Indigenous Peoples Plan

Project Number: 55134-001
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Cambodia: Science and Technology Project in Upper Secondary Education

Prepared by Ministry of Education, Youth and Sport, Kingdom of Cambodia for the Asian Development Bank.

ABBREVIATIONS

ADB	–	Asian Development Bank
COVID-19	–	Coronavirus disease
EA	–	executing agency
Edtech	–	educational technology
ELC	–	Economic Land Concession
EMG	–	ethnic minority groups
EMIS	–	education management information system
GRM	–	grievance redress mechanism
GTHS	–	general technical high school
IA	–	implementing agency
IP	–	Indigenous Peoples
IPP	–	Indigenous Peoples Plan
LASED	–	Land Allocation for Social and Economic Development Project
MOEYS	–	Ministry of Education, Youth and Sport
MTEF	–	medium-term expenditure framework
NGS	–	new generation school
MSS	–	Minimum service standards
NIE	–	National Institute of Education
NPDIP	–	National Policy on Development of Indigenous Peoples
NWS	–	network school
PIU	–	project implementation unit
PMU	–	project management unit
RGC	–	Royal Government of Cambodia
SLC	–	Social Land Concessions
SPS	–	Safeguard Policy Statement
SRS	–	secondary resource school
STEM	–	science, technology, engineering, and mathematics
USE	–	upper secondary education
USS	–	upper secondary school

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EXECUTIVE SUMMARY

1. This Indigenous Peoples Plan (IPP) has been prepared for the Science and Technology Project in Upper Secondary Education project (STEP UP). STEP UP has been categorized as "B" for indigenous peoples as per Asian Development Bank (ADB) Safeguard Policy Statement (SPS), 2009 and the impacts are positive on indigenous peoples.

2. The project will support the government's human capital development agenda by improving the effectiveness of upper secondary education (USE). It will increase access to quality education, strengthen science, technology, engineering, and mathematics (STEM) teaching and learning, and strengthen education leadership and management capacity. This project continues ADB's support in Cambodia to the upper secondary education system with a focus on STEM education. STEP UP aims to address the increasing demand for high-quality human resources to support Cambodia's rapidly evolving industrial, technology-oriented, and knowledge-based economy. The project interventions will target secondary resource schools that have received previous ADB support as well as equitably broadening the scope to raise standards in other upper secondary schools (USSs) including general technical high schools (GTHSs) across the country.

3. The STEP UP project categorization has been prepared in accordance with the ADB SPS 2009 on indigenous peoples safeguards. According to the Indigenous People's Safeguards Sourcebook "indigenous peoples safeguards are triggered when a project affects either positively or negatively and either directly or indirectly the indigenous peoples." The IPP provides the guidance necessary to support culturally appropriate project implementation for indigenous people's (IP) beneficiaries. The project will facilitate that indigenous peoples are aware of the STEP UP provided by the government through the Ministry of Education, Youth and Sport (MOEYS).

4. The project is expected to have positive impacts on indigenous peoples. The STEP UP project will cover 50 SRS, 100 upper secondary resource school (SRS), 100 network school (NWS), and 103 USS in 25 provinces and the capital of which some targeted schools fall within the provinces having the presence of IP. IP residents have been reported in project coverage areas of 20 schools out of 253 schools. The project will not negatively affect the IPIP but will bring benefit to the people, especially IPIP, who are living in the project areas. No negative impacts are foreseen and the project will not involve any land acquisition and hence, no involuntary resettlement is anticipated in the Project.

5. During project preparation, a technical assistance (TA) consultant carried out consultations with 50 IP students (29 females) in six high schools in four provinces, namely Kratie, Stung Treng, Ratanakiri, and Mondulkiri provinces from 27 to 31 January 2022. The ADB social safeguard team conducted another round of consultation with various stakeholders such as (i) two directors of the Provincial Department of Education, Youths and Sports in Ratanakiri and Preah Vihear provinces; (ii) two heads of IP Office from the Provincial Department of Rural Development in Ratanakiri and Preah Vihear provinces; and (iii) eight school directors and four commune chiefs from Ratanakiri and Preah Vihear provinces from July 20 to 22.

6. Information containing core issues on the IPP will be disclosed and made available to the IPs and beneficiaries in the form of leaflets or brochures translated into the local language. For indigenous peoples where a large number of adults cannot read, materials will be produced in popularized form. The MOEYS through its PMU and the provincial implementing agencies which is Provincial Department of Education, Youths and Sports along with assistance from national

safeguard, communication and gender specialists, will be in charge of disclosing IPP related information, including project's benefits to the IPs. The IPP for STEP UP will also be disclosed in the ADB and MOEYS websites. The periodic monitoring reports on IPP implementation will also be posted on the ADB website as well as on MOEYS website.

7. ADB's SPS 2009 requires the establishment of a responsive, readily accessible, and culturally-appropriate grievance redress mechanism (GRM) capable of receiving and facilitating the resolution of affected persons' concerns and grievances about the physical, social, and economic impacts of the project. The GRM aims to: (i) reduce conflict, risk of undue delay, and complication in project implementation; (ii) improve quality of project activities and outputs; (iii) ensure that the rights of affected parties are respected; (iv) identify and respond to unintended impacts of projects on individuals; and (v) maximize participation, support and benefit to local communities. The GRM for the STEP UP will follow the same structures and procedures of GRM and consultation process of the USESDP2.

8. The implementation of the IPP will be monitored by the project management unit (PMU) to: (i) ensure that indigenous peoples benefit from the project, (ii) record the number of IP beneficiaries and types of benefits, (iii) ensure that mitigation measures designed to address negative social impacts and measures to enhance positive impacts are adequate and effective, (iv) determine if the indigenous peoples have any issues or concerns regarding project implementation, (v) determine that adequate consultation is taking place, and (vi) propose corrective actions when needed. The MOEYS through Department of Policy and the PMU will be responsible for monitoring the IPP, making sure that it is implemented per the ongoing project and the reporting follows the existing and established systems.

9. The executing agency of the project will be MOEYS while the implementing agencies (IA) will be the Institute of Technology of Cambodia, National Institute of Education (NIE) and the Directorate General of Education. The executing agency will establish a project steering committee (PSC) to provide overall strategic and policy guidance, advice, and direction to the project to ensure achievement of project outcomes and facilitate inter-ministry coordination. The PSC will be co-chaired by the Minister, MoEYS, and Permanent Secretary of State, Ministry of Economy and Finance (MEF). Members of the PSC include: (i) relevant Secretary of State and Under Secretary of State of the EA, (ii) representatives from MEF (General Department of International Cooperation and Debt Management and General Department of Budget); (iii) General Department of Administration and Finance, and Directorate General for Policy and Planning, MoEYS; and (iv) Deputy Director General for Policy and Planning and Chair of the NIE Reform Committee as the Secretariat. The executing agency will also appoint a project director and a project manager, to be responsible for the overall management and day-to-day administration of the project implementation, respectively, and, if necessary, to appoint a deputy project manager to support the work of the project manager. Both the project director and project manager will report to the PSC on a quarterly basis. The cost pertaining to IPP implementation will be part of ADB loan under the operating costs. The IPP will be implemented in parallel with other activities.

I. DESCRIPTION OF THE PROJECT

A. Background, Impact and Outcome

1. The Science and Technology Project in Upper Secondary Education project (STEP UP) will support the government's human capital development agenda by improving the effectiveness of upper secondary education (USE). It will increase access to quality education, strengthen science, technology, engineering, and mathematics (STEM) teaching and learning, and strengthen education leadership and management capacity. This project continues the Asian Development Bank's (ADB) support in Cambodia to the USE system with a focus on STEM education. STEP UP aims to address the increasing demand for high-quality human resources to support Cambodia's rapidly evolving industrial, technology-oriented, and knowledge-based economy. The project interventions will target secondary resource schools that have received previous ADB support as well as equitably broadening the scope to raise standards in other upper secondary schools (USSs) including general technical high schools (GTHSs) across the country. The project is aligned with the following impact: high quality human resources for a knowledge-based society developed.[1] The project will have the following outcome: effectiveness of upper secondary education improved.[2]

B. Rationale of the IPP

2. The project design will cover the implementation of outputs (section C below) within 25 provinces and the capital of Cambodia which includes total 258 schools. Secondary and primary data collection as part of technical assistance (TA) assessment and due diligence confirmed 20 schools are within indigenous peoples (IP) and ethnic groups (EG) populated areas.

3. The project is categorized B for indigenous peoples safeguard for positive impacts. Project activities and interventions are expected to have positive impact on indigenous students/teachers particularly in terms of increased access to quality education and improved capacity of indigenous peoples students and teachers in the project areas. There will be clear benefits for indigenous children's education participation, quality of education as well as post-education employment prospects. The poverty and social impact assessment has determined that no project activities will adversely affect the indigenous peoples' identity, dignity, human rights, livelihood systems, and cultural uniqueness. However, the indigenous peoples in the northeastern provinces possess vulnerability characteristics in terms of poverty incidence and educational outcomes that the project is seeking to address.

4. Therefore, the Indigenous Peoples Plan (IPP) has been prepared as a standalone document following the Appendix 3 of the SPS (2009). Social Impact Assessment has been carried out as part of TA to form the IPP. The IPP aims to provide cultural appropriate measures to ensure the maximum benefits to students, teachers, and school administrators in indigenous peoples areas

[1] Government of Cambodia, Ministry of Education, Youth and Sport (MoEYS). 2021. *Cambodia Secondary Education Blueprint 2030.* Phnom Penh.

[2] The design and monitoring framework is in Appendix 1 of the Report and Recommendation of the President to the Board of Directors.

C. Project Outputs and Scope

5. The proposed project will have following outputs.

6. **Output 1: Equitable access to standard-based upper secondary education expanded.** This output will expand access to standardized-based USE for boys and girls through upgrading of facilities, putting in place standards for quality education for all USSs and providing essential educational technology (EdTech) and STEM equipment. Output 1 will specifically:

(i) Develop minimum service standards (MSS) for USE inputs and outputs to ensure equitable resource allocation across all USSs and to inform planning and quality assurance for learners. Priority in setting standards will be given to inputs that are most strongly associated with student learning outcomes, such as teachers and teacher quality, class furniture, and learning equipment. MSS for outputs including on gross enrolment rate, completion rate and dropout rate will also be defined. Relevant departments will collaborate to develop these MSS.

(ii) Develop and implement a 5-year secondary education Medium-Term Expenditure Framework (MTEF), including multi-year budget estimates, aligned with the Cambodia Secondary Education Blueprint 2030. The executing agency will use the MSS targets, and based on the secondary education sector priorities, strategies, and targets, the MTEF will be developed early in the project to guide secondary sub-sector planning for the next 5 years.

(iii) Develop and implement an action plan to harmonize access of upper secondary students to labor market-driven technical and vocational training courses or modules and certifications based on the Cambodia Qualification Framework.[3] The action plan will be implemented through coordination between the executing agency and relevant ministries, especially with the Ministry of Labor and Vocational Training, and other training providers, through partnership arrangements and joint delivery programs.

(iv) Upgrade facilities of 14 upper secondary network schools (NWSs) and 103 general secondary schools, with gender-responsive, socially inclusive, and climate-adaptive design considerations by converting three classrooms in each of these schools into two science classrooms and one library with equipment, teaching materials, books, furnishing and requisite EdTech resources. The upgrades will utilize proven effective designs from previous projects and facilitate use of modern teaching methods (e.g., small group work, STEM activities).

(v) Install multi-purpose life skills and project-based classrooms in 25 secondary resource schools (SRSs).

(vi) Upgrade water and sanitation facilities in 18 SRSs and 50 SRS NWSs, including the 14 new upper secondary NWSs, including providing separate toilets for girls and boys.

(vii) Install voltage stabilizers in 36 SRSs with unstable electricity supply in 18 SRSs, 25 SRS NWSs, including the new ones, and 10 general secondary schools to sensitive electronics which are otherwise often damaged from frequent voltage spikes.

(viii) Provide 50 SRSs, 100 SRS NWSs, and 4 GTHSs with enhanced STEM equipment for improved safe teaching and learning in STEM subjects. The equipment is purposefully selected to encourage and facilitate project-based learning with a

[3] National Training Board (February 2012). The Cambodia Quality Framework is designed to enable young people to pursue a practical education at an early age, to equip them with the right skills and competencies for the workplace.

strong focus on tools for STEM project creation. Basic lab safety equipment is also included to facilitate safe laboratory practices, and development of a safety culture. The technical workshops in four GTHSs will also be provided STEM equipment to improve teaching and learning of the technical subjects taught in these schools.

(ix) Provide innovative digital technology to support effective STEM teaching and learning to 50 SRSs, 101 SRS NWSs, 4 GTHSs, in addition to 103 general USSs (e-libraries only). Driving towards minimal school standards on access to computers for students, staff and teachers, the primary component will be the 'single computer board'. Targeted USS will be supplied smart classrooms which feature an LCD projector, projection screen, sound system and single computer board-based computer. The smart classrooms will allow whole class use of multimedia to modernize teaching and learning using digital materials. The project will also provide two e-Libraries in targeted USS for classroom and library use and student and teacher research. Selected USS will be provided maker kits and 3D printing which will help advance integrated STEM. STEP UP will deploy information technology tech teams to train a select number of staff from each target USS on a range of EdTech to be used. At the deployment stage, there will be basic training on set-up, maintenance, and usage of equipment and features of the learning management system (LMS) and e-Library. In addition to initial training, there will be follow up continuous professional development (CPD) (e.g., professional learning community or PLC, discussions, locally organized needs-based workshops, etc.) and coaching and mentoring to ensure the systems are in place and maintained, and that all target schools are able to integrate and use the tools effectively.

(x) Provide support to SRS in the accreditation process to enable at least 3 to become new generation schools (NGS). In the case that a proportion of SRS that begin the 3-year NGS accreditation do not continue through the full process, a total of eight schools will be considered for this support. A yearly assessment will be developed and administered by the consulting firm for the candidate schools to proceed in receiving higher levels of investment. Support to these SRS will include: (a) upgrading and/or provision of classrooms, science rooms, computer labs, libraries, faculty offices, student affairs facilities, auditoriums; (b) provision of laptops for teachers; and (c) consultant support for the school management reforms.

7. **Output 2: Quality of science, technology, engineering, and mathematics teaching and learning strengthened.** This output aims to promote quality STEM education by upskilling teachers and strengthening STEM education delivery through a holistic approach. Output 2 will (i) develop and facilitate CPD for in-service STEM teachers and NIE STEM lecturers on effective and innovative teaching strategies, integration of digital technologies in USS STEM teaching, and improving pedagogical content knowledge; (ii) develop and pilot a STEM school-level framework to guide all types of schools in systematically improving STEM teaching and learning; and (iii) establish and operationalize the Cambodia Science and Technology Center (CSTC). Output 2 will specifically:

(i) Conduct a feasibility study, design, set up, and operationalize the CSTC that creates a bridge between science and society. The CSTC will promote STEM in an interactive and innovative way to the public through a physical presence in Phnom Penh at the Institute for Technology of Cambodia (ITC) and a digital outreach program for access in schools and communities nationwide. It will also

provide a STEM eco-system hub for teacher education institutions and higher education institutions for research and teaching purposes; connect industry and secondary schools; and connect with regional and global STEM communities.

(ii) Develop and implement a school-based STEM Framework appropriate for effective, gender equality and social inclusion (GESI)-responsive teaching and learning in 30 target USS.[4] The Framework will provide a guide for schools to adopt a holistic approach to develop and improve STEM programs over time through change in key areas including school governance, curriculum, instruction, teacher capacity, infrastructure, extracurricular activities, and community outreach. Customized to the local context, the framework will provide a range of action plans defining expected behaviors and achievable targets suitable for schools of varying capacities and facilities. The framework will be piloted in 30 USS, including 15 SRS, during the project for review and scale up among USSs.

(iii) Develop and facilitate CPD for at least 25 NIE STEM-subject lecturers on the school-based STEM Framework, effective and innovative teaching strategies, integration of digital education in USS STEM teaching, action research methods, and improving pedagogical content knowledge.[5]

(iv) Develop and facilitate CPD for 775 USS STEM teachers (including THS technical teachers) from 50 SRS, 101 US NWSs, and 4 GTHSs on effective and innovative teaching strategies, integration of technology in USS STEM teaching, action research methods, and improving pedagogical content knowledge.

(v) Apply Learning and Knowledge Management Systems for teacher pre-service training and CPD (digital delivery).[6] The teacher trainings will leverage and increase use of the existing online Ministry of Education, Youth and Sport (MoEYS) learning and knowledge management system.

(vi) Develop and implement competency-based STEM assessment for USS.[7] Aligning with modern teaching methods, competency-based assessments will shift focus from theory to application and creation, encouraging change from the current textbook focused, rote learning behaviors resulting from the existing 2-day Grade 12 national summative assessment. Delivered at school level, the competency-based assessment will comprise a combination of student portfolio-based (including projects), oral, written, and presentation activities encouraging 21st century skills development. STEP UP proposes incorporation of these modern assessment techniques into pre-service training and CPD activities to build capacity of teachers to use assessment as a planning tool. EdTech solutions such as computerized testing may play a role in the design of suitable competency-based assessment techniques.

(vii) Strengthen utilization of EdTech in technical education programs in four target GTHS. STEP UP will develop and implement information technology-related modules (Years 1–3) in the targeted GTHS technical education programs. To

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[4] The 30 pilot schools consist of 5 SRS in smart provinces, 10 SRSs in disadvantaged provinces, 10 upper secondary network schools, and 5 general USSs.

[5] This activity will build upon and enhance the work of USESDP 2 at NIE, rather than replicate or overlap with what has been done since 2019.

[6] LMS will store resources for teachers and students (i.e., STEM lesson plans and modules for use in pre-service training and all USS. Inquiry, problem, and project-based teaching and learning strategies will be applied in USS classrooms using blended learning). NGS teachers are currently preparing lesson plans and resources for use by other schools. *Kolibri* is an example of an offline and online LMS (https://learningequality.org/kolibri/).

[7] Performance-based assessment is developmental focused on improving student learning outcomes as THS technical subjects, Years 1-3, currently do, rather than punitive.

address workforce development needs, modules will be developed covering: (a) information technology office equipment maintenance, (b) multimedia digital graphics and videography, (c) application and information and communications technology systems, and (d) networking and/or telecommunications. These modules will be integrated into existing technical courses. STEP UP will support the Vocational Orientation Department and the target GTHS through technical assistance to design and develop course material (print and digital) to integrate with their existing curriculum. The project will procure appropriate additional equipment (above the current EdTech equipment allotted to target schools) needed to support the additional modules.

8. **Output 3: Institutional and school leadership and management capacity strengthened for effective quality improvement.** This output addresses the important role school leaders and education staff on STEM education delivery and learning outcomes. This output includes the following:

(i) Support MoEYS's aim to enable and empower all schools, their communities and stakeholders to take more active responsibility for improving the learning of students through school-based management (SBM). It will support schools in implementing their SBM action plans and develop an objective assessment tool to rigorously measure progress in meeting the SBM effectiveness standards.

(ii) Develop and facilitate CPD each year for 155 target USS school directors including school leadership and management, the teacher career pathways, instructional supervision, partnership building, resource mobilizations, and stakeholder engagement.[8]

(iii) Establish at least three USS partnerships on STEM CPD and curriculum enhancement established and implemented with tertiary and polytechnic education and training institutions, private or nongovernment organizations, international schools, and industry and business. Multi-school partnerships should be explored at the provincial level. ITC will provide guidance on how to promote active participation from STEM teachers (especially female teachers) in the use of these partnerships. STEP UP will support operating costs of meetings to facilitate the partnerships.

(iv) Establish at least three partnerships between USS and post-secondary or private sector to enhance student learning and career preparation including guest speakers, site visits, work experience programs, etc. STEP UP will provide school grants to SRS and to NWS to support these activities. Joint delivery programs, such as immersion programs and internships that provide a more in-depth and hands-on learning experience in a workplace environment will be prioritized. Schools will need to prepare and submit action plans to trigger disbursement of these funds.

(v) Strengthen system-wide analysis and planning functions through capacity development of technical and education specialists, and integration of OpenEMIS census and school information systems. OpenEMIS software will upgrade the existing education management and information system (EMIS) and be customized to the Cambodia context by EMIS with the support of a consulting firm. The firm will support trainings and the rollout of OpenEMIS from the national to

[8] Integrate the school-based STEM Framework, where appropriate (i.e., 25 SRS as per Activity 2.2)

school levels. School performance outcomes for each target school will be compared year by year to demonstrate areas of improvement and address issues. OpenEMIS, once operationalized, will enable a more effective and efficient process for acquiring this data.

(vi) Support the publishing and dissemination of five research papers on STEM education teaching and learning. STEP UP will support writing and research proposal development workshops targeted at SRS and NWS teachers and school leaders. The five best proposals will be awarded a grant for funding of the research activities including, but not limited to data collection and analysis, printing, and dissemination workshops. The findings of the research will feed into school improvement plans.

(vii) Upskill at least 50 technical and education specialists, education staff of provincial and district offices, and school managers (with at least 50% available female specialists and education staff) in project implementation, gender-based analysis, policy analysis, and results-based monitoring and evaluation. These selected specialists will develop skills to contribute to STEP UP and future education project management and implementation through a series of hands-on workshops and facilitated local and international field visits and trainings.

D. Project Description and Reach

9. The STEP UP project component will cover 258 target schools in various provinces across Cambodia such as Ratanakiri, Mondulkiri, Kratie, Preah Vihear, Kampong Thom, Stung Treng, Udor Meanchey, Kampong Cham, Pursat, Kampong Speu, Koh Kong, Battambang, Preah Sihanouk, Banteay Meanchey, Siem Reap and other areas. Details on the list of schools to be covered under STEP UP is provided in **Table 1**.

Table 1 : Number of Schools disaggregated by IP provinces

No.	IP Provinces	No. of School with STEP UP intervention	No.	IP Provinces	No. of School with STEP UP intervention
1	Banteay Meanchey	2	5	Rattanak Kiry	4
2	Battambang	1	6	Mondul Kiry	2
3	Kampong Thom	2	7	Preah Vihear	6
4	Kratie	3			
	Total	**08**			**12**

II. LEGAL AND POLICY FRAMEWORK

A. Relevant National Laws Concerning Indigenous Peoples

10. **Cambodia Constitution and the Land Law:** In the context of Cambodian legal framework, Article 31 of the Cambodian Constitution states that “All Cambodian citizens shall be equal before the law, enjoying the same rights, freedom and fulfilling the same obligations regardless of race, color, sex, language, religious belief, political tendency, birth origin, social status, wealth or other status”; and the promulgation of the 2001 Cambodian Land Law marks explicit recognition of collective land rights of indigenous communities by the State that offer a unique chance for indigenous peoples in Cambodia to exercise their rights to self-determined development that include:

(i) Ownership of the lands is granted by the State to indigenous communities as collective ownership, including all the rights and protections enjoyed by private owners. The exercise of collective ownership rights are the responsibility of the traditional authorities and decision-making mechanisms of the indigenous community, according to their customs and subject to laws such as the law on environment protection. (Article 26).

(ii) No authority outside the community may acquire any rights to immovable properties belonging to an indigenous community. (Article 28).

11. Indigenous communities have the right to collective ownership of their lands, which gives them all the rights and protection of ownership as enjoyed by private landowners. The lands of indigenous communities include residential and agricultural land and encompass land actually cultivated and the lands reserved for shifting cultivation. Indigenous communities shall continue to manage their community land according to their traditional customs, pending the determination of their legal status. Once they are registered as legal entities, communities can apply for the registration of their collective title (Land Law 2001, Article 23 to 25).

12. According to the constitution of 1993 and the Land Law of 2001 five main categories of property on land can be distinguished such as (i) private land, (ii) state public land (all areas need for public services such as roads, river banks, etc.), (iii) state private land (all other areas owned by the state), (iv) communal land, and (v) indigenous land.

13. Cambodia's Administration Law of 2001, Article 43, stipulates the Commune Council's role in protecting and preserving the environment and natural resources. They also have a role in the classifying and setting of boundaries for all forests in their area of jurisdiction, in coordination with the Ministry of Agriculture, Fisheries and Forestry (Forestry Law 2002, Article 10).

14. **Protected Area Law of 2005. Article 21:** The Natural Protection and Conservation Administration shall develop an implementation plan for managing each protected area designated by the Ministry of Environment and pursuant to the national strategic plan. The process of developing the implementation plan for managing each protected area shall be conducted in coordination and consultation with local authorities, local communities, indigenous ethnic minorities, and other stakeholders.

15. **Article 30**. The Natural Protection and Conservation Administration shall have the duties to conduct feasibility studies for organizing a protected area community by identifying a clear location and an appropriate size through consultation and coordination with the local authority, local community and indigenous ethnic minorities.

16. **Article 11.** The Natural Protection and Conservation Administration shall prepare proposals for establishing or modifying any protected areas based on research findings, criteria, management objectives, rights to use natural resources, rights to land ownership, and other relevant factors. The following shall be attached with the proposals for establishing or modifying any protected areas:

(i) A description of the importance of biodiversity, landscape, geography, history, culture, and conservation for the area to be proposed or modified as a protected area.

(ii) A legal description of the area to be proposed or modified with a map of clearly defined scale showing the exact location, boundaries and size of the protected area attached.
(iii) The management objectives of the proposed area and threats.
(iv) Study on the use of natural resources and land in the proposed protected area.
(v) Findings from consultations with relevant institutions and parties and representatives of local authorities located in or near the protected area proposed for establishing or modifying.

17. **Land Concessions 2003 and 2005.** A sub-decree on Social Land Concessions (SLC) was established in 2003 to accompany the implementation of the Land Allocation for Social and Economic Development Project (LASED). The SLC aims at providing state private land for purposes of settlement and family farming to private families particularly the poor, disabled soldiers, and families of deceased soldiers who have no or not enough land.

18. In late December 2005, the ELC sub-decree was established, defining a mechanism to grant state private land through a specific ELC contract to a concessionaire to use the land for agricultural and agro-industrial production. This refers to the cultivation of food or industrial crops, animal raising and aquaculture and the construction of facilities for the processing of domestic agricultural raw materials (Sub-Decree No.146 on ELC, article 2). For an ELC, which can be granted to private or investment companies, it must have been classified and registered in the Land Register as state private land, complying with the necessary legal procedures (Land Law 2001 Article 17, Sub-Decree No.118 on State Land Management article. 3 & 21, Sub Decree No. 146 on ELC article. 2).

19. All responsibilities and authorities in granting ELCs lie with the MAFF. The concession land cannot exceed 10,000 ha and may only be granted when some additional requirements are fulfilled as follows (sub decree No.146 on ELC, article 4 & 5):

(i) A land use plan for the land has been adopted by the Provincial or Municipal State Land Management Committee, and the land use is consistent with the plan.
(ii) Environmental and social impact assessments have been completed with respect to the land use and development plan.
(iii) There are solutions for resettlement issues in accordance with the existing legal framework and procedures. There shall be no involuntary resettlement and access to private land shall be respected.
(iv) Public consultations have been conducted with territorial authorities and local residents, relating to economic land concession projects or proposals.

20. Moreover, the proposal for ELC has to be evaluated against criteria that include the promotion of people's living standards, perpetual environmental protection and natural resource management, avoidance or minimization of adverse social impacts, creation of increased employment and with linkages and mutual support between SLC and ELC.

21. **Decentralization Reform of 2005.** The government has initiated a decentralization program to further be responsive to community needs, indigenous peoples included. This emanates from the Land Law and subsequently passed legislation create additional opportunities for commune council involvement in participatory land use/natural resources and environmental management (NREM) planning by clarifying issues related to state public and state private

property, the designation of communal property that is managed and ultimately owned by indigenous communities, economic and social land concessions, procedures for creation of cadastral maps and land registers and land dispute resolution. While all of these issues can be worked into the commune development planning process, certain areas mandate direct involvement of commune councils.

22. Commune councils have a direct role to play in land conflict resolution procedures, creation of cadastral maps and land registries (both systematic and sporadic) and social land concessions. The provisions for social land concession planning are of critical importance; commune councils initiate the process at the local level, and it mirrors the commune development planning process, therefore creating the opportunity to integrate the two. It is hoped that the rules and regulations related to economic land concessions (industrial agricultural exploitation) will create a similar role, thereby further enhancing the ability of commune councils to be actively involved in land use/NREM planning.[9]

23. **Registration of Lands of Indigenous Communities 2009.** Sub-decrees on tenurial security have been issued by the RGC to put in place procedures whereby IPs can process claims to their rightful lands (provided they are the majority population at commune level). Recognition and certification of lands among IPs are ongoing with the issuance of the 2009 Sub-Decree on Procedures of Registration of Lands of Indigenous Communities.

24. **National Policy on Development of Indigenous Peoples.** The 2009 National Policy on Development of Indigenous Peoples (NPDIP) provides the main policy framework related to indigenous land rights in Cambodia. It also sets out policy directions in the fields of culture, education, vocational training, health, environment, land, agriculture, water resources, infrastructure, justice, tourism and industry, and mines and energy. National Policy on the Development of Indigenous Peoples" has various goals, (i) indigenous peoples shall have a living standard beyond starvation and extreme poverty, (ii) indigenous peoples shall be provided for at least nine years of fundamental education and shall be provided for appropriate vocational skill training courses according to their needs and based on the geographical areas in which they live, (iii) indigenous peoples have been provided for good healthcare services, and (iv) the cultures of indigenous peoples have been carefully protected and safeguarded.

25. **Other Policy Considerations.** Apart from its Constitution and other national laws, Cambodia has adopted and supports the UN Declaration of Rights of Indigenous Peoples (IP) by way of ending discrimination and promoting the rights of Cambodia's recognized IPs.

26. The Cambodian government initiated a decentralization program to be more responsive to community needs, indigenous peoples included. In the mid-1990s, the Cambodian government created the Inter-Ministerial Committee for Ethnic Minorities Development and the Inter-Ministerial Committee for Highland Peoples Development to address indigenous peoples' issues. The Department of Ethnic Minority Development at the Ministry of Rural Development was established in 1999 after the Inter-Ministerial Committee was abolished. The Department mainly works to maintain the culture, beliefs and traditions of IPs through a formal process of establishing the identity and conditions of IP groups in Cambodia (a total of 56 IP groups has been recognized as legal IP groups). The Department operates through IP Offices in the provinces. IPs are

[9] Oberndorf, Robert, B. 2004. Law Harmonization in Relation to the Decentralization Process in Cambodia. Working Paper 31. Cambodia Development Resource Institute, Phnom Penh, Cambodia.

represented in the formal governance structures in Cambodia from the village, commune and through to the district/provincial levels.

B. ADB Safeguard Policy Statement of 2009 for Indigenous Peoples

27. According to ADB's Safeguard Policy Statement (SPS) 2009, the objectives of indigenous peoples safeguards are to design and implement projects in a way that fosters full respect for indigenous peoples' identity, dignity, human rights, livelihood systems, and cultural uniqueness as defined by them. It ensures that ADB-assisted development interventions that may impact indigenous peoples will be consistent with the needs and aspirations of affected indigenous communities and compatible with their culture and social and economic institutions. This IPP recognizes indigenous peoples' vulnerability and ensures that all project impacts will be addressed by the implementing agency. The implementing agency will ensure that affected indigenous peoples have the opportunity to fully participate in and benefit equally from project interventions. The following are the principles of ADB SPS for indigenous peoples:

(i) Screen early on to determine (a) whether indigenous peoples are present in, or have collective attachment to, the project area; and (b) whether project impacts on indigenous peoples are likely;
(ii) Undertake a culturally-appropriate and gender-sensitive assessment of social impacts] or use similar methods to assess potential project impacts, both positive and adverse, on indigenous peoples;
(iii) Undertake meaningful consultations with affected indigenous peoples communities and concerned indigenous peoples organizations to solicit their participation (a) in designing, implementing, and monitoring measures to avoid adverse impacts or, when avoidance is not possible, to minimize, mitigate, or compensate for such effects; and (b) in tailoring project benefits for affected indigenous peoples communities in a culturally appropriate manner;
(iv) Ascertain the consent of affected indigenous peoples communities to the following project activities: (a) commercial development of the cultural resources and knowledge of Indigenous Peoples; (b) physical displacement from traditional or customary lands; and (c) commercial development of natural resources within customary lands under use;
(v) Avoid, to the maximum extent possible, any restricted access to and physical displacement from protected areas and natural resources. Where avoidance is not possible, ensure that the affected indigenous peoples communities participate in the design, implementation, and monitoring and evaluation of management for such areas and natural resources and that their benefits are equitably shared;
(vi) Prepare an IPP that is based on the [assessment of social impacts] with the assistance of qualified and experienced experts and that draw on indigenous knowledge and participation by the affected indigenous peoples communities. The IPP includes a framework for continued consultation with the affected indigenous peoples communities during project implementation; specifies measures to ensure that indigenous peoples receive culturally appropriate benefits; identifies measures to avoid, minimize, mitigate, or compensate for any adverse project impacts; and includes culturally appropriate grievance procedures, monitoring and evaluation arrangements, and a budget and time - bound actions for implementing the planned measures;

(vii) Disclose a draft IPP, including documentation of the consultation process and the results of the [assessment of social impacts] in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected Indigenous Peoples communities and other stakeholders. The final IPP and its updates will also be disclosed to the affected Indigenous Peoples communities and other stakeholders;

(viii) Prepare an action plan for legal recognition of customary rights to lands and territories or ancestral domains when the project involves (a) activities that are contingent on establishing legally recognized rights to lands and territories that indigenous peoples have traditionally owned or customarily used or occupied, or (b) involuntary acquisition of such lands;

(ix) Monitor implementation of the IPP using qualified and experienced experts; adopt a participatory monitoring approach, wherever possible; and assess whether the IPP's objective and desired outcome have been achieved, taking into account the baseline conditions and the results of IPP monitoring. Disclose monitoring reports.

C. Objectives of the Indigenous Peoples Plan

28. STEP UP has been categorized as B for indigenous peoples. This categorization has been prepared in accordance with the ADB SPS on indigenous peoples safeguards. According to the Indigenous People's Safeguards Sourcebook "indigenous peoples safeguards are triggered when a project affects either positively or negatively and either directly or indirectly the indigenous peoples." [10] STEP UP is expected to have positive impacts on indigenous peoples in terms of better improving education in the project area. The project will bring positive benefits to indigenous peoples in project areas, specifically with respect to benefits for indigenous children's education participation, quality of education as well as post-education employment prospects. The project's IPP will maximize the anticipated benefits for indigenous groups.

29. The IPP provides the guidance necessary to support culturally appropriate project implementation for IP beneficiaries. The project will deploy culturally appropriate and gender sensitive consultation processes while engaging IPs. The IPP specifies safeguard provisions to be implemented and monitored during project implementation to ensure that IPs can benefit from project activities.

III. SOCIAL IMPACT ASSESSMENT

A. Method Applied for Social Impact Assessment

30. **Review of secondary data/documents:** As per SIA requirement a selection of documents and data have been reviewed including RGC law and sub-decree and reports related to IPs, ADB's SPS, project documents, and local requirements.

31. **Primary data collection**. In addition to secondary data collection, a TA safeguard specialist was also engaged to collect primary data covering both qualitative and quantitative

[10] According to the Indigenous People's Safeguards Sourcebook, "The borrower/client is responsible for assessing projects and their environmental and social impacts, preparing safeguard plans, and engaging with affected communities through information disclosure, consultation, and informed participation following all policy principles and safeguard requirements." ADB. June 2013. Indigenous Peoples Safeguards. A Planning and Implementation Good Practice Sourcebook (Draft Working Document).

methods of field survey and assessment. As a result, informed consents have been confirmed by six Focus Group Discussions that were carried out with mixed groups of male and female IP students, and six Key Informant Interviews that were conducted with four commune chiefs, eight secondary and upper secondary school principals, two head of IP office of PDRD, and two directors of PDOEYS from Ratanakiri and Preah Vihear province. The field surveys and online interviews were conducted covering five IP Provinces of Ratanakiri, Mondulkir, Stung Treng, Kratie, and Preah Vihear province. Table 2 below indicates details of primary data collection disaggregated by method and target locations. Additional consultations/community support meeting will be carried out to all IP provinces at the time of STEP UP implementation.

Table 2 : Primary data collection disaggregated by method and target locations

No.	Province	Inform Consents/IP community support	FGDs	KIIs	Total
1	Stung Treng	Yes	2		2
2	Ratanakiri	Yes	2	3	5
3	Mondulkiri	Yes	1		1
4	Preah Vihear	Yes		3	3
5	Kratie	Yes	1		1
	Total	Yes	6	6	12

FGD = focus groud discussions, IP = indigenous peoples, KII = Key Informant Interviews
Source: TRTA-SIA Primary data collection, June 2022

32. All applicable COVID-19 preventative measures were applied during the primary data collection with all relevant stockholders and IP communities.

B. Social Impact Assessment Results and Findings

1. Indigenous Peoples in Cambodia

33. Indigenous Peoples are people living in the territory of the Kingdom of Cambodia, who have particular ethnic, social, cultural and economic unity and who practice their traditional lifestyles according to custom. Their agricultural and plantation works on the plots of land they occupy are done according to the custom of collective usage of the land. The National Policy on Development of Indigenous People has concluded that there are a number of indigenous peoples in the Kingdom of Cambodia, such as the Punong, Kuoy, Tumpuon, Charay, Kroeung, Prov, Kavet, Stieng, Kraol, Mil, Kachak, Por, Khaonh, Chorng, Suoy, Thmaun, Lun, Saauch, Roder, Khe, Raang, Spung, Laeun, Samre and other indigenous peoples. Those indigenous peoples (approximately 1 percent of total population) live in a number of provinces, such as Ratanakiri, Mondulkiri, Kratie, Preah Vihear, Kampong Thom, Stung Treng, Udor Meanchey, Kampong Cham, Pursat, Kampong Speu, Koh Kong, Battambang, Preah Sihanouk, Banteay Meanchey, Siem Reap and other areas.

34. The indigenous peoples practice different cultures, traditions, customs, beliefs and languages according to their particular group. As for the main occupations to make their living are shifting cultivation based on their tradition by slashing and burning forests for rotation farming, collection of forest byproducts, hunting, fishing and livestock. Their livelihoods depend entirely on the natural environment. They face hardship and are vulnerable in access to transportation and quality healthcare, and standards of living are also low. Levels of completed education are also lower (para.42).

35. The largest of the ethnic groups in Cambodia are the Khmer who comprise approximately 90% of the total population and they mainly live within the lowland Mekong subregion and the central plains. The remaining 10% are non-Khmer ethnic groups, comprising of Chams (predominantly Muslim and originally from Viet Nam), ethnic Vietnamese, ethnic Chinese, and the indigenous Khmer Loeu (hill-tribes). The non-indigenous ethnic minorities include immigrants and their descendants who live among the Khmer and have mostly adopted, at least nominally, Khmer culture and language[11]. Ethnic minority groups (EMGs) are very mixed group, but typically live in the highlands and mountains. In Cambodia, EMGs mainly live in the north eastern provinces, with some small groups living elsewhere in the north-west and scattered throughout the country. Most of these EMGs are fully assimilated in Khmer society and may no longer identify themselves as EMGs, which would exclude them as per ADB's definition. IP population by province is provided in **Table 3**.

Table 3 : Indigenous People Population by Province

#	Province	Total Population	Number of IP	% of IP to Total Population	Name of IP
1	Banteay Meanchey	8,59,545	0	0	
2	Battambang	9,87,400	820	0.1%	Kouy, Tompuonn, Charay, Kroeung, and Kachak
3	Kampong Cham	8,95,763	0	0	
4	Kampong Chhnang	5,25,932	0	0	
5	Kampong Speu	8,72,219	1,154	0.1%	Kouy, Phnong, and Saouch
6	Kampong Thom	6,77,260	12,825	2%	Kouy
7	Kampot	5,92,845	0	0	
8	Kandal	11,95,547	0	0	
9	Kep	41,798	0	0	
10	Koh Kong	1,23,618	350	0.3%	Chorng
11	Kratie	3,72,825	38,059	10%	Phnong, Kouy, Sting,Mil, Kroal, Thmorn, and Khaonh
12	Mondul Kiri	88,649	39,619	45%	Phnong, Kouy, Sting,Mil, Kroal, Thmorn, Tompuonn, Charay , and Kroeung
13	Phnom Penh	21,29,371	0	0	
14	Preah Vihear	2,51,352	14,402	6%	Phnong & Kouy
15	Prey Veng	10,57,428	0	0	
16	Pursat	4,11,759	1,420	0.3%	Phnong
17	Ratanakiri	2,04,027	97,774	48%	Phnong, Kouy, Sting, Tompuonn, Charay Kroeung, Kavet, Lun, Kachak, and Praov
18	Pailin	71,600	0	0	
19	Preah Sihanouk	3,02,887	126	0.04%	Saouch
20	Siem Reap	10,06,512	441	0.04%	Kouy
21	Stung Treng	1,59,565	10,399	7%	Phnong, Kouy,Kroeung, Praov, Kavet, Sting,Topuonn, Charay, Lun, and Kachak
22	Svay Rieng	5,24,554	0	0	
23	Takeo	8,99,485	0	0	
24	Oddar Meanchey	2,61,252	740	0.28%	Phnong, Kouy,Sting,Kroal, Thmorn,Tompuonn,Charay, andKavet.
25	Tbong Khmum	7,75,296	1,641	0.21%	Sting
	TOTAL	**1,52,88,489**	**2,19,770**	**1.44%**	

IP = indigenous peoples

[11] World Heritage Encyclopedia. List of Ethnic Groups.

Note and source:
1. Total Population: Based on the Cambodia General Population Census 2019.
2. Number of IP: Based on the 2010 Commune Database and 2020 IP Identity Recognition of the Ministry of Rural Development.

2. Indigenous Peoples in Project Areas

STEP UP will cover 50 SRS, 101 upper secondary NWS, 4 general technical high schools and 103 USS in 25 provinces and the capital of which some targeted schools fall within the provinces having the presence of Indigenous Peoples. These provinces are Ratanakiri, Mondulkiri, Kratie, Preah Vihear, Kampong Thom, Stung Treng, Udor Meanchey, Kampong Cham, Pursat, Kampong Speu, Koh Kong, Battambang, Preah Sihanouk, Banteay Meanchey, Siem Reap and other areas. IP residents have been reported in the coverages areas of nine proposed NWS, five USS, and six SRS. There are diverse indigenous peoples such as Punong, Kuoy, Tumpuon, Charay, Kroeung, Prov, Kavet, Stieng, Kraol, Mil, Kachak, Por, Khaonh, Chorng, Suoy, Thmaun, Lun, Saauch, Roder, Khe, Raang, Spung, Laeun, Samre and other indigenous peoples. Indigenous Peoples in these areas maintain their own distinct language and socio cultural practices; however, they do assimilate with mainstream population. The project will bring positive benefits to the indigenous peoples in project areas, specifically with respect to STEM education.

36. Out of the total coverage of 258 targeted schools, based on the available data on indigenous peoples identity registration by MRD, there are 20 schools[12] across seven provinces where majority of the population are indigenous peoples. The total beneficiaries from the 20 schools is estimated at 12,184 of which 3,166 are in Rattanak Kiry, 3,272 in Kratie, 1,813 in Banteay Meanchey, 1609 in Preah Vihear, 1,555 in Kampong Thom, 443 in Mondul Kiry, and 326 in Battambang. A summary of schools located in IP provinces with associated number of beneficiaries is provided in **Table 4 and the details are in ANNEX I, II, & III.**

Table 4 : Indigenous People Beneficiaries

No.	Target IP Provinces	No. of schools	Locations	Total beneficiaries
1	Banteay Meanchey	2	Monkul Borei and Preah Netre Preah Districts	1,813
2	Battambang	1	Samlot District	326
3	Kampong Thom	2	Sandan and Prasat Ballangk Districts	1,555
4	Kratie	3	Krarite town and Snoul District	3,272
5	Mondul Kiry	2	O Raing and Saen Monorum Districts	443
6	Preah Vihear	6	Provincial towns and Rovieng district	1,609
7	Rattanak Kiry	4	Banlung town and O Chum District	3,166
	TOTAL	20		12,184

Source: 2020 IP Identity Recognition, Ministry of Rural Development

[12] These schools are: Hun Sen Mongkul Borei Highschool (Mongkol Borei district, Banteay Meanchey province), Hun Sen Sre Andoung Highschool (Samlot district, Battambang province), Hun Sen Sandan Highschool (Sandan district, Kampong Thom province), Kratie Krong Highschool (Krong Kratie town, Kratie province), Hun Sen Snoul High School (Snoul district, Kratie), Sandan Highschool (Kratie), O Raing Highschool (Oraing district, Mondulkiri province), Hun Sen Tbeng Meanchey Highschool, Hun Sen Hmoset Highschool, Hun Sen Phnom Dek Highschool, Hun Sen Krapum Chhouk Highschool (Preah Vihear province), Hun Sen Phum Thmey Highschool, Anteveasekethan Highchool, BouThang O Chum Highschool (Ratanakiri province), Chup Vary Highschool (Banteay Meanchey province), Hun Sen Ballangk Highschool (Kampong Thom province), Hun Sen Mondulkiri Highschool (Mondulkiri province), Samdech Ov and Samdech Mae Highschool (Ratanakiri province), Rovieng Highschool (Preah Vihear province), and Chea Sim Tbeng Meanchey Highschool (Preah Vihear province).

3. Socio-Economic Profile

37. This section briefly describes the socio-economic profile of the provinces where IP beneficiaries live. The information is collected through various secondary sources such as (i) Cambodia General Population Census 2019; (ii) The 2010 Commune Database and 2020 IP Identity Recognition of the Ministry of Rural Development, (iii) Cambodia Country Poverty Analysis 2014, ADB; and (iv) 2010 Cambodia Demographic and Health Survey.

38. **Demography.** The total population of the 10 provinces covered is 41,99,535. Among the provinces Siem Reap, Kampong Speu, Kampong Thom and Pursat are the highly populated provinces. Siem Reap has the highest population which is 10,06,512 comprises of 24.0% of the total population followed by Kampong Speu. The province of Mondul Kiri has the lowest population among all the provinces covered which is 88,649 comprises of only 2.1% of the total population living in the 10 provinces. However, in terms of children population group i.e., population under the age of 15 years, there is not much variance among the provinces except in the province of Preah Sihanouk. The overall composition of the under 15 years for all the 10 provinces is 29.4%, and in Preah Sihanouk this is about 22.7%, which is significantly less than Mondul Kiri where children comprise 35.0% of the total population of that province. Details are provided in **Table 5**.

Table 5 : Demographic Profile

#	Province	Total Population	% to the total population	% of Population Age Under 15 Year Old
1	Kampong Speu	8,72,219	20.8	28.8
2	Kampong Thom	6,77,260	16.1	32.5
3	Koh Kong	1,23,618	2.9	29.4
4	Mondul Kiri	88,649	2.1	35.0
5	Preah Vihear	2,51,352	6.0	33.5
6	Pursat	4,11,759	9.8	33.1
7	Ratanakiri	2,04,027	4.9	35.0
8	Preah Sihanouk	3,02,887	7.2	22.7
9	Siem Reap	10,06,512	24.0	32.4
10	Oddar Meanchey	2,61,252	6.2	33.7
	CAMBODIA	**41,99,535**	100.0	**29.4**

39. **Indigenous People.** The overall composition of the indigenous people in all the 10 provinces is only about 1.44%. The presence of indigenous people is very high in only two of the provinces Ratanakiri (48.00%) and Mondul Kiri (45.00%). Preah Vihear has 6.00% of the indigenous people and Kampong Thom has 2% of the IP population all. The other six provinces have less than 1% IP people. Details are provided in **Table 6**.

Table 6 : Indigenous People Composition

#	Province	Total Population	% of IP Population
1	Kampong Speu	8,72,219	0.1
2	Kampong Thom	6,77,260	2.0
3	Koh Kong	1,23,618	0.3
4	Mondul Kiri	88,649	45.0
5	Preah Vihear	2,51,352	6.0
6	Pursat	4,11,759	0.3
7	Ratanakiri	2,04,027	48.0
8	Preah Sihanouk	3,02,887	0.04
9	SiemSiem Reap	10,06,512	0.04

#	Province	Total Population	% of IP Population
10	Oddar Meanchey	2,61,252	0.25
	CAMBODIA	**41,99,535**	**1.44**

IP = indigenous peoples

40. **Education.** The overall literacy rate among the 10 provinces covered is 88.5%. In Kampong Speu the literacy rate is the highest at 89.7% followed by Preah Sihanouk 89.4%. Among the provinces the lowest rate of literacy is evident in Ratanakiri (74.2%) and Mondul Kiri (75.8%) and in the rest of the provinces the literacy rate is at least 80% or more. The primary school education attended by 6 to 11 years is seen more in Oddar Meanchey at 91.1% Pursat 90.9% and Koh Kong at 90.8%. The primary level is attainment is the lowest in Mondul Kiri province which is 77.7%. Similarly, the secondary school education attended by 12 to 14 years is seen more in Koh Kong at 94.5% Pursat 92.8% and Preah Sihanouk 91.8%. The secondary level is attainment is the lowest in Mondul Kiri province which is 80.4%. Similarly, the upper secondary school education attended by 15 to 17 years is seen more in Pursat 70.4% and Koh Kong 69.4%. The upper secondary level is attainment is the lowest in Mondul Kiri province which is 50.6%. Details are provided in **Table 7**.

Table 7 : Literacy Status

#	Province	% of Literacy Rate of Population Age 7 +	% of Population Currently Attending School by Age		
			06-11 (Primary)	12-14 (Secondary)	15-17 (Upper Secondary)
1	Kampong Speu	89.7	90.5	91.7	62.2
2	Kampong Thom	82.0	88.4	89.5	66.4
3	Koh Kong	85.2	90.8	94.5	69.4
4	Mondul Kiri	75.8	77.7	80.4	50.6
5	Preah Vihear	79.8	82.2	84.3	55.4
6	Pursat	88.3	90.9	92.8	70.4
7	Ratanakiri	74.2	78.2	85.6	61.5
8	Preah Sihanouk	89.4	89.6	91.8	66.4
9	SiemSiem Reap	81.6	88.3	89.3	64.1
10	Oddar Meanchey	81.7	91.1	90.8	58.5
	CAMBODIA	**88.5**	**90.6**	**91.6**	**67.6**

41. **Household access to amenities..** Among the 10 provinces covered the overall ownership of the houses is 90.7%. The highest ownership is evident from Kampong Speu (97.7%) followed by Kampong Thom and Pursat. The ownership is low in Preah Sihanouk province which is 83.3%. The percentage of households using city power or a generator as a source of lighting varies to a greater extent when the provincial data are compared. Overall 84.0% of the households use city power or generator for lighting their households. The usage of this is high in the province of Preah Sihanouk (94.5%), Kampong Speu (88.6%) and Pursat (81.8%). The use of city power or generator is low in the provinces of Ratanakiri, Preah Vihear, Oddar Meanchey, and Mondul Kiri. Firewood or charcoal is used as a cooking fuel in 68.7% of the households in all the 10 provinces covered. More than 90.0% of the households in the provinces of Oddar Meanchey, Preah Vihear, Kampong Thom, and Pursat are using firewood and charcoal as cooking fuel. The low use of these fuels is seen in Koh Kong and Preah Sihanouk provinces. Access to toilet is a problem as overall 17.2% of the households in all the 10 provinces do not have toilets at their homes. The problem of toilet is more in the provinces of Ratankiri, Preah Vihear and Mondul Kiri where more than 44.0% of the households do not have toilets. Similarly, majority about 62.6% of the households in the 10 provinces are having only one room in their respective dwelling units.

Most of the households in Pursat (81.0%), SiemSiem Reap (72.7%) and Kampong Thom (69.0%) provinces are having one room in their dwelling units. Details are provided in **Table 8**.

Table 8 : Household use/access to different amenities

#	Province	% of Households Owned House	% of Households Using City Power and/or Generator as Source of Light	% of Households Using Firewood and/or Charcoal as Source of Cooking Fuel	% of Households No Use Toilet/None	% of Households Has Only One Room
1	Kampong Speu	97.7	88.6	70.3	22.2	52.8
2	Kampong Thom	95.9	69.9	90.7	18.6	69.0
3	Koh Kong	87.6	75.9	53.6	18.5	56.0
4	Mondul Kiri	86.2	53.8	75.7	44.0	61.1
5	Preah Vihear	93.6	44.3	91.1	46.8	51.1
6	Pursat	95.8	81.8	90.3	21.9	80.9
7	Ratanakiri	88.6	44.2	82.9	48.8	49.6
8	Preah Sihanouk	83.3	94.5	41.4	16.5	56.8
9	SiemSiem Reap	92.5	76.5	81.9	20.6	72.7
10	Oddar Meanchey	93.9	52.8	91.5	29.5	60.4
	CAMBODIA	**90.7**	**84.0**	**68.7**	**17.2**	**62.6**

42. **Health Status:** Disability of members aged 5 years and above is reported from all the provinces without any major variations. Overall about 4.9% of the population in all the provinces in this age group are suffering from disability of different degrees. Deliveries by skilled health care provider are also a problem as about 29.0% of the deliveries are conducted by unskilled providers. The deliveries attended by unskilled attendant is more than 50.0% in the provinces of Preah Vihear, Mondul Kiri, Ratanakiri and Kampong Thom. In Koh Kong and Preah Sihanouk provinces more percentage of deliveries (79.2%) are attended by skilled health care providers. The health treatment seeking behaviour is high as 92.2% of sick persons have sought at least one treatment for their health ailments. This is very high in Pursat province and low in Koh Kong province. For seeking treatment overall about 18% of persons borrowed money, and this is reported be high in provinces of Kampong Thom (37.8%) and Pursat (33.3%). Similarly the overall under-five mortality rate per 1,000 live Births is 54 and this high in the provinces of Mondul Kiri (106), Ratanakiri (106) and Preah Vihear (118). This indicator is reported low at 47 in the province of Oddar Meanchey. Details are provided in **Table 9**.

Table 9 : Health Indicators of different provinces

#	Province	% of Population Aged 5+ With Any Disability	% of Delivered by Skilled Providers	% of Sick Persons who Sought At Least One Treatment	% of Persons Who Borrowed Money When Seeking for Health Care	Under-Five Mortality Rate per 1,000 live Births
1	Kampong Speu	4.5	68.2	93.7	15.8	73
2	Kampong Thom	5.3	47.7	90.6	37.8	67
3	Koh Kong	4.2	79.2	85.2	14.4	63
4	Mondul Kiri	4.9	38.4	93.3	7.1	106
5	Preah Vihear	5.4	28.2	87.6	15.9	118
6	Pursat	5.6	73.9	98.7	33.3	57
7	Ratanakiri	3.6	38.4	93.3	7.1	106
8	Preah Sihanouk	5.7	79.2	85.2	14.4	63
9	SiemSiem Reap	4.5	72.7	86.6	15.2	60

#	Province	% of Population Aged 5+ With Any Disability	% of Delivered by Skilled Providers	% of Sick Persons who Sought At Least One Treatment	% of Persons Who Borrowed Money When Seeking for Health Care	Under-Five Mortality Rate per 1,000 live Births
10	Oddar Meanchey	4.8	64.4	93.9	13.3	47
	CAMBODIA	**4.9**	**71.0**	**92.2**	**18**	**54**

43. **Economy:** The overall poverty rate among the 10 provinces is 22.9%. This is low in the provinces of Preah Sihanouk (15.6%) and Koh Kong (20.3%). In all other provinces it varies between 27.0% to 37.0%. Employment is not a problem as 98.7% of the population aged 15 years and above are engaged in some kind of work. The overall migration rate is 21.5% and this is high in the provinces of Preah Sihanouk, Oddar Meanchey and Koh Kong. The lowest rate of migration is in the province of Pursat, Kampong Speu and Kampong Thom. Details are provided in **Table 10**.

Table 10 : Poverty, Employment and Migration pattern

#	Province	Poverty Rate (%)	% of Employment Rate of Those Aged 15+	% of migrants
1	Kampong Speu	27.7	99.4	10.0
2	Kampong Thom	29.1	99.1	9.7
3	Koh Kong	20.3	99.2	35.1
4	Mondul Kiri	32.9	99.2	31.3
5	Preah Vihear	37.0	98.9	25.2
6	Pursat	27.8	98.5	12.1
7	Ratanakiri	36.2	99.5	23.7
8	Preah Sihanouk	15.6	93.1	51.1
9	SiemSiem Reap	28.8	98.2	15.8
10	Oddar Meanchey	34.3	99.7	37.3
	CAMBODIA	**22.9**	**98.7**	**21.5**

44. **Land Acquisition and Involuntary Resettlement:** No negative impacts are foreseen and the project will not involve any land acquisition and hence, no involuntary resettlement is anticipated in the Project.

4. Situation of Indigenous Peoples in the COVID-19 Pandemic

45. Indigenous Peoples are vulnerable to COVID-19 due to their lack access to health care services. This lack of access presents a barrier to the early detection and timely treatment of COVID-19 infection amongst ethnic group members. And it is relatively link as challenges for IP students in accessing to education and job opportunities. Therefore, the government has a role in ensuring indigenous peoples receive information about COVID-19 prevention and are able to access medical assistance and emergency care regardless of status and without any discrimination.

IV. MEANINGFUL CONSULTATION AND INFORMATION DISCLOSURE

A. Consultation and Participation Mechanisms

46. **Requirements**: A meaningful consultation is a process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people, culturally appropriate to IPs and EGs; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive; (v) enables the incorporation of all relevant views of affected people and other stakeholders into project design and implementation; and (vi) ensures the participation of IPs and EGs in planning, implementation, and monitoring and evaluation of IP related programs.

47. The IP and EGs have been and will be properly informed of all STEP UP activities and interventions. The information includes the specific activities, schedules, impacts, grievance redress mechanism, IPP implementation, and mitigation measures. The information is provided through public meetings lead by project implementation unit (PIU), District/Commune authorities as required in the consultation and participation section of the SPS**.**

48. **Consultation conducted as part of Due diligence and SIA to form an IPP**: During the initial stages of project preparation, consultations with indigenous peoples and beneficiaries were restricted due to the COVID-19 situation. Despite these challenges, a TA consultant carried out consultations with 50 IP students (29 females) in 6six high schools in four provinces, namely Kratie, Stung Treng, Ratanakiri, and Mondulkiri provinces from 27 to 31 January 2022. The ADB Social Safeguard Team conducted another round of consultation with various stakeholders such as (i) two directors of the Provincial Department of Education, Youths and Sports in Ratanakiri and Preah Vihear provinces; (ii) two heads of IP Office from the Provincial Department of Rural Development in Ratanakiri and Preah Vihear provinces; and (iii) eight school directors and four commune chiefs from Ratanakiri and Preah Vihear provinces from July 20 to 22. **Table 11** provides details on the number of consultations with total participation disaggregated by gender. Consultations with IP beneficiaries will be continued during project implementation.

49. The topics discussed during the meeting covered (i) informing the overall design of STEP UP including outputs and activities, (ii) barriers for IP students to complete high school, (iii) potential pull factors for IP students to come to school and to continue their studies, (iv) the benefits of the project for IP students, (v) how to maximise student benefits to continue their learning as part of STEP UP interventions, and (vi) cultural barrier for IPs.

Table 11 : Summary of consultation conducted with IPs and relevant stakeholders

No.	Date	Venue/Mode of meeting	Province	Total	# Female
1	27/01/2022	Sam Pheak Borak USS	Kratie	14	12
2	28/01/2022	Preah Kor USS	Stung Treng	04	04
3	28/01/2022	Preah Reach Bovhanikech USS	Stung Treng	08	02
4	29/01/2022	Samdach Ov Somdach Me USS	Ratanakiri	06	03
5	29/01/2022	Som Thom USS	Ratanakiri	09	05
6	31/01/2022	Mondul Kiri USS	Mondulkiri	07	03
7	20/07/2022	Online	Ratanakiri	09	0
8	21/07/2022	Online	Preah Vihear	09	0
9	21/07/2022	Online	Ratanakiri	04	0

No.	Date	Venue/Mode of meeting	Province	Total	# Female
10	22/07/2022	Online	Ratanakiri	12	0
11	22/07/2022	Online	Preah Vihear	04	0
12	22/07/2022	Online	Preah Vihear	04	0
	TOTAL			**90**	**29 (32%)**

USS = upper secondary school
Source: TRTA-SIA Primary data collection, July 2022

50. The IPP is designed to ensure that indigenous peoples will continue to be consulted during STEP UP project implementation and actively participate in project activities, while also ensuring that the issues and concerns of indigenous peoples are heard, recognized, and responded to by the project implementers. During implementation, the project staff with support from consulting services staff will use simple language and culturally-appropriate consultation methods to:

(i) Ensure that the head of village and commune in IP areas are consulted and made aware of the STEP UP supports and interventions provided by the government;
(ii) Share the benefits as outlined in the IPP with the IP beneficiaries
(iii) Share relevant IPP related information materials translated into local languages with the beneficiaries including the IP beneficiaries;
(iv) Explain the purpose of the STEP UP project outputs and activities.

Table 12: Summary of broad community support and concerns raised by IP/EG

No	Topics/Questions	Key Response from Relevant Persons
1	What is your opinion about the STEP UP project?	• The proposed project will provide good benefits to the students to get access to good/acceptable quality in STEM, especially for remote schools where IP students study.
2	Do you support STEP UP Project?	• IP community leaders and education authorities support the project.
3	What are the general economic activities in the area? What are main economic activities of the IP?	• Majority of IP economic activities are farming and collecting non-timber products. They grow rice, cashew nut, cassava and harvest rubber. • Very few of IP are doing family business.
4	Would you voluntarily provide consent as part of STEP UP project support?	• IP community leaders and education authorities have expressed/consent their support for the project because it will help to increase IP students to study in STEM.
5	What positive impacts and/or benefits do you think the project will have especially on the IP students/teachers?	• Increase IP students to study in STEM. • Help reducing dropout rate especially for the IP female students. • Help to increase IP STEM teachers. • Increase supplies of learning materials especially for the STEM ones. • Expect to have adequate internet for online class. • Improve education management at school level which help provide opportunity for IP students to study.
6	What negative impacts do you think the project may have especially on the IP students/teachers? Any concerns/issues about the project? How to address these concerns?	Generally, the participants do not expect that the proposed project will provide any negative impacts on IP students/teachers. However, they expressed some concerns which can be challenges for the STEP UP project implementation as: • Inadequate teachers especially the STEM teachers. • Inadequate classrooms and lack of learning materials and laboratory materials. • Limited English skills for both IP students and IP teachers.

No	Topics/Questions	Key Response from Relevant Persons
		• Very few IP teachers, especially in STEM subjects which can help IP students to communicate in their native language in cases they face difficulties on technical term. • Limited financial supports for lab activities. • Most IP students are not preferring to study in STEM due to difficult situation to pass final grade 12th exam.
7	Are schools available in your areas that can facilitate IP students to study?	• School is not available for some remote villages which discourage some students living in those areas not to study. • No "Home Stay" to accommodate some students as well as the teachers who come from the far distance to stay. • No proper transport means for some IP students especially who live far away from the school. • Limited number of IP teachers who can explain/communicate/facilitate during the teaching in cases the IP students face language barrier at secondary and upper secondary levels. • Not enough teachers especially the STEM teachers in remote schools (Almost 70% of remote IP schools do not have STEM teachers). • Inadequate learning materials including libraries. • Almost 10% of IP students have dropped out during COVID 19. • IP female students are usually married in very young age (from 13-year-old) which leads to the high dropout rate. In addition, many IP students have left school due to their commitment to help family in economic activities.
8	Do the indigenous people have any challenges for sending their children to school? What is the different between son and daughter?	• Very limited financial sources for sending the children to study. • Most of IP are cultivating quite far from their village and they always take their children with them to the agricultural field for few days/weeks before returning home which the root cause on dropout. • Low return rate on the education investment at the primary level for IP students (no different salary between the primary graduated workers and uneducated workers). • Some schools are far away from their homes and the road condition is difficult to travel especially during rainy season plus the issue on lack of transport means and feeling unsafe for IP female students to go to school. • Inadequate leaning materials supply for STEM with limited number of teachers leading IP students less confidence on the quality of the teaching. • Getting married at a very young age for many IP students especially the female ones.
9	Are there any traditional/cultural constraints of IP community for sending the daughters to go to school?	• It is observed that in addition to young marriage, economic conditions influence sending the daughters to school. • Lack of school facilities (especially toilets) and long distance of schools are seen the main causes of dropping out for IP female students.
10	How do the IP students prefer to study in STEM? What are constraints to study in STEM? IP female students' study in STEM?	• Generally, most IP students are studying in social science classes due to lack of STEM teachers in many rural/remote schools even they prefer the STEM class one. • Lack of STEM teachers especially the IP teacher ones are considered as main challenge for IP students to study in STEM. • Language barrier in technical term can be considered as another challenge for IP students to enrol in STEM.

No	Topics/Questions	Key Response from Relevant Persons
		• The STEM classes have been only recently introduced in some schools so approximate only 15% of total IP students take the STEM class. IP students are not so interested in STEM subjects because it is more difficult to pass final grade 12th state exam than of the social science one. • Lack of learning materials and lab materials are also main causes which discourage IP students to enrol in STEM class. • However, recent observation shows that more and more IP students are interested in STEM subjects especially for those who study hard. It is observed the percentage of IP students enrol in STEM has increased almost 50%.
11	What do main subjects the IP teachers teach in the schools? Are there any STEM IP teachers?	• 50% of available IP teachers in the 3 schools (6 IP teachers out of 39 total teachers) teach in STEM subjects in Ratanakiri. • Only one of the IP teachers in the 4 schools is available and he teaches in STEM subjects in Preah Vihear. • There are around 10% of total teachers in the province are the IP teachers but they mostly teach at primary schools. • Only around 1% of total STEM teachers are IP. • Almost all IP teachers teach in social science classes due to background of their study field in the schools. • It is important to have refresher trainings among those IP teachers to become STEM teachers which can help increasing STEM classes in rural/ remote schools.
12	How can the project benefits to the IP students to increase them to study in STEM subjects?	• Local and school authorities need to mainstream the importance of STEM subjects for labour market requirement to the IP students and IP communities. • Arrange science fairs to attract more students especially the IP students to study in STEM subjects. • Provide adequate lab materials and other learning materials. • Increase numbers of secondary and upper secondary schools in IP areas with supports of sufficient learning materials. • Promote long distant leaning with engaged available STEM teachers in other areas to teach STEM subjects in IP schools. • Create STEM study clubs and arrange science fair/competition between schools to attract IP students to study in STEM. • Special incentive should be provided to IP students who want to choose STEM class (e.g., scholarship, home stay at schools). • Increase STEM teachers especially the IP ones and displace to rural/remote schools. • Provide home stay for IP students whose residents are far from the school which priority to be given to the female IP students. • Strengthen STEM subjects in the primary school level to mainstream the science and technology to attract more IP students.
13	How can the project benefits to the IP teachers in teaching STEM subjects?	• IP teachers should be prioritized to be selected/involved in project activities. • The MoEYS should have specific policy to provide priority/more weight score to local IP residents during teacher recruitment. • Install equipment which can allow the IP teachers to teach online. • It is difficult to recruit IP STEM teachers due to most IP students choose social science class for passing final state exam. So, it should be considered to provide special training to existing IP teachers to become the STEM teachers.

No	Topics/Questions	Key Response from Relevant Persons
14	Views on the STEP UP project and how it is going to benefit the women including IP ones?	• Provide home stay at school compound for the IP students/teachers. • Gender mainstreaming in education program to be aware on the importance of education for women in economic activities. • Conduct regular consultation meetings at IP communities. • Provide home stay at school compound for the IP students/teachers. • Provide scholarships and/or other incentives to support the IP students to study longer especially the IP female students. • Increase IP STEM teachers especially in upper secondary schools which can help to relief the technical language barrier.
15	In your opinion, how can the IP student data be collected properly/accuracy? Are there any constraints that the IP students do not proclaim themselves as IP ones which can be obstacle of accuracy of IP data collection?	• No issue for IP student data collection at school level if required. Teachers responsible for each class can do the task properly. The data is regularly collected by schools. • Cooperation with local authorities is also the best way for accuracy in IP student data collection.
16	Other Suggestions if any	• It is proposed that any consultation meetings should be conducted physically as much as possible due to the limited/instable internet access in these remote areas. • MoEYS should provide adequate learning/lab materials and other incentive to IP students to attract/encourage them to continue studying. • Continue online classes on STEM subjects to those remote schools with assistance from available STEM teachers from urban areas. • Provide special quota for recruitment STEM teachers for IP schools especially in the remote ones. • Provide opportunity/special assistance to IP STEM teachers to improve their skills/study. • Provide home stay for both teachers and students. • Strengthen STEM subjects at primary level.

Source: TRTA-SIA Primary data collection, July 2022

B. Information Disclosure

51. Information on the IPP will be disclosed and made available to the IPs and beneficiaries in the form of leaflets or brochures translated into the local language. For indigenous peoples where a large number of adults cannot read, materials will be produced in popularized form. The MOEYS through its PMU and the provincial implementing agencies which is Provincial Department of Education, Youths and Sports along with assistance from national safeguard, communication and gender specialists, will be in charge of disclosing IPP related information, including project's benefits to the IPs. The IPP for STEP UP will also be disclosed on the ADB and MOEYS websites. The monitoring reports on IPP implementation will also be posted on the ADB website as well as on MOEYS website.

V. PROJECT BENEFITS, IMPACTS, AND MITIGATION MEASURES

A. Benefits

52. STEP UP will support the government's human capital development agenda by improving the effectiveness of upper secondary education. It will increase access to quality education, strengthen STEM teaching and learning, and strengthen education leadership and management capacity. This project continues the ADB's support in Cambodia to the USE system with a focus on STEM education. STEP UP aims to address the increasing demand for high-quality human resources to support Cambodia's rapidly evolving industrial, technology-oriented, and knowledge-based economy. The project interventions will target secondary resource schools that have received previous ADB support as well as equitably broadening the scope to raise standards in other USSs including GTHSs across the country. The STEP UP project will cover 50 SRS, 100 U-NWS, and 103 USS in 25 provinces and capital of which some targeted schools fall within the provinces having the presence of Indigenous Peoples. Out of the total coverage of 253 targeted schools, based on the available data on indigenous peoples identity registration by MRD, there are 20 schools[13] over 7 IP presence provinces which locate in the areas where majority of the population are indigenous peoples. The total 20 schools beneficiaries is estimates for approximately 12,184 in total of which 3,166 in Rattanak Kiry follow by 3,272 in Kratie, 1,813 in Banteay Meanchey, 1609 in Preah Vihear, 1,555 in Kampong Thom, 443 in Mondulkiry, and 326 in Battambang.

B. Mitigation Measures

53. A purpose of this IPP is to (i) outline the potential positive and negative impacts of the project on indigenous peoples, (ii) specify actions to mitigate any negative impacts that may occur during implementation, which are likely to be negligible; and (iii) specify actions to enhance benefits to indigenous people. Table 13 describes the identified potential positive and negative impacts, as well as the measures to mitigate the unavoidable negative impacts that may occur during implementation. The goal is for IP beneficiaries to benefit from the quality education provided and to attain the skills needed for continued education, training or a better job after graduation.

54. To increase support for indigenous peoples and achieve positive outcomes for IPs in the project, the project management unit at central level (PMU) and representatives of the implementing agencies will ensure full implementation of the IPP. To facilitate this process, key features of this IPP are mirrored in the project administration manual. No negative project impacts were identified that would require mitigation measures. However, lack of participation of IP may cause small scale hindrance to the desired positive impacts.

[13] These schools are: Hun Sen Mongkul Borei Highschool (Mongkol Borei district, Banteay Meanchey province), Hun Sen Sre Andoung Highschool (Samlot district, Battambang province), Hun Sen Sandan Highschool (Sandan district, Kampong Thom province), Kratie Krong Highschool (Krong Kratie town, Kratie province), Hun Sen Snoul High School (Snoul district, Kratie), Sandan Highschool (Kratie), O Raing Highschool (Oraing district, Mondulkiri province), Hun Sen Tbeng Meanchey Highschool, Hun Sen Hmoset Highschool, Hun Sen Phnom Dek Highschool, Hun Sen Krapum Chhouk Highschool (Preah Vihear province), Hun Sen Phum Thmey Highschool, Anteveasekethan Highchool, BouThang O Chum Highschool (Ratanakiri province), Chup Vary Highschool (Banteay Meanchey province), Hun Sen Ballangk Highschool (Kampong Thom province), Hun Sen Mondulkiri Highschool (Mondulkiri province), Samdech Ov and Samdech Mae Highschool (Ratanakiri province), Rovieng Highschool (Preah Vihear province), and Chea Sim Tbeng Meanchey Highschool (Preah Vihear province).

Table 13 :Potential Positive and Negative Impacts and Mitigation Measures

Project Outcome/Outputs	Anticipated Positive Impacts	Anticipated Negative Impacts	Proposed Mitigation Measures and Reporting
Outcome **Effectiveness of USE improved** By 2029: a. At least 1.5 percentage point increase in proportion of female and male USE science stream students in 50 SRSs passing Grade 12 national exam (SY2021/22 baseline: TBD)[b] (sex- disaggregated) (OP 1.1) b. At least 2 percentage point increase in proportion of SRSs meeting minimum service standards for outputs[c] (SY2022/23 baseline: TBD)[d] (OP 1.1 OP 6.2.1) c. At least three SRSs accredited as NGSs (SY2022/23 baseline: 0) (OP 1.1; OP 2.1.4; OP 6.2) **Output 1:** **Equitable access to standards-based USE expanded** By 2028: 1a. 117 USSs upgraded with standardized facilities of SRS, with gender-responsive, socially inclusive, and climate-adaptive design considerations (SY2022/23 baseline: 0) (OP 1.1; OP 2.1.4; OP 3.2.5; OP 6.2.1) 1b. STEM and EdTech equipment provided to 258 USS (SY2022/23 baseline: 0) (OP 1.1; OP 6.2.1) 1c. 5-year secondary education MTEF including multi-year budget estimates, aligned with the Cambodia's Secondary Education Blueprint 2030, developed, and implemented (2022 baseline: 0) (OP 6.2; OP 6.2.1)	An increase in IP student performance in STEM subjects at project schools. IP students benefit from improved learning environment and quality STEM education. Better access of IP students to quality USE, especially to STEM subject classes	IPs may be excluded from the project benefits due to lack of USE in IP communities and low class availability of STEM in many remote schools.	• Conduct consultation meetings with IP students/teachers and IP communities during project implementation to increase awareness on the project. • Ensure the participation of indigenous people's leaders, representatives, and community members at the consultations to be carried out during project implementation • Encouragement of STEM teachers and IP students to pursue their teaching and/or study in STEM subjects. • Provide continuous professional development opportunities to IP STEM teachers. • Ensure adequate learning and lab materials in the schools in IP presence provinces to attract IP students to study in STEM subjects.

Project Outcome/Outputs	Anticipated Positive Impacts	Anticipated Negative Impacts	Proposed Mitigation Measures and Reporting
1d. Action Plan to harmonize pathways for US students to the education and technical training programs and certifications based on the Cambodia Qualifications Framework implemented (2022 baseline: 0) (OP 1.1; OP 6.2) **Output 2:** **Quality of STEM teaching and learning strengthened** 2a. 775 USE STEM teachers from 50 SRS, 101 US network schools, and 4 GTHS (at least 50% of available female US STEM teachers) report overall increased pedagogical content knowledge, understanding of innovative teaching strategies and integration of technology into STEM teaching, and are engaged in professional learning communities (SY2022/23 baseline: 0) (OP 1.1.1; OP 2.1.1) 2b. 25 NIE lecturers (including at least 80% of available female teacher-candidates) report overall increased knowledge and understanding of effective and innovative teaching strategies, integration of technology into STEM teaching, and increased pedagogical content knowledge (SY2022/23 baseline: 0) (OP 1.1.1; OP 2.1.1) 2c. CSTC established, fully equipped, staffed, and operational with gender-responsive, climate-smart features and socially inclusive aspects. (SY2022/23 baseline: 0) (OP 1.1; OP 2.1.4; OP 3.2.5) 2d. STEM school-level model action plans for effective teaching, learning, competency-based student assessment piloted in 30 target USS. (SY2022–23 baseline: 0) (OP 1.1; OP 6.2)	IP STEM teachers improve teaching skills. Increased learning and awareness of traditional IP STEM practices through CSTC exhibits.		
		None	PMU safeguards staff monitor implementation of IPP and submission of monitoring report. ADB safeguards team provides training on IPP implementation to Project Management Unit (PMU) staffs and the focal in each project area

Project Outcome/Outputs	Anticipated Positive Impacts	Anticipated Negative Impacts	Proposed Mitigation Measures and Reporting
Output 3: Institutional and school leadership and management capacity strengthened[f] 3a. 155 school leaders (at least 80% of available female school leaders) report overall increased knowledge of understanding of instructional leadership, partnership building, resource mobilization, and stakeholder engagement (SY2022/23 baseline: 0) (OP 1.1.1; OP 2.3.1; OP 6.1) 3b. At least 3 new USS partnerships on teacher and school leader CPD and STEM curriculum implementation established with tertiary and polytechnic education and training institutions, NGO/international schools, and industry and business established and implemented. (SY2022/23 baseline: 0) (OP 6.2) 3c. At least 50% target schools operationalize partnerships for joint delivery programs for USS students with gender-specific professional safety guidelines. (SY2022/23 baseline: TBD) (OP 1.1; OP 6.2) 3d. At least 50 technical and education specialists, teachers, education staff provincial and district offices, and school managers (at least 50% female) report improved capacity on project implementation, gender-based analysis, and results-based monitoring and evaluation. (SY2022/23 baseline: 0) (OP 1.1.1; OP 2.1.1; OP 6.1.1	• Strengthening leadership and management skills of IP school leaders.		

A = assumption; ADB = Asian Development Bank; COVID-19 = coronavirus disease; CPD = continuous professional development; CSTC = Cambodia Science and Technology Center; EdTech = education technology; EMIS = education management information system; GTHS = general technical high school; MoEYS = Ministry of Education, Youth and Sport; MTEF = medium-term expenditure framework; NGO = nongovernment organization; NGS = new generation school; NIE = National Institute of Education; NWS = network school; OP = operational priority; PMU = project management unit; Q= quarter; R = risk; SRS = secondary resource school; STEM = science, technology, engineering, mathematics; SY = school year; US = upper secondary; USE = upper secondary education; USS = upper secondary school; TBD = to be determined; WASH = water, sanitation, and hygiene.

[a] Government of Cambodia, MoEYS. 2021. *Cambodia Secondary Education Blueprint 2030.* Phnom Penh.
[b] The baseline is to be determined in December 2022, once the SY 2021/22 grade 12 assessment data is available.
[c] Completion, dropout, and enrollment rates will be used for output standards. The targets and baselines for minimum service standards will be determined during implementation.
[d] The baseline will be determined in May 2023, after the minimum service standards for outputs are developed, and an assessment of the USSs meeting the minimum service standards for outputs are completed.
[e] Facilities, infrastructure, and teaching and learning spaces to be provided under the project will integrate gender-responsive and socially inclusive design features which respond to the unique and/or special needs of the male and female learners and teachers including provision for separate female and male toilets and safe and potable water.
[f] An additional indicator "At least X% of SRSs meet the school-based management effectiveness standards (SY2023/24 baseline: TBD)" will be added to the DMF at mid-term review or earlier once the school-based management activities to develop the assessment tools and to set a baseline under output 3 have been completed.

Contribution to Strategy 2030 Operational Priorities

Expected values and methodological details for all OP indicators to which this operation will contribute results are detailed in Contribution to Strategy 2030 Operational Priorities (accessible from the list of linked documents in Appendix 2).
Source: Asian Development Bank

Table 14 : IP Indicators aligned with STEP UP Overall Project Implementation:

Project Outputs	Anticipated Positive Impact	Anticipated Negative Impact	Proposed monitorable actions
Output 1: Equitable access to standards-based USE expanded	Better access of IP students to quality USE, especially to STEM subject classes	IPs may be excluded from the project benefits due to lack of USE in IP communities and low class availability of STEM in many remote schools.	By 2027: 1.1: At least 10% of the 117 USSs upgraded with standardized facilities of SRS, with gender-responsive, socially inclusive, and climate-adaptive design considerations are USSs located in IP presence provinces. • 1.2: At least 7% of the 258 USS being provided STEM and EdTech equipment are USS located in IP presence provinces. • 1.3: Ensure 5-year secondary education MTEF including multi-year budget estimates, aligned with the Cambodia's Secondary Education Blueprint 2030, developed, and implemented including in IP presence provinces.
Output 2: Quality of STEM teaching and learning strengthened	IP STEM teachers improve teaching skills.	Limited IP STEM teachers at USS.	2.1: All available IP USE STEM teachers trained under the project report improved pedagogical skills. 2.2: At least 3 schools selected for piloting of STEM school-level framework to enhance effective teaching, learning are located in IP presence provinces.
Output 3: Institutional and school leadership and management capacity strengthened	Strengthening leadership and management skills of IP school leaders.	No anticipated negative effect.	3.1: All available IP school leaders in the STEP UP project schools who were trained under the project report overall increased knowledge of understanding of instructional leadership, partnership building, resource mobilization, and stakeholder engagement. 3.2: At least 50% of STEP UP supported SRS in IP presence provinces operationalize partnerships for joint delivery programs for USS

Project Outputs	Anticipated Positive Impact	Anticipated Negative Impact	Proposed monitorable actions
			students with gender-specific professional safety guidelines. 3.3: At least 5 persons among the total qualified technical and education specialists, teachers, education staff provincial and district offices, and school managers trained by STEP UP report improved capacity on project implementation, gender-based analysis, and results-based monitoring and evaluation are from the IP presence provinces.

Source: STEP UP IPP plan, July 2022

VI. GRIEVANCE REDRESS MECHANISM

55. The ADB SPS states that the borrower is required to establish and maintain a GRM to ensure effective resolution of indigenous peoples beneficiaries' concerns and grievances about project implementation. ADB's SPS 2009 requires the establishment of a responsive, readily accessible, and culturally-appropriate GRM capable of receiving and facilitating the resolution of affected persons' concerns and grievances about the physical, social, and economic impacts of the project. The GRM aims to: (i) reduce conflict, risk of undue delay, and complication in project implementation; (ii) improve quality of project activities and outputs; (iii) ensure that the rights of affected parties are respected; (iv) identify and respond to unintended impacts of projects on individuals; and, (v) maximize participation, support and benefit to local communities. The GRM for the STEP UP will follow the same structures and procedures of GRM and consultation process of the USESDP2.

56. Prior to the implementation of IP plan, a well-defined Grievance Redress Mechanism following ADB SPS requirements will be established and there will be two levels of GRM: at the Project level and at the sub-project level (school & local authority and representatives of IP communities) to address the complaints. This will facilitate to develop mechanisms to resolve complaints in a timely manner through a transparent process that is gender responsive, culturally appropriate, and readily accessible to all indigenous beneficiaries. Regular meetings and consultations will seek to minimize dissatisfaction among project affected people. Local stakeholder's opinions and concerns will be part of the project planning and implementation. The participatory approach will encourage people to raise any concerns before conflicts may appear in the design and implemented on project activities. Grievance redress mechanism will be disclosed to affected communities by school representatives and safeguard staff of PMU. The beneficiaries including the indigenous people beneficiaries can also address their concerns through their representative. The complaint will be screened and assessed for its eligibility and will be negotiated in to a solution between the project representative (focal point) and local authorities, and then fed back to the communities as part of the participatory planning process. If the complaint is not resolved amicably, it will be taken to the PMU or MOEYS steering committee under the MOEYS. The project representative at various levels through the national social safeguard specialist in the PMU will be responsible for recording and reporting any grievances up to the appropriate level. The particular activities will be carried out after such conflict is resolved satisfactorily. In case where affected households or IPs do not have the writing, skills or are unable to express their grievance verbally, they are allowed to seek assistance from any recognized local

group or village head or commune chief. Throughout the grievance redress process, the project proponent especially the working group will ensure that the concerned affected IPs are provided with copies of complaints and decisions or resolution reached.

57. The Science and Technology Project in Upper Secondary Education project will benefit the people including indigenous peoples as beneficiaries and is not expected to have major grievances. However, any unanticipated impacts will be mitigated in accordance with ADB's SPS. People are also free to approach the country's legal system at any time they wish to. People can also approach to ADB's accountability mechanism and may submit complaints directly. The procedure for complaints redresses are proposed as follows:

58. **Stage 1:** The affected people will submit a written complaint to Grievance Redress Committee (GRC) at the sub project level and the GRM at this level will be obliged to provide immediate written confirmation of receiving the complaint. Within 7 working days the committee has been obligated to respond to the aggrieved persons. If the complainant is not satisfied with the decision taken by in the first stage, the complaint may be brought to the Department of General Secondary Education.

59. **Stage 2:** The Department of General Secondary Education has 15 days within after receiving the complaints from the affected people to resolve the complaint. If the complaint cannot be solved in this stage, the affected people can bring the complaint to the PMU level.

60. **Stage 3:** The PMU meets with the aggrieved party and tries to resolve the complaint within 30 days of the submission of the grievance. If the affected parties are not still satisfied with the resolution provided by the committee at PMU level, she/he can bring the complaint to the provincial/municipal court.

VII. MONITORING AND REPORTING

61. The implementation of the IPP will be monitored by the PMU to: (i) ensure that indigenous peoples benefit from the project, (ii) record the number of IP beneficiaries and types of benefits .,(iii) ensure that mitigation measures designed to address negative social impacts and measures to enhance positive impacts are adequate and effective, (iv) determine if the indigenous peoples have any issues or concerns regarding project implementation, (v) determine that adequate consultation is taking place, and (vi) propose corrective actions when needed. The MOEYS through Department of Policy and the PMU will be responsible for monitoring the IPP, making sure that it is implemented per the ongoing project and the reporting follows the existing and established systems.

62. Monitoring and reporting of the IPP will follow the overall project monitoring and reporting arrangements in parallel to the overall project DMF. The PMU, with the support of the national safeguard specialists, community development and gender specialists, will monitor the IPP implementation and ensure compliance with ADB's SPS requirements. All IPP related data will be disaggregated by gender to the extent possible. The progress of IPP implementation will be reported highlighting compliance issues and corrective actions, if identified. The progress of IPP implementation will be prepared and reported in every six month as part of semiannual Social Safeguard Monitoring Report (SSMR) and will be submitted to ADB by the PMU. IPP monitoring reports will be disclosed on ADB's website as well as on the website of MOEYS.

63. In addition to IPP monitoring, ADB will conduct loan review missions that will also review the progress of IPP implementation. A project completion report within 6 months of physical completion of the project will be prepared. The project completion report will be prepared and will analyze the project implementation, project performance and achievements against the targets, and expected project impacts. The project completion report will also include a section on IPP implementation to report whether the objectives of IPP have been achieved, that indigenous peoples have positively benefited from the STEP UP, and that no indigenous peoples have been negatively impacted.

VIII. INSTITUTIONAL ARRANGEMENTS

A. Executing Agency and Project Implementation Organizations: Roles and Responsibilities

64. The executing agency of the project will be the of the Ministry of Education, Youth and Sport (MoEYS) while the implementing agencies (IA) will be the Institute of Technology of Cambodia (ITC), National Institute of Education (NIE) and the Directorate General of Education (DGE).

65. The executing agency will establish a project steering committee (PSC) to provide overall strategic and policy guidance, advice, and direction to the project to ensure achievement of project outcomes and facilitate inter-ministry coordination. The PSC will be co-chaired by the Minister, MoEYS, and Permanent Secretary of State, Ministry of Economy and Finance (MEF). Members of the PSC include: (i) relevant Secretary of State and Under Secretary of State of the EA, (ii) representatives from MEF (General Department of International Cooperation and Debt Management and General Department of Budget); (iii) General Department of Administration and Finance, and Directorate General for Policy and Planning, MoEYS; and (iv) Deputy Director General for Policy and Planning and Chair of the NIE Reform Committee as the Secretariat. The executing agency will also appoint a project director and a project manager, to be responsible for the overall management and day-to-day administration of the project implementation, respectively, and, if necessary, to appoint a deputy project manager to support the work of the project manager. Both the project director and project manager will report to the PSC on a quarterly basis.

66. MoEYS will establish a project management unit (PMU) headed by a project director. The project director will be supported by a project manager who will manage a team to monitor and supervise project implementation activities. The PMU will be supported by full-time counterpart staff and the project management consultant team. The PMU, with the support of its consultants, will provide overall administration and oversight as the executing agency of the project. A PIU will be established at the ITC, NIE, and DGE. The PIUs will be responsible for day-to-day management and operation of project implementation activities.

67. Project stakeholders' roles and responsibilities are presented in Table 4 below.

Table 15 : Project Management Roles and Responsibilities

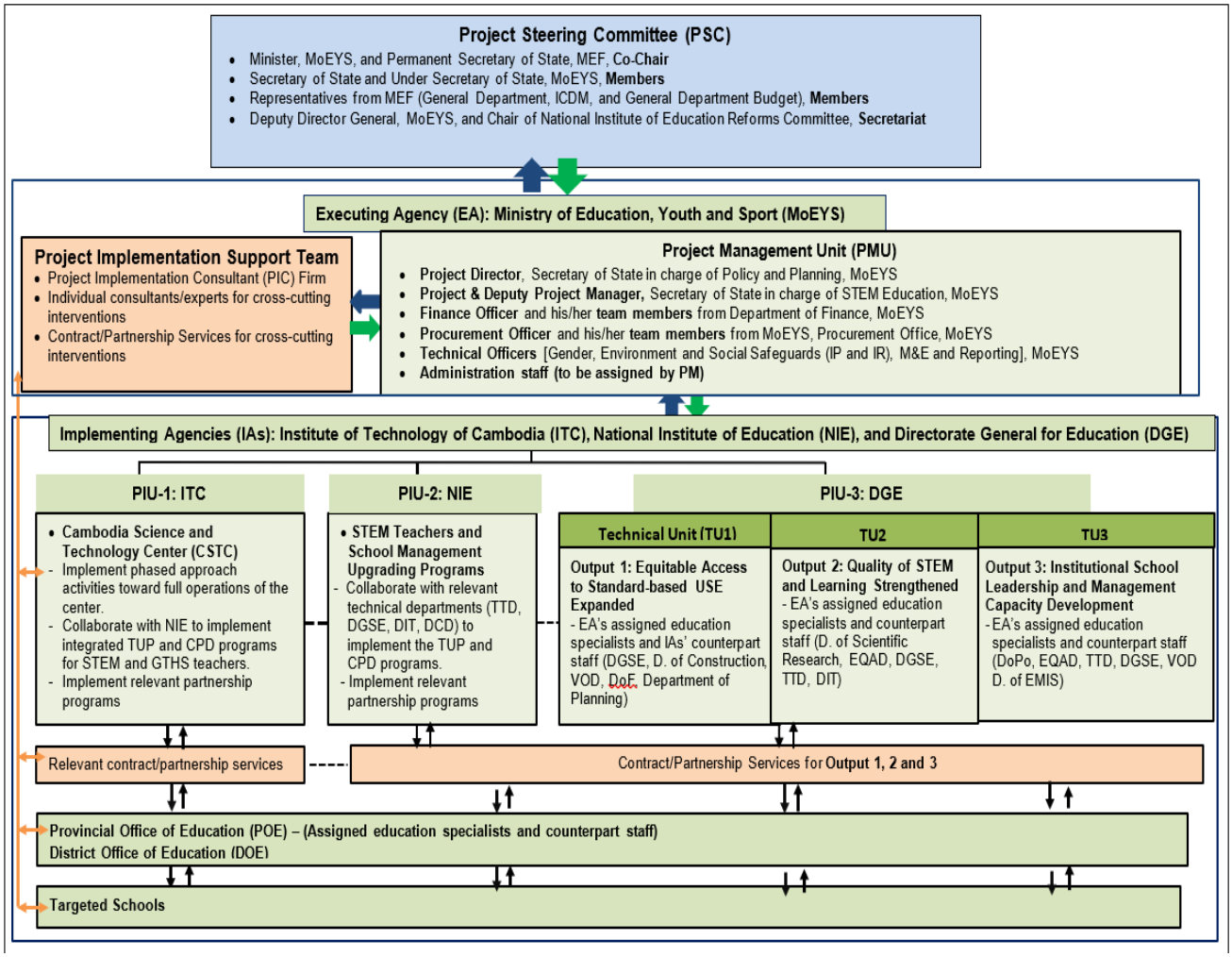
Project implementation organizations	Management Roles and Responsibilities
Ministry of Economy and Finance	Borrower (i) Review and approve the project's AWPB and allocation and release counterpart funds (ii) Facilitate opening an advance account of the EA for transferring funds

Project implementation organizations	Management Roles and Responsibilities
	(iii) Review SOEs, endorse withdrawal applications to ADB, and release funds to the designated advance account (iv) Submit the audited project financial statement on time (v) Provide oversight of procurement, disbursements, and resettlement matters (vi) Process and submit to ADB any request when required, for allocating the loan proceeds (vii) Participate in the regular meetings of the PSC
Project Steering Committee	(i) Oversight body co-chaired by Minister of MoEYS and Permanent Secretary of State of MEF with representatives from senior management of the EA and the General Departments of MEF (ii) Provide overall direction and guidance to the EA and PMU (iii) Convene regular meetings, at least thrice a year during the project implementation period, to review and endorse the project's AWPB (iv) Provide guidance on inter-ministerial or strategic issues
Executing Agency: Ministry of Education, Youth and Sport	(i) Establish the PMU, PIUs, and TIUs (ii) Assign and evaluate the performance of the project manager and deputy project manager, PMU staff, and Heads of TIUs, counterpart staff, including education specialists (iii) Arrange offices for the PIC firm and other contracting services providers (iv) Prepare the project AWPB based on the project implementation schedule for review and endorsement by the PSC and approval by MEF (v) Implement the program in accordance with the loan agreement (vi) Ensure that the project outputs and outcome are delivered and achieved on time and within budget (vii) Submit to the PSC and ADB the quarterly technical progress and semi-annual environment and social safeguards reports and audited project financial statements in accordance with the loan agreement covenants and ADB requirements
Project Management Unit, MoEYS	(i) Administer the project on behalf of the EA (ii) Coordinate with all the PIUs to prepare AWPB for the project by consolidating proposals from the IAs (iii) Facilitate disbursement and WAs for the PIUs (iv) Provide MEF with data and documents for WAs and replenishment (v) Communicate with ADB for any amendments in the reallocation of the loan proceeds (vi) Lead communication and reporting on the project between the EA and the IAs and ADB (vii) Conduct quality assurance review of project documents from the IAs (viii) Establish and maintain a monitoring framework for all the project components (ix) Ensure compliance with agreed guidelines and procedures for the procurement of goods and selection of consultants (x) Recruit consultants who will support the PMU and manage their contracts (xi) Prepare consolidated project financial statements in accordance with government accounting laws and regulations and have it audited by an acceptable auditor to ADB (xii) Manage financial reporting and accountability aspects (WAs, financial reports, audits, bank account statements, etc.) (xiii) Maintain the advance account, including managing disbursements to the subaccount (xiv) Ensure compliance with ADB's financial management requirements (xv) Lead financial management per ADB's Loan Disbursement Handbook (xvi) Be responsible for overall safeguards implementation, monitoring and reporting as delegated by MoEYS, as per the respective safeguards documents
Implementing Agency: Institute of Technology of Cambodia	(i) Manage and supervise the STC as per the term of reference (ii) Establish the PIU-1 and assign a PIU manager and counterpart staff and education specialists to be endorsed by the EA in consultation with ADB before submission to MEF (iii) Facilitate conduct of the feasibility study, and phased implementation and operations of the STC (iv) Provide technical inputs (technical specifications and requirements for procurement) to the PMU's procurement and finance teams and supervise the implementation of relevant procurement contracts and other relevant partnership programs under the IA in accordance with procurement and financial plans and procedures (v) Prepare regular progress reports and submit for compilation to PMU for the EA, PSC, and ADB

Project implementation organizations	Management Roles and Responsibilities
	(vi) Prepare project financial reports and submit for compilation to PMU for the EA, PSC, MEF, and ADB (vii) Ensure compliance with environmental and social safeguards requirements. (viii) Implement climate-adaptive measures of the STC (ix) Implement relevant activities of the GAP (x) Collaborate with the assigned team of education specialists from NIE to deliver integrated STEM CPD programs, including mentoring and coaching support, for USS teachers and GTHS teachers
Implementing Agency: National Institute of Education	(i) Establish the PIU-2 and assign a PIU manager and counterpart staff to be endorsed by the EA in consultation with ADB before submission to MEF (ii) Ensure smooth and successful implementation of the project DMF targets and indicators (iii) Coordinate and collaborate with relevant technical departments to implement the Teacher Upgrading Program and CPD programs (iv) Implement the STEM teachers and school management upgrading programs (v) Provide technical inputs (technical specifications and requirements) to the PMU's Procurement and Finance teams and supervise the implementation of relevant procurement contracts and other relevant partnership programs (vi) Prepare regular progress reports and submit for compilation to PMU for the EA, PSC, and ADB (vii) Ensure compliance with environmental and social safeguards requirements. (viii) Implement relevant activities of the GAP
Implementing Agency: Directorate General for Education	(i) Manage, supervise, and coordinate with PIUs as per the terms of reference to be prepared by the IA and approved by the EA (ii) Establish the PIU-3 and assign a PIU manager, three TIU managers, and counterpart staff to be endorsed by the EA in consultation with ADB before submission to MEF (iii) Manage and supervise TIUs and ensure smooth and successful implementation of the project DMF targets and indicators (iv) Provide technical inputs (technical specifications and requirements for procurement) to the PMU's procurement and finance teams and supervise the implementation of relevant procurement contracts and other relevant partnership programs under the IA in accordance with procurement and financial plans and procedures (v) Prepare regular progress reports and submit for compilation to PMU for the EA, PSC, and ADB (vi) Ensure compliance with environmental and social safeguards requirements (vii) Implement relevant activities of the GAP (viii) Coordinate and collaborate with PIU-1 and PIU-2 to deliver the project's DMF targets and indicators and implement milestone activities.
Technical Implementation Units	(i) Support and report to PIU-3 on implementation progress and actions to address implementation bottlenecks toward successful implementation of activities and key outputs and sub-outputs under PIU-3; and (ii) In collaboration with PIC and individual consultants, contract/partnership services, education specialists and counterpart staff under PIU-1 and PIU-2, POEs and targeted schools to ensure successful implementation of activities and interventions and delivery of DMF targets under each responsible TIU (list of key technical departments under each TIU are presented in Figure 1)
Asian Development Bank	(i) Assist the PMU and PIUs in providing timely guidance at each stage of the project implementation in accordance with the agreed implementation arrangements (ii) Review all the documents that require ADB approval (iii) Conduct periodic loan review missions, a midterm review, a final review mission for the project, and an overall project completion review mission (iv) Monitor and require compliance to all loan covenants (v) Timely process withdrawal applications and release eligible funds (vi) Monitor and require the compliance of financial audit recommendations (vii) Regularly update ADB's project performance review reports (viii) Regularly post on ADB website the updated project information documents, including safeguards documents following ADB's disclosure requirements

ADB = Asian Development Bank; AWPB = annual work plan and budget; CPD = continuous professional development; DMF = design and monitoring framework; EA = executing agency; GAP = gender action plan; GTHS = general technical high school; IA = implementing agency; ITC = Institute of Technology Cambodia; MEF = Ministry of Economy and Finance; MoEYS = Ministry of Education, Youth and Sport; NIE = National Institute of Education; PIC = project's implementation consultants; PIU = project implementing unit; PMU = project management unit; POE = Provincial Offices of Education; PSC = Project Steering Committee; SOE = statement of expenditure; STC = Science and Technology Center; STEM = science, technology, engineering, and mathematics; TIU = technical implementation unit; TTD = Teacher Training Department; USS = upper secondary school; VOD = Vocational Orientation Department; WA = withdrawal application.
Source: Asian Development Bank.

Figure 1 : Project Management and Implementation Arrangements for STEP UP



Source: STEP UP Project Administration Manual.

IX. BUDGET AND FINANCING

68. The indicative cost for implementing and monitoring the IPP is estimated to be $69,300 (**Table 16**). The indicative cost pertaining to IPP implementation will be covered as part of operating costs and other costs funded under the ADB loan for the STEP UP Project.

Table 16 : Indicative IPP Implementation Budget

Items	Unit	Quantity	Unit price ($/unit)	Amount ($)
Consultation[a] and STEP UP Information Sharing	Number	180	200	36,000
Interpretation/translation[b] into IP languages and leaflet/brochure	Lump sum			9,000
Grievance Redress+ Monitoring[c]	Lump sum			18,000
Total				**63,000**
Contingency (10%)				**6,300**
GRAND TOTAL				**69,300**

[a] calculated based on the estimated amount per trip of approximately 200 USD over the total 15 IP provinces by two trips per year.
[b] Estimated based on the average expenditure for 100 USD per year for each IP province.
[c] Estimated based on the average expenditure for 200 USD per year per each IP province.

X. INDICATIVE IMPLEMENTATION SCHEDULE

69. The implementation of IPP will have approximately six years implementation period in parallel to the overall STEP UP project implementation and interventions, from 2023 to 2028.

APPENDIX I: LIST OF 100 U-NWS

No	Province	School Name
1	Banteay Meanchey	Samdech Ov
2		O Ambil
3		Serei Sophoan
4		Teuk Chor
5		HunSen Chhnun Meanchey
6		Rohal
7		O Chrov
8		Nimit
9		Toul Prasath
10	Battambang	Preah Monivong
11		Samdech Ov
12		Fapunleu Selapak
13		Kdol DonTeav
14		Lavea
15	Kampong Cham	SambourMeas
16		Beung Kok
17		DeiDos
18		BR.HS Meanchey
19	Kampong Chhnang	Krong Kampong Chhnang
20		BR.HS Rolear Pa-Ir
21		HS Rolear Pa-Ir
22	Kampong Speu	Sokha Phaly
23		HS Chambak
24		HS Rolaing Chhouk
25		Dipok
26		VealPong
27		BR.HS Chan Thnal
28	Kampong Thom	Steung Sen
29		CheaSim Kampong Thmao

No	Province	School Name
52	Preah Vihear	HunSen Tbeng Meanchey
53		Hmo Set
54		Phnom Dek
55		Krapum Chhouk
56	Prey Veng	Kampong Leav
57		Por Vieng
58		Prey Pnov
59		Pearaing
60	Rotanakiri	HunSen PhoumThmey
61		Anteveasekethan
62		BouThang O Chum
63	Siem Reap	Samdech Ov
64		HunSen Siem Reap
65		Wat Svay
66		Phnom Krom Souvun
67		Sen Sok
68	Preah Sihanouk	HunSen MitaPheap
69		HunSen Khlaing Leu
70		HunSen Prey Nob
71	Steung Treng	HunSen Steung Treng
72		Preahko
73	Svay Rieng	Svay Chhrum
74		Korolko
75		Samaki Donsa
76		Svay Rompea
77	Poursat	Tea Chamrat
78		10 Makara
79	Takeo	Ang Preahsdech
80		HunSen ChheuTeal

No	Province	School Name
30		Baray
31		HS Krova
32	Kampot	Kampot Krong
33		Meas Sophea Banea
34	Kandal	Takmao
35		Preah Thomasras
36		O Kong
37		Koh Chen
38		Prek Tadong
39		Kampong Kong
40	Koh Kong	Pak Klong
41	Kratie	Sandan
42	Mondulkiri	O Raing
43	Phnom Penh	Kambol
44		Borei 100 Khnang
45		BR.HS Arun Vatey
46		Chak Angre
47		Beung Trabek
48		Phsar DeumTkov
49		Yuk Kunthor
50		Toul Tumpoung
51		Beung Keng Kang

No	Province	School Name
81		LeayBo
82		HunSen AngPrey
83		BR-HS Sla Rom
84		Samrong
85		BR-HS Phnom Chiso
86		HunSen Slakou
87		Kdey Toteum
88	Pailin	Sala Krov
89	Keb	BR-HS CharyaVong
90	Oddar Meanchey	DekchoSen Samrong
91		HunSen ChongKal
92		Banteay Ampil
93		HunSen PongRo
94		Trapaing Prasath
95		Trapaing Tav
96	Tbong Khmum	Samdech Mae
97		Tbong Khmum
98		HunSen Kna
99		Peam Chaing
100		HengSamrin Chak

APPENDIXII: LIST OF 103 UPPER SECONDARY SCHOOLS

No	Province	School Name
1	Banteay Meanchey	HunSen Monkulborey Highschool
2		Phnom Thom Hun Sen Highschool
3		Roung Ko HS Highschool
4		Poy Char HS Highschool
5		Nam Tao HS
6		Or Sompor HS
7		Takong HS
8	Battambang	Moung Russey HS
9		Sangke HS
10		Anlong Vil
11		Srae Andong HS
12		Bo HS
13		Rokhakiri
14		Ta Kream HS
15	Kampong Cham	Tameang HS
16		Lavea
17		HunSen Speu
18		Bos Knao
19		KohSotin
20		KromPreah Mohaleab
21		Mohamonkul MohaSeak
22		HunSen Sangkeub
23		HunSen Kchao
24		Steung Trang
25		HunSen Peam Koh Sna
26	Kampong Speu	HunSen Bat Deung
27		HunSen Anlong Chrey
28		24 Kanha
29		TrengTra-Ying
30		PreahReach Beda Ekareach
31		Sras Banteay HS

No	Province	School Name
52	Kampot	Ang Chek
53		Trapaing Bei
54		Norodom Ranarith
55		Preah Reach BedaCheat
56		Touk Meas
57		Boriveas
58		Angkor Chey
59		Ang Svay Pumsen
60		Ang Stok
61		Prek Tnot
62		Ang Romeas
63	Siem Reap	GTHS Pouk
64		Athibadei
65		Kampong Kdey
66		Dam Dek
67		28 Makara
68		Svay Leu
69		Angkor Chum
70		Srae Noy
71	Takeo	Tnal Bambek
72		HengSamrin Prey Lavea
73		Banoy
74		Angko Borei
75		Tonle Bati
76		ChheuTeal Chhrum
77		Sok-An Tonlorb
78		Ang Roneab
79		Tnot Chhum
80		Ang Tasom
81		Koh Andet
82		Kampong Chak

No	Province	School Name
32	Kampong Thom	HunSen Phnom Santouk
33		Kro Ya
34		HunSen Rong Roeung
35		CheaSim Pralay
36		HunSen Chamna Leu
37		Rasmey Sophoan
38		Ta Aok
39		HunSen Sandan
40		Vong MeanRith
41	Kandal	Deum Russey
42		HunSen Bandav
43		HunSen Khlaing
44		HunSen Peam Ta-Ong
45		HunSen PeamRaing
46		HunSen Ang Snoul
47		HunSen AngPoPeay
48		HunSen Trapaing Tnot
49		ReachBoKri
50		Krang Yov
51	Phnom Penh	Toul Svay Prey

No	Province	School Name
83	Svay Rieng	Pong Teuk
84		Bavit (GTHS)
85		Preah Ponlea
86	Prey Veng	Ba Phnom
87		Beung Preah
88		Kampong Trabek
89		Kampong Trabek
90		Chan Krisna
91		ីHunSen Takouk
92		Mitapheap Khmer-Japan
93		Damrei Poun
94	Tbong Khmum	Krek
95		Krouch Chmar
96		Dambae
97		Memut
98		HunSen Knar
99		Samdach Mae
100	Kratie	Kratie Krong
101		Snoul
102		Silavity KeatChhun
103	Svay Rieng	Svay Chhrum

Appendix III: LIST of 50 SECONDARY RESOURCE SCHOOLS:

ល.រ	រាជធានី ខេត្ត	កូដ	ឈ្មោះសាលា	
ProvinceID	Province	school	Name_Location_KH	Types of Teachers
1	Banteay Meanchey	1040210901	វិទ្យាល័យ ជប់វារី	USS
1		1060206903	វិទ្យាល័យ ហ៊ុន សែន ខ្ជាក្ងន	USS
1		1100202902	វិទ្យាល័យ ប៉ោយប៉ែតក្រុង	USS
2	Battambang	2030201901	វិ.នេតយ៉ង់	USS
2		2040101901	វិ.បវេល	USS
2		2010605901	វិ.ហ៊ុនសែន ភ្នំសំពៅ	USS
3	Kampong Cham	3050209901	ព្រះសីហនុ	USS
3		3030804901	ហ៊ុនសែន ស្គន់	USS
4	Kampong Chhnang	4030201901	វិទ្យាល័យព្រះបាទសុរាម្រឹត	USS
4		4010405901	វិទ្យាល័យ ហ៊ុន សែន បរិបូណ៌	USS
5	Kampong Speu	5051109901	វិទ្យាល័យ ឧដុង្គ	USS
5		5020307902	វិទ្យាល័យ កំពង់ស្ពឺ	USS
6	Kampong Thom	6070302902	វិទ្យាល័យ កំពង់ថ្ម	USS
6		6030902901	វិទ្យាល័យ កំពង់ធំ	USS
6		6030102902	វិទ្យាល័យ ហ៊ុនសែន បល្ល័ង្ក	USS
7	Kampot	7080403901	ព្រះរាជសម្ភារ	USS
7		7030402901	ហ៊ុន សែន ឈូក	USS
8	Kandal	8110401902	វិទ្យាល័យ ហ៊ុន សែន សេរីភាព	USS
8		8091402901	វិទ្យាល័យ ទេពប្រណម្យ	USS
8		8041108901	វិទ្យាល័យ ហ៊ុន សែន កោះធំ	USS
9	Koh Kong	9040105901	វិទ្យា.កោះកុង	USS
9		9060604901	វិទ្យា.ស្រែអំបិល	USS
10	Kratie	10021004902	វិទ្យាល័យ ក្រចេះក្រុង	USS
10		10040706901	វិទ្យាល័យ ហ៊ុន សែន សម្ព:បុរ:	USS
11	Mondulkiri	11050304901	វិទ្យាល័យហ៊ុន សែន មណ្ឌលគីរី	USS
12	Phnom Penh	12090520901	វិទ្យាល័យចំណេះទូទៅនិងបច្ចេកទេសហ៊ុនសែនជម្ពូវ័ន	USS
12		12120802901	វិទ្យាល័យ ច្បារអំពៅ	USS
13	Preah Vihear	13080101901	វិទ្យាល័យ ជា ស៊ីម ក្រែងមានជ័យ	USS
13		13050401901	វិទ្យាល័យ រវៀង	USS

លរ	រាជធានី ខេត្ត	កូដ	ឈ្មោះសាលា	
ProvinceID	Province	school	Name_Location_KH	Types of Teachers
14	Prey Veng	14080102902	វិទ្យាល័យ ហ៊ុន សែន កំពង់ពពិល	USS
14		14130303901	វិទ្យាល័យ ព្រះអង្គឌួង	USS
14		14070501901	វិទ្យាល័យ ពាមរក៏	USS
16	Ratanakiri	16020201901	វិទ្យាល័យសម្តេចឪ សម្តេចម៉ែ	USS
17	Siem Reap	17100401904	វិទ្យាល័យ អង្គរ	USS
17		17060305901	វិទ្យាល័យ ក្រឡាញ់	USS
18	Preah Sihanouk	18010301901	វិទ្យាល័យ ក្រុងព្រះសីហនុ	USS
18		18021402901	វិទ្យាល័យ ហ៊ុន សែន វាលរេញ	USS
19	StungTreng	19040105901	វិ.ព្រះរាជបូជនីយកិច្ច	USS
20	Svay Rieng	20060105901	វិទ្យាល័យ ស្វាយរៀង	USS
20		20070301901	វិទ្យាល័យ ហ៊ុន សែន ប្រសូតិ	USS
21	Takeo	21080202901	ជា ស៊ីម តាកែវ	USS
21		21070805901	សម្តេចឪ	USS
22	Kep	22020103901	វិ.ហ៊ុន សែន ចំការដូង	USS
23	Pailin	23010302901	សាលាវិទ្យាល័យ ហ៊ុន សែន ក្រុងទេពនិម្មិតប៉ៃលិន	USS
24	Oddar Meanchey	24040404901	វិទ្យាល័យ ហ៊ុន.សែន ឧត្តរមានជ័យ	USS
24		24010105901	វិទ្យាល័យ អន្លង់វែង	USS
26	Tbong Khmum	26170112901	សម្តេចតេជោ ហ៊ុន សែន សួង	USS
26		26110404901	ហ៊ុន សែន អូររាំងឪ	USS
15	Pursat	15030705901	វិទ្យាល័យ ហ៊ុន សែន ក្រគរ	USS
15		15050406901	វិទ្យាល័យពោធិ៍សាត់	USS

Appendix IV: SUMMARY RESULTS FROM CONSULTATION MEETINGS AND KEY INFORMANT INTERVIEWS WITH LIST OF PARTICIPANTS

Results of Consultation meetings with School directors and Commune chiefs in Preah Vihear (21 July 2022)

N	Topics	Summary Discussion
1	Have you heard about the Project, or Do you have any information about the project?	• All participants are not aware about the project before.
2	What is your opinion about this Project?	• The proposed project will provide good benefits to the students to get access to good/acceptable quality in STEM, especially for remote schools where IP students study.
3	Do you support this Project?	• They all support the project.
4	Please tell details of various indigenous people /ethnic people. Name of the Ethnic Groups Numbers (%) What is the common language? What is the official language? Are there non-ethnic households If yes, name and percentage What is the general occupation?	• Most majority of IP ethnicity is Koy (from 30% to 80% to total population) and others are Khmer. • Khmer and their lative language. • Almost all of them practice their religion and only very few proportions in Buddhism. • Number of IP students' enrollments have been increased recently.
5	Do the community people understand and speak and write the Khmer language? Do the indigenous people assimilate with mainstream population in terms of socio-cultural and economic activities?	• IP students communicate in Khmer at schools and other public places. However, they communicate only in their native language at home and at their villages. • Most majority IP population has practiced its own belief, tradition, culture for their daily activities. • IP have assimilated with Khmer and other ethnicity in term of economic activities.
6	What are the general economic activities in the area? What are main economic activities of the IP?	• Most majority of IP 's economic activities are farming and non-timber products. They crop rice, cashew nut, cassavas and rubber plantation. • Very few of IP are sellers.
7	Would you volunteer and provide consent to the Project	• IP community leaders have expressed their support for the project because it will help to increase IP students to study in STEM.

N	Topics	Summary Discussion
8	What positive impacts and/or benefits do you think the project will have especially on the IP students/teachers?	• Increase IP students to study in STEM. • Help to increase IP STEM teachers.
9	What negative impacts do you think the project will have especially on the IP students/teachers? Any concerns/issues about the project? How to address these concerns?	• Lack of learning materials and laboratory materials. • Very few IP teachers, especially in STEM subjects which can help IP students to communicate in their native language in cases they face difficulties on technical term. • No financial supports for Lab activities.
10	Are schools available in your areas that can facilitate IP children to study?	• Schools are available for IP students which are not so far aways from their villagers (around 3 KM distance).
11	Do the indigenous people have any challenges for sending their children to school? What is the different between son and daughter?	• General observation, more IP female students than the male students study in the schools.
12	Are there any traditional constraints of IP community for sending the daughters to go to school?	• No tradition is observed which cause to prevent sending the daughters to school from IP parents. Only economic condition can be influenced on sending the daughters to school.
13	How do the IP students prefer to study in STEM? What are they constraints to study in STEM? IP female students' study in STEM?	• The STEM classes have been only recently introduced in these schools so approximate only 15% of total IP students take the STEM class.
14	What do main subjects the IP teachers teach in the schools? Are there any STEM IP teachers?	• Only one of IP teachers in the 4 schools is available and he teaches in STEM subjects.
15	How can the project benefits to the IP students to increase them to study in STEM subjects?	• Increase STEM teachers especially the IP ones. • Provide adequate lab materials. • Arrange science fairs to attract more students especially the IP students to study in STEM subjects.
16	How can the project benefits to the IP teachers in teaching STEM subjects?	• The MoEYS should have specific policy to provide priority/more weight score to local IP residents during teacher recruitment. • IP teachers should be prioritized to be selected/involved in project activities.

N	Topics	Summary Discussion
17	Views on the Proposed Project and how it is going to benefit the women including IP ones?	• Provide financial supports to IP female students such as scholarships and other incentives.
18	In your opinion, how can the IP student data can be collected properly/accuracy? Are there any constraints that the IP students do not proclaim themselves as IP ones which can be obstacle of accuracy of IP data collection?	• No issue for IP student data collection at school level if require. Teacher who is responsible for each class can do the task properly. • Since last few recent years, the IP students do not hesitate to hide their identity.
19	Other Suggestions if any	• MoEYS should provide adequate learning materials and other incentive to IP students to attract/encourage them to continue studying.

Results of Consultation meetings with School directors and Commune chiefs in Ratanakiri (20 July 2022)

N	Topics	Summary Discussion
1	Have you heard about the Project, or Do you have any information about the project?	• The school authorities are aware about the project, but not for the commune authorities
2	What is your opinion about this Project?	• The proposed project will provide good benefits to the students to get access to good/acceptable quality in STEM, especially for remote schools where IP students study.
3	Do you support this Project?	• They all support the project.
4	Please tell details of various indigenous people /ethnic people. Name of the Ethnic Groups Numbers (%) What is the common language? What is the official language? Are there non-ethnic households If yes, name and percentage What is the general occupation?	• Around total 1,000 HHs in each commune (Pok Gney, Andong Mease and Taveng Leu) • From 70% to 80% of the total HHs in the communes are IP which consist of Cha Ray, Tom Pun, Trong and Kreung and others are Khmer. • Khmer and their lative language. • Almost all of them practice their religion and only very few proportions in Buddhism. • Number of IP students' enrollments have been increased recently.

N	Topics	Summary Discussion
5	Do the community people understand and speak and write the Khmer language? Do the indigenous people assimilate with mainstream population in terms of socio-cultural and economic activities?	• IP students communicate in Khmer at schools and other public places. However, they communicate only in their native language at home and at their villages. • Most majority IP population has practiced its own belief, tradition, culture for their daily activities. • IP have assimilated with Khmer and other ethnicity in term of economic activities.
6	What are the general economic activities in the area? What are main economic activities of the IP?	• Most majority of IP 's economic activities are farming and non-timber products. They crop rice, cashew nut, cassavas and rubber plantation. • Very few of IP are sellers.
7	Would you volunteer and provide consent to the Project	• IP community leaders have expressed their support for the project because it will help to increase IP students to study in STEM.
8	What positive impacts and/or benefits do you think the project will have especially on the IP students/teachers?	• Increase IP students to study in STEM. • Help reducing drop out rate, especially for the IP female students.
9	What negative impacts do you think the project will have especially on the IP students/teachers? Any concerns/issues about the project? How to address these concerns?	Inadequate teachers especially the STEM teachers. • Inadequate classrooms. • Lack of learning materials and laboratory materials. • Limited English skills for both IP students and IP teachers. • Very few IP teachers, especially in STEM subjects which can help IP students to communicate in their native language in cases they face difficulties on technical term.
10	Are schools available in your areas that can facilitate IP children to study?	• School is not available for some remote villages which forces some students living in those areas discourage to study. • No "Home Stay" to accommodate some students as well as the teachers who come from the far distance to stay. • No transport means for some IP students especially who live far away from the school. • No/few IP teachers who can explain/communicate/facilitate during the teaching in cases the IP students face language barrier.
11	Do the indigenous people have any challenges for sending their children to school? What is the different between son and daughter?	• The school is far away from their home and road is difficult to travel especially during raining season. • Not enough financial sources for sending the children to study. • Most of IP cultivate far from their village and they always take their children with them to the

N	Topics	Summary Discussion
		agricultural field for few days/weeks before returning home which cause in dropping out. • Getting marriage in very young age.
12	Are there any traditional constraints of IP community for sending the daughters to go to school?	• No tradition is observed which cause to prevent sending the daughters to school from IP parents.
13	How do the IP students prefer to study in STEM? What are they constraints to study in STEM? IP female students' study in STEM?	• More and more IP students are interested in STEM subjects especially for those who study hard. It is observed the percentage of IP students enroll in STEM has been increase almost 50%. • Lack of STEM teachers especially the IP teacher ones are considered as main challenge for IP students to study in STEM. • Language barrier in technical term can be considered as another challenge for IP students to enroll in STEM.
14	What do main subjects the IP teachers teach in the schools? Are there any STEM IP teachers?	• 50% of available IP teachers in the 3 schools (6 IP teachers/39 total teachers) teach in STEM subjects.
15	How can the project benefits to the IP students to increase them to study in STEM subjects?	• Increase STEM teachers especially the IP ones. • Local and school authorities need to mainstream the importance of STEM subjects for labor market requirement to the IP students and communities. • Provide adequate lab materials.
16	How can the project benefits to the IP teachers in teaching STEM subjects?	• Provide priority/more weight score to local IP residents during teacher recruitment. • Teachers including IP one should be recruited/selected from the local communities, if possible/available. • IP teachers should be prioritized to be selected/involved in project activities.
17	Views on the Proposed Project and how it is going to benefit the women including IP ones?	• Provide home stay at school compound for the IP students/teachers. • Gender mainstreaming in education program to be aware on the importance of education for women in economic activities. • Conduct regular consultation meetings at IP communities. • Increase IP STEM teachers especially in IP provinces.

N	Topics	Summary Discussion
18	In your opinion, how can the IP student data can be collected properly/accuracy? Are there any constraints that the IP students do not proclaim themselves as IP ones which can be obstacle of accuracy of IP data collection?	• No issue for IP student data collection at school level if require. Teacher who is responsible for each class can do the task properly. • Since last few recent years, the IP students do not hesitate to hide their identity. • Cooperate with local authority is also the best way for accuracy IP student data collection.
19	Other Suggestions if any	• It is proposed that any consultation meetings should be conducted physically as much as possible due to the limited / instable internet access in these remote areas.

Results of Consultation meetings with Deputy Director of Provincial Department of Education in Ratanakiri (22 July 2022)

N	Topics	Summary Discussion
1	Have you heard about the Project, or Do you have any information about the project?	• Deputy director of PDEYS is aware about the project but does not know exactly the objectives/outputs of the project.
2	What is your opinion about this Project?	• The proposed project is the appropriate one which fits with the needs of the PDEYS to support/provide learning materials including lab ones.
3	Do you support this Project?	• PDEYS has fully supported the project.
4	Would you volunteer and provide consent to the Project	• Support for the proposed project because it will help to increase IP students to study in STEM.
5	What positive impacts and/or benefits do you think the project will have especially on the IP students/teachers?	• Increase IP students to study in STEM. • Increase supplies of learning materials especially for the STEM ones. • Expect to have adequate internet for online class. • Improve education management at school level which help provide opportunity for IP students to study.
6	What negative impacts do you think the project will have especially on the IP students/teachers? Any concerns/issues about the project? How to address these concerns?	• Inadequate teachers especially the STEM teachers. • Most of IP students are not preferring to study in STEM due to very difficult to pass final 12 grade exam. • No negative impact is expected from the proposed project.

N	Topics	Summary Discussion
7	Are schools available in your areas that can facilitate IP children to study?	• School is not available for some remote villages which forces some students living in those areas discourage to study. • Not enough teachers especially the STEM teachers in remote schools (Almost 70%). • No adequate learning materials as well as libraries. • Almost 10% of IP student have dropped out during COVID 19. • IP female students are always married in very young age (from 13-year-old) which leads to high drop out. In addition, many IP students have left school due to helping family in economic activities.
8	Do the indigenous people have any challenges for sending their children to school? What is the different between son and daughter?	• Economic condition of the IP family (Poverty) and need the children to work to support the family. • Low return rate of the education at the primary level for IP students (no different salary between the primary graduated workers and uneducated workers. • The school is far away from their home and road is difficult to travel especially during raining season (Lack of transport means, feeling unsafe for IP female students to go to school). • In adequate leaning material and teachers force the IP students feel no confidence of the quality of the teaching.
9	Are there any traditional constraints of IP community for sending the daughters to go to school?	• No tradition is observed which cause to prevent sending the daughters to school from IP parents. • Lack of school facilities (especially toilets) and long distance of schools are seen the main causes of dropping out IP female students.
10	How do the IP students prefer to study in STEM? What are they constraints to study in STEM? IP female students' study in STEM?	• IP students are not so interested in STEM subjects because it is more difficult to pass final grade 12 state exam than of the social science one. • Lack of STEM teachers especially the IP teacher ones are considered as main challenge for IP students to study in STEM. • Lack of learning materials and lab materials are also main cause which discourage IP students to enroll in STEM class.
11	What do main subjects the IP teachers teach in the schools? Are there any STEM IP teachers?	• There are around 10% of total teachers in the province are the IP teachers but they mostly teach at primary schools. • Only around 1% of total STEM teachers is the IP one.
12	How can the project benefits to the IP students to increase them to study in STEM subjects?	• Increase STEM teachers especially the IP ones. • Provide adequate lab materials and other learning materials. • Increase numbers of upper secondary schools in IP areas with supports of sufficient learning materials. • Promote long distant leaning with engaged available STEM teachers in other areas to teach STEM subjects in IP schools. • Create STEM study clubs and arrange science fair/competition between schools to attract IP students to study in STEM. • Special incentive should be provided to IP students who want to choose STEM class (scholarship, home stay at schools…).

N	Topics	Summary Discussion
13	How can the project benefits to the IP teachers in teaching STEM subjects?	• Provide priority/more weight score to local IP residents during teacher recruitment. • Install equipment which can allow the IP teachers can teach online. • It is difficult to recruit IP STEM teachers due to most IP students choose social science class for passing final state exam. • IP teachers should be prioritized to be selected/involved in project activities.
14	Views on the Proposed Project and how it is going to benefit the women including IP ones?	• Provide home stay at school compound for the IP students/teachers. • Gender mainstreaming in education program to be aware on the importance of education for women in economic activities. • Increase IP STEM teachers especially in IP provinces.
15	In your opinion, how can the IP student data can be collected properly/accuracy? Are there any constraints that the IP students do not proclaim themselves as IP ones which can be obstacle of accuracy of IP data collection?	• Have IP data. The data is regularly collected by schools. • No issue for IP student data collection at school level. Teacher who is responsible for each class can do the task properly. • Since last few recent years, the IP students do not hesitate to hide their identity.
16	Other Suggestions if any	• Provide adequate lab materials. • Continue online classes on STEM subjects to those remote schools with assistance from available STEM teachers from urban areas. • Provide special quota for STEM classes/teachers in IP schools especially in the remote ones. • Provide opportunity/special assistance to IP STEM teachers to improve their skills/study.

Results of Consultation meetings with Deputy Director of Provincial Department of Education in Preah Vihear (22 July 2022)

N	Topics	Summary Discussion
1	Have you heard about the Project, or Do you have any information about the project?	• Never heard before about this project.

N	Topics	Summary Discussion
2	What is your opinion about this Project?	• The proposed project is the appropriate one which fits with the needs of the PDEYS to support/provide learning materials including lab ones. • Provide opportunity on study STEM online for remote schools in which lack of STEM teachers. • Increase STEM teachers which is the main target of the provincial department of Education.
3	Do you support this Project?	• PDEYS has fully supported the project.
4	Would you volunteer and provide consent to the Project	• Support for the proposed project because it will help to increase IP students to study in STEM.
5	What positive impacts and/or benefits do you think the project will have especially on the IP students/teachers?	• Increase IP students to study in STEM. • Increase supplies of learning materials especially for the STEM ones. • Expect to have adequate internet for online class.
6	What negative impacts do you think the project will have especially on the IP students/teachers? Any concerns/issues about the project? How to address these concerns?	• No negative impact is expected from the proposed project. • Inadequate teachers especially the STEM teachers. • Most of IP students are not preferring to study in STEM due to very difficult to pass final 12 grade exam.
7	Are schools available in your areas that can facilitate IP children to study?	• There are inadequate schools for some remote villages which forces some students living in those areas discourage to study.
8	Do the indigenous people have any challenges for sending their children to school? What is the different between son and daughter?	• Economic condition of the IP family (Poverty) and need the children to work to support the family. • Low return rate of the education at the primary level for IP students (no different salary between the primary graduated workers and uneducated workers. • The school is far away from their home and road is difficult to travel especially during raining season (Lack of transport means, feeling unsafe for IP female students to go to school). • In adequate leaning material and teachers force the IP students feel no confidence of the quality of the teaching. • Getting marriage in very young age for many IP students especially the female ones.
9	Are there any traditional constraints of IP community for sending the daughters to go to school?	• No tradition is observed which cause to prevent sending the daughters to school from IP parents.
10	How do the IP students prefer to study in STEM? What are they constraints to study in STEM? IP female students' study in STEM?	• Generally, most majority IP students study in social science classes due to lack of STEM teachers in many rural/remote schools even they prefer the STEM class one.

N	Topics	Summary Discussion
11	What do main subjects the IP teachers teach in the schools? Are there any STEM IP teachers?	• Only approximate 1% of the total teachers is the IP teachers and almost all of them teach in social science classes due to background of their study field in the schools. • It is importance to refresh/ training among those IP teachers to become the STEM teachers ones which can help increasing STEM classes in rural/ remote schools.
12	How can the project benefits to the IP students to increase them to study in STEM subjects?	• Increase STEM teachers especially the IP ones and displace to rural/remote schools. • Provide home stay for IP students whose residents are far from the school which priority to be given to the female IP students. • Strengthen STEM subjects in the primary school level to mainstream the science and technology to attract more IP students. • Provide adequate lab materials and other learning materials. • Increase numbers of upper secondary schools in IP areas with supports of sufficient learning materials. • Special incentive should be provided to IP students who want to choose STEM class (scholarship, home stay at schools…).
13	How can the project benefits to the IP teachers in teaching STEM subjects?	• Provide priority/more weight score to local IP residents during teacher recruitment. • Provide special training to existing IP teachers to become the STEM teachers. • IP teachers should be prioritized to be selected/involved in project activities.
14	Views on the Proposed Project and how it is going to benefit the women including IP ones?	• Provide home stay at school compound for the IP students/teachers. • Provide scholarships and/or other incentives to support the IP students to study longer. • Gender mainstreaming in education program to be aware on the importance of education for women in economic activities. Tradition/belief is not seen as the obstacle to prevent the IP female to study. • Increase IP teachers especially in upper secondary schools which can help to relief the technical language barrier.
15	In your opinion, how can the IP student data can be collected properly/accuracy? Are there any constraints that the IP students do not proclaim themselves as IP ones which can be obstacle of accuracy of IP data collection?	• Have IP data. The data is regularly collected by schools. • No issue for IP student data collection at school level. Teacher who is responsible for each class can do the task properly.
16	Other Suggestions if any	• Need financial supports to promote/improve skills of STEM teachers. • Provide home stay for both teachers and students. • Strengthen STEM subjects at primary level.

N	Topics	Summary Discussion

Table V: Summary Results of Consultations with Key Informants (PDRD)

Topics/Questions	Response from Relevant Persons
Which indigenous people or ethnic groups do people associate with in this village /Commune?	In Ratanakiri: 80% of the total population in the province is IP residents. Tom Pun, Charay, Kachok, Prov, Kreung, Kavet, Phnong and Lon. In Preah Vihear: 15% of the total population in the province is IP residents. 99% is Koy and another 1% are Por and Phong.
Which languages do IP speak?	In Ratanakiri: Most of adult IP speak their native language. Old IP population do not speak Khmer good. However, new IP generation commonly speak Khmer very when they are out of their communities. In Preah Vihear: All IP residents communicate in Khmer, and they know Khmer very well at public place as well as in their villages/communities. Only old persons whose age is above 60-year-old still practice Koy's language.
Are there people in the village(s) who do not speak the Khmer language fluently?	In Ratanakiri: Old IP population do not speak/understand Khmer well especially those who lack of education. In Preah Vihear: IP residents can speak Khmer very well. IP new generation know Khmer better than their IP language. Only two IP villagers in the province where Koy language still speak among new generation.
Are there people in the village who cannot read and write in the Khmer language?	In Ratanakiri: For those IP who have studies/studies can speak and read Khmer. Only for those who have never enrolled in school that cannot read/write Khmer especially old IP generation. In Preah Vihear: For those IP who have studied that can speak and read Khmer. Only for those who have never enrolled in school that cannot read/write Khmer.
Which religions do people confess to in this village / commune Approximate proportions	In Ratanakiri: 98% of IP residents have their own belief or religion practice. Only about 1% is Christian and another 1% is Buddhism. In Preah Vihear: 90% is Buddhist including IP residents. 10% is Christian including some IP residents.

Topics/Questions	Response from Relevant Persons
What local community organizations / groups are there in the village(s)?	In Ratanakiri: The IP communities are dominated by the old persons and head of IP village who are considered the most powerful local leadership in the IP communities whose members are only male. These powerful men are heritage selected from the same families from generation to generation. There is IP Association Committee in the commune whose members consist of 0five IP persons (Al least one female member) who have been selected by the communities with no limited period. The IP Associated Committee aims: To preserve the IP identity. To eligible to receive land community. To eligible to preserve custom land. There are also existing association such as IP women association which is mainly advocated by NGO. In Preah Vihear: In the past, the old persons and head of IP village were the most powerful local leadership in the IP communities. Currently, the same leadership structure as of Khmer villages are applied in the IP communities. There are still very few IP communities still hold their old leadership structures (Old persons and head of IP villages) and keep old traditions/belief. There is IP Association Committee in the commune whose members consist of five IP persons (Al least one female member) who have been selected by the communities with no limited period. The IP Associated Committee aims: To preserve the IP identity. To eligible to receive land community. To eligible to preserve custom land.
Do the villages have a group of elders/leaders based on ethnic group?	In Ratanakiri: Yes. In Preah Vihear: Currently, No. The same leadership structures as in the Khmer's villages/communities are also practices in the IP communities.
How was that group selected or assigned?	Only from the same family members whose generation/ancestors are old person or leader of the village.
What is the role and responsibilities of that group of leaders/elders?	Mainly lead traditional ceremonies or other cultural events and they are also considered as main persons to facilitate daily life activities including conflict resolution.
Do you know about the proposed project about STEP UP project?	Do not know about the project before.
What are your thoughts about the proposed project; do you expect the Project will improve education quality and increase IP students access to quality education especially in STEM subjects?	Fully support the project. Provide the opportunity to more IP students to enrol in STEM subjects. Currently, many IP students have dropped out schools at primary level due to economic condition of the family, far distance of the schools from their home and the influence by the communities that

Topics/Questions	Response from Relevant Persons
	not so many IP children continue their study after the completing of primary school level.
What positive impacts do you expect from the project?	Help more IP students to pursue their study especially in the STEM subjects. Can help providing adequate learning materials, classrooms and lab/lab materials in STEM subjects. Can help reducing the dropping rate of IP female students at secondary/upper secondary levels.
Do you foresee any negative impacts or risks from the project?	No negative impact is seen will be by the project.
Do you support the Project as a community Leader and do you provide your consent for the Project on behalf of the ethnic community?	Yes. Fully support the proposed project because it will help improving the quality of the learning/study/teaching especially in the STEM subjects.
Please provide any other suggestions, concerns or recommendations to the Project People on behalf of the Community	Special allowance and incentive should be given to those STEM teachers and IP students to pursue their teaching and/or study in STEM subjects. Special assistance should be considered to IP students especially the female ones to keep them to study as long as they prefer. Most of IP households are farming and their living condition is almost poor. Ensure adequate learning and teaching materials including lab facilities. Provide home stay for students and teachers with can attract them to study/ stay long in the schools.

LIST OF PARTICIPANTS
Consultation Meeting with Relevant Stakeholders from Ratanakiri and Preah Vihear Province
Date: 20-22 July 2022

#	Name	Age	Sex (M/F)	Occupation	Signature
Meeting with school principals and commune chiefs from Ratanakiri province on 20 July 2022 at 2:00-4:00 pm					
01	Mr. Siv Samphors		Male	Head of Office, Department of Policy, MOEYS	
02	Mr. Mil Chanthorn		Male	Principal of Taveng Highschool. Ratanakiri Province	
03	Mr. Mam Basak		Male	Principal of Andoung Meas Highschool. Ratanakiri Province	
04	Mr. Vai Eng		Male	Malik commune Chief. Ratanakiri Province	
05	Mr. Cheng Heng		Male	Pok Nhai Commune Chief. Ratanakiri Province	
06	Mr. Chroeuk Bunthet		Male	Principal of Pok Nhai Highschool. Ratanakiri Province	
07	Mr. Chan Phearun		Male	Principal of Bokeo Secondary School. Ratanakiri province	
08	Mr. Sambath Kim		Male	Senior Social Safeguard Officer, ADB	
09	Mr. Narin Souk		Male	Social Safeguard Specialist, ADB	
Meeting with school principals and commune chiefs from Preah Vihear province on 21 July 2022 at 08:30 - 10:00 am					
01	Mr. Siv Samphors		Male	Head of Office, Department of Policy, MOEYS	
02	Mr. Bun Pengkheang		Male	Chea Sim Tbeng Meanchey Highschool	
03	Mr. Som Sokhet		Male	Hun Sen Tbeng Meanchey Highschool	
04	Mr. Bun Thoeun		Male	Prome Secondary School	

#	Name	Age	Sex (M/F)	Occupation	Signature
05	Mr. Nhu Sothea		Male	Po Secondary School	
06	Mr. Tuek Lykong		Male	Po Commune Council member	
07	Mr. Nem Thang		Male	Prome commune chief	
08	Mr. Sambath Kim		Male	Senior Social Safeguard Officer, ADB	
09	Mr. Narin Souk		Male	Social Safeguard Specialist, ADB	
Meeting with IP Office, Ratanakiri Provincial Department of Rural Development on 21 July 2022 at 10:00 - 12:00 pm					
01	Mr. Siv Samphors		Male	Head of Office, Department of Policy, MOEYS	
02	Mr. Heng Samoeun		Male	Head of Office, Ratanakiri PDRD.	
03	Mr. Sambath Kim		Male	Senior Social Safeguard Officer, ADB	
04	Mr. Narin Souk		Male	Social Safeguard Specialist, ADB	
Meeting with Director of Ratanakiri Provincial Department of Education, Youths and Sports on 22 July 2022 at 08:30 - 10:00 am					
01	Mr. Siv Samphors		Male	Head of Office, Department of Policy, MOEYS	
02	Mr. Chhiv Kimsay		Male	Deputy Director, PDOEYS	
03	Mr. Sambath Kim		Male	Senior Social Safeguard Officer, ADB	
04	Mr. Narin Souk		Male	Social Safeguard Specialist, ADB	
05	Mr. Mil Chanthorn		Male	Principal of Taveng Highschool. Ratanakiri Province	

#	Name	Age	Sex (M/F)	Occupation	Signature
06	Mr. Mam Basak		Male	Principal of Andoung Meas Highschool. Ratanakiri Province	
07	Mr. Chroeuk Bunthet		Male	Principal of Pok Nhai Highschool. Ratanakiri Province	
08	Mr. Chan Phearun		Male	Principal of Bokeo Secondary School. Ratanakiri province	
09	Mr. Son Vontheara		Male		
10	Mr. Tin Sarom		Male		
11	Mr. Makrara Sou		Male	Head of Office, DPOEYS	
12	Mr. Seng San Deli		Male		
Meeting with Director of Preah Vihear Provincial Department of Education, Youths and Sports on 22 July 2022 at 10:00 - 12:00 pm					
01	Mr. Cheng Limhan		Male	Director, PDOEYS	
02	Mr. Siv Samphors		Male	Head of Office, Department of Policy, MOEYS	
03	Mr. Sambath Kim		Male	Senior Social Safeguard Officer, ADB	
04	Mr. Narin Souk		Male	Social Safeguard Specialist, ADB	
Meeting with IP Office, Preah Vihear Provincial Department of Rural Development on 22 July 2022 at 01:30 - 03:00 pm					
01	Mr. Kong Tan		Male	Had of Office, PDRD	
02	Mr. Siv Samphors		Male	Head of Office, Department of Policy, MOEYS	
03	Mr. Sambath Kim		Male	Senior Social Safeguard Officer, ADB	

#	Name	Age	Sex (M/F)	Occupation	Signature
04	Mr. Narin Souk		Male	Social Safeguard Specialist, ADB	