) work with the student finance specialist to identify and propose HEI revenue generating and cost-recovery measures (e.g., monetization of HEI assets, tuition fees, student financial assistance schemes); (vii) identify strategies to promote greater private sector and industry involvement in university development; and (viii) conduct an affordability analysis to assist the student finance specialist to design student financial assistance schemes including stipends or subsidies for the poor, ethnic minorities, or traditionally excluded groups.

21. The specialist will also (i) prepare, in coordination with other specialists, cost estimates for the proposed project (with detailed cost tables for all components and activities) and a financing plan, taking into consideration cofinancing opportunities with development partners (use of COSTAB is highly desirable); (ii) analyze the fiscal framework and financial procedures and recommend strategies to ensure sustainability and accountability of the proposed project; and (iii) suggest a package of financial incentives to promote greater private sector and industry involvement in university development;

22. **Gender and social safeguards specialist** (2 person-months). The gender and social safeguards specialist will have an advanced degree in gender studies, law, or other relevant discipline, and at least 5 years' expertise in assessments of gender and social development

issues surrounding females, the poor, indigenous people, and other disadvantaged groups, preferably in the context of the education sector. The specialist will have experience in the use of participatory methodologies to collect and analyze information and develop relevant action plans, as well as a good understanding of relevant ADB policies and requirements. The consultant will work with the strategic planning, monitoring and evaluation specialist and team leader, deputy team leader, the education economics and finance specialist, and higher education specialist in conducting demand-side analyses, and will take lead responsibility in preparing poverty and social analyses and providing into project interventions and implementation arrangements. Specific responsibilities include:

- (i) Provide a summary assessment of gender issues in education (in particular in secondary and higher education) in Lao PDR, including supply- and demand-side factors affecting access to secondary and higher education, quality of education, and learning outcomes.
- (ii) Assess implementation progress of gender actions and achievement of gender action plan (GAP) targets under SHEP.
- (iii) Collect key sex-disaggregated baseline data to be monitored during the project implementation, including from SHEP.
- (iv) Review previous and ongoing higher education projects supported by ADB or other development partners in Lao PDR from a gender perspective based on progress reports, mid-term reviews, and other relevant project documents to determine lessons learned in relation to gender mainstreaming and how the proposed project can build upon gender aspects of such projects.
- (v) Identify interventions for inclusion in the project design to address existing challenges and constraints in the design of the proposed project, including those aimed at reducing gender gaps in the higher education sector (e.g., overall enrolments, female enrolments in non-traditional fields, share of academic and research staff).
- (vi) Contribute to the process of campus and architectural design to ensure that design is gender sensitive.
- (vii) Prepare a GAP.
- (viii) Review the national HRD strategy that is being developed with ADB support for relevant gender elements.
- (ix) Work with the education economics and finance specialist, higher education specialist, and team leader to conduct poverty and social analyses, including a disaggregated analysis of social impacts and benefits of the proposed project, and to develop the monitoring and evaluation framework.
- (x) Identify priority interventions and procedures to promote participation by and benefits to women, the poor, indigenous people, and other disadvantaged groups in the proposed project.

National Consultants

23. **Higher education strategic planning specialist and deputy team leader** (6 person-months). The higher education strategic planning specialist and deputy team leader, working in collaboration with the team leader, MOES and HEI representatives, will be responsible for (i) providing oversight and guidance to the national experts on the social analyses and document preparations, and ensuring quality outputs for the project; (ii) support international specialists; (iii) review, assess and improve proposals for student scholarships and student loans; (iv) review the APS and ensure requisite approvals are received from provincial authorities, MOES and Savannakhet University; document stakeholder consultations. Outputs include, but may not

be limited to: assistance in preparing social analysis, social safeguard documents (resettlement and indigenous peoples screening checklists and gender assessment).

24. **Higher education specialist** (6 person-months). The higher education specialist will have a relevant degree and experience in working on education projects in Lao PDR, preferably with some experience on international development partner funded projects. The specialist will work closely with the strategic planning, monitoring and evaluation expert and team leader, the higher education specialist (international), the education economics and finance specialist, and other specialists to develop a project design that includes strategies to improve the performance of the higher education sector across a range of aspects including access, research, quality assurance, institutional and sector management and governance, and quality and relevance of programs. This will include (i) developing an innovation fund for extra-curricular activities; (ii) developing a competitive research fund; (iii) assessing the higher education sector in Lao PDR, including benchmarking it against countries in the Greater Mekong Subregion and elsewhere in Southeast Asia and identifying higher education sector constraints and issues. The specialist will also contribute to the work of other specialists, including: (i) identifying a program for policy studies to be undertaken during the project; (ii) developing a pilot student loan scheme and scholarship program; (iii) identifying proposed program areas for HEI centers of teaching and research excellence; (iv) assessing the existing legislative framework for private higher education, including recommendations for reform to the existing framework; and (v) preparing a revised and updated higher education master plan.

25. **Gender and social safeguards specialist** (3 person-months). The consultant will have expertise in assessments of gender and social development issues surrounding females, the poor, indigenous people, and other disadvantaged groups, preferably in the context of the education sector. The specialist will have experience in the use of participatory methodologies to collect and analyze information and develop relevant action plans, as well as a good understanding of relevant ADB policies and requirements. The consultant will work with the strategic planning, monitoring and evaluation specialist and team leader, deputy team leader, the education economics and finance specialist, and higher education specialist in conducting demand-side analyses, and will take lead responsibility in preparing poverty and social analyses and providing related inputs into the design of project interventions and implementation arrangements. Specific responsibilities include:

- (i) Provide a summary assessment of gender issues in education (in particular in secondary and higher education) in Lao PDR, including supply- and demand-side factors affecting access to secondary and higher education, quality of education, and learning outcomes.
- (ii) Assess implementation progress of gender actions and achievement of gender action plan (GAP) targets under SHEP.
- (iii) Collect key sex-disaggregated baseline data to be monitored during the project implementation, including from SHEP.
- (iv) Review previous and ongoing higher education projects supported by ADB or other development partners in Lao PDR from a gender perspective based on progress reports, mid-term reviews, and other relevant project documents to determine lessons learned in relation to gender mainstreaming and how the proposed project can build upon gender aspects of such projects.
- (v) Identify interventions for inclusion in the project design to address existing challenges and constraints in the design of the proposed project, including those aimed at reducing gender gaps in the higher education sector (e.g., overall

- enrolments, female enrolments in non-traditional fields, share of academic and research staff).
- (vi) Contribute to the process of campus and architectural design to ensure that design is gender sensitive.
 - (vii) Prepare a GAP.
 - (viii) Review the national HRD strategy that is being developed with ADB support for relevant gender elements.
 - (ix) Work with the education economics and finance specialist, higher education specialist, and team leader to conduct poverty and social analyses, including a disaggregated analysis of social impacts and benefits of the proposed project, and to develop the monitoring and evaluation framework.
 - (x) Identify priority interventions and procedures to promote participation by and benefits to women, the poor, indigenous people, and other disadvantaged groups in the proposed project.

26. **Procurement specialist** (3 person-months). The procurement specialist will (i) assess the procurement capacity of MOES and public HEIs; (ii) in coordination with the campus, facilities, and laboratory development specialist, the infrastructure PPP specialist, and university subproject teams, prepare a tentative list of laboratory equipment and civil works to be procured and/or outputs specifications, considering the needs of the new curriculum levels and laboratory and teaching equipment; (iii) prepare the procurement plan for the proposed project, in accordance with government regulations and ADB's *Procurement Guidelines*; (iv) prepare bidding documents for the equipment to be procured under the proposed project, and assist MOES to start recruiting project consultants and drafting the request for proposals; (v) prepare master bidding documents for the project; (vi) conduct a procurement risk assessment, and prepare the procurement risk assessment and management plan.

27. **Financial management specialist** (3 person-months). The financial management specialist should have a recognized professional accountancy qualification such as a chartered accountant, certified public accountant or chartered certified accountant, and at least 10 years' experience, working on development partner supported projects. The specialist will:

- (i) Assess the financial management capacity of MOES and public HEIs.
- (ii) Prepare funds flow diagrams for all aspects of the project, including student loans, scholarships.
- (iii) In coordination with other consultants, prepare cost estimates for the proposed project taking into consideration the sustainability of project costs.
- (iv) Assist the project costing specialist team leader to prepare detailed cost tables using COSTAB.
- (v) Analyze the fiscal framework and financial procedures and recommend strategies to ensure sustainability, and accountability of financial managers.
- (vi) Assist the economic and costing specialist to assess the potential for public HEIs to undertake revenue generating activities.
- (vii) Define financial procedures and delineation of responsibilities between central government and local authorities, and HEIs, for financial management of loan proceeds.
- (viii) Assess and indicate whether the EA has adequate capacity to administer imprest account and statement of expenditure procedures, and if so, whether such capacity is sufficient to justify removal of the imprest account/SOE ceilings.

B. Firm-based Consultants

International Consultants

28. **Architectural and engineering design specialists**, including civil, structural, mechanical, electrical hydraulic, civil engineering (roads, bridges and utilities), ICT and laboratory and workshop equipment specialist) [6 person-months]. The specialists will be required to prepare the schematic design for a revised and comprehensive master plan for Savannakhet University to constitute a 'reference design' adequate for cost estimates for detailed feasibility analysis and for moving to the next stage of procurement which is likely to be either of the following methodologies: traditional 'design-bid-build', 'design and construction' or PPP. Activities will include, but not be limited to:

- (i) Schematic architectural and engineering design for site infrastructure.
- (ii) Schematic architectural and engineering drawings for the new campus and facilities, reflecting (a) separate male and female requirements (e.g., separate toilets, dormitories, etc.); and (b) giving consideration to capital and operating costs; passive environmental design; environmental engineering systems (including rainwater harvesting, water recycling, sustainable energy systems, innovative building methodologies, and materials), including shell and core, and furniture, fittings and equipment.
- (iii) Outline output specifications that link the constructed infrastructure and campus to its performance during the operating period.

29. **Environmental safeguards specialist** (2 person-months). Key tasks include: (i) review the environmental implications of civil works and environmental settings of the proposed project; (ii) review environmental risks of the proposed project, and, where such risks are present (e.g., construction), examine the measures that could be taken during implementation to mitigate the risks; (iii) conduct an initial environmental examination or environmental impact analysis for construction-related proposals for prospective university facilities, in accordance with ADB's Safeguard Policy Statement (2009); (iv) develop and justify a proposed environmental categorization for the project; (v) provide inputs into drafting the RRP and relevant linked documents; and (vi) conduct meaning consultations and disclosure, and establish grievance redress mechanism.

30. **Quantity surveying specialist** (1.5 person-months). The specialist will prepare a cost breakdown of capital and operating cost for the University of Savannakhet with its varying complexities of uses and building typologies to be built in Savannakhet, Lao PDR including: (i) the identification of construction methodologies and costs to be found on this university campus, the influence of innovations and changes in building technologies, building materials, environmental engineering systems, contemporary pedagogies and contemporary facility management and operations. The specialist will advise on all construction costs relating to infrastructure establishment across the campus, including roads; utilities; landscaping; shell and core construction; and furniture, fittings, and equipment. The specialist will establish a public sector comparator with the assistance of the financial advisor and will assist the financial advisor prepare the project financial model.

National Consultants

31. **Architectural and engineering design specialists including civil, structural, mechanical, electrical and hydraulic engineering specialists, information and communication technologies, and laboratory and workshop equipment specialist** (10 X 2 = 20 person-months). The architectural and engineering design specialists should have a relevant qualification in architecture, design, engineering or related area, and experience in architectural and engineering design in Lao PDR. Specific activities will include supporting the international specialists, including but not be limited to, the following:

- (i) Prepare the conceptual drawings, floor plans, cross-sections and elevations for the campus architectural design, and develop and produce these in a 3D AutoCAD model suitable for cost estimation that allows for detailed options analysis and business case preparation.
- (ii) Ensure that the most cost-effective, practical and easy to maintain strategies for construction are applied while introducing innovation where appropriate aligned with the evolution of the Lao building industry as it experiences international influences integrated with local capacity and expertise.
- (iii) Ensure that architectural and construction solutions include passive design approaches and are responsive to contextual factors such as climate, type of usage, anticipated loads, and cultural considerations that may have an impact on the quality and nature of the spaces.
- (iv) Determine the most cost-effective and appropriate mechanical, information and communication technologies (ICT) network and electrical systems for use in new campus buildings.
- (v) Ensure appropriate conditions for ICT-specific spaces, networks, etc.
- (vi) Develop schematic engineering drawings and technical specifications for all mechanical and electrical work for inclusion in building construction (including all plumbing, electrical, ICT network, air conditioning, ventilation, air exhaust, and other layouts).
- (vii) Determine the most suitable options for management of wastewater and sewage to be discharged from the buildings and describe appropriate septic tanks and/or other systems.
- (viii) Ensure that all buildings are designed and detailed in compliance with government and provincial planning regulations, statutory authorities and building codes.
- (ix) Provide quantity assessments to the QS for inclusion in the cost estimates for all buildings under the project.
- (x) Provide inputs as necessary to the pre-bid conference(s).

32. **Topographical and site survey and soil testing** (3 person-months). The specialist should have a relevant degree and experience. Tasks include conducting a topographical survey and identifying key features and boundaries for the campus at Savannakhet University. Survey to be restricted to approximately 30 hectares and not the entire Savannakhet University site.

33. **Geological and hydrological survey** (3 person-months). The specialist should have a relevant degree and experience. Tasks include conducting a subsoil survey including site hydrology to be used for the master plan and technical designs for the construction of the campus and university buildings.

34. **Involuntary resettlement specialist** (2 person-months). The involuntary resettlement specialist should have a relevant degree and experience. The specialist will (i) assess the proposed site for Savannakhet University campus to determine whether there is a need for any involuntary resettlement as defined in ADB's Safeguard Policy Statement (2009); (ii) on the basis of the assessment of land issues, titles, and the potential impact of the proposed project, develop a resettlement framework or a resettlement plan in accordance with ADB's Safeguard Policy Statement (2009), if required; and (iii) provide inputs into drafting the project RRP and linked documents.

35. **Environmental safeguards specialist** (3 person-months). The environmental safeguards specialist should have a relevant degree, and experience in conducting environmental assessments. Experience working on international development partner projects is essential. Key tasks include: (i) review the environmental implications of civil works and environmental settings of the proposed project; (ii) review environmental risks of the proposed project, and, where such risks are present (e.g., construction), examine the measures that could be taken during implementation to mitigate the risks; (iii) conduct an initial environmental examination or environmental impact analysis for construction-related proposals for prospective university facilities, in accordance with ADB's *Environment Policy* (2002) and *Environmental Assessment Guidelines* (2003); develop and justify a proposed environmental categorization for the project; and (iv) provide inputs into drafting the RRP and relevant linked documents.

36. **Quantity surveying specialist** (3 person-months). The quantity surveying specialist should have a degree in quantity surveying, or other relevant degree and at least 5 years' experience. The specialist will support the international specialist to prepare a cost breakdown of capital and operating cost for Savannakhet University with its varying complexities of uses and building typologies to be built in Lao PDR including (i) the identification of construction methodologies and costs to be found on this university campus, and (ii) the influence of innovations and changes in building technologies, building materials, environmental engineering systems, contemporary pedagogies and contemporary facility management and operations. The specialist will advise on all construction costs including infrastructure establishment across the campus including roads; utilities and landscaping; shell and core construction; and furniture, fittings and equipment.