

TERMS OF REFERENCE/REQUEST FOR PROPOSAL
Professional Service

1. Assignment Information

Assignment Title:	Review Cambodia's Garment and Footwear Industry adaptation toward automation/technologies focusing on youth employment and skills development.
Cluster/Project:	Promoting Decent Youth Employment in Cambodia
Assignment Location	Home-based with travel to factories located in Phnom Penh, Kandal, Kampong Speu, Takeo province, Cambodia.
Assignment Duration	20 October to 25 January 2019

2. Background and Project Description

Cambodia remains a young and growing nation; people under the age of 30 represent two-thirds of its population, which continues to grow at around 1.6% per year. Youth also constitute about 43% of the total working-age population. Moreover, the country is undergoing a rapid demographic transition, with birth rates falling, and the proportion of elderly dependents remaining relatively low. This demographic dividend can be used to further boost economic growth and bring about positive social transformation. Whether the country can realize these benefits in the future, however, is dependent on youth's access to decent and higher value jobs and their ability to start and sustain their enterprises, as well as to successfully respond to rapid technological change driven by the advent of Industry 4.0.

To address these critical issues and support Cambodia to promote skill development and employment for young Cambodians, UNDP is implementing a project on Promoting Youth Employment Project with three key objectives: 1) Contribute to the improvement of sectoral and national policies related to youth skills development and employment through policy-oriented researches and advocacy which includes an analysis of the threats and opportunities presented by Industry 4.0 for youth employment and a co-design of appropriate policy responses following the analysis; 2) Increase human capital for decent and better employment to support Cambodia's Industry 4.0 transition through enabling young working-age Cambodians to participate in the dynamics of rising income from higher value-added manufacturing and services; 3) Increase young entrepreneurs' capability by equipping them with entrepreneurial skills that will allow them to start-up businesses in both rural and urban areas that are responsive to changing industry needs and coordinate efforts and leverage resources from key stakeholders including government, development partners and private sector to promote social impact investment by young entrepreneurs.

Under this youth employment project, UNDP will gather evidence for policy intervention through two separate studies, one of which is a study on Cambodian's youth employment and skills development in the context of automation and technological adoption in the garment and footwear industry.. The study is an integral part of the project and will contribute to the improvement of sectoral and national policies and advocacy work related to youth skills development and the future of employment in Cambodia.

3. Context

Concerns surrounding the arrival of the Fourth Industrial Revolution and a noticeable increase in automation of the production process, the use of digital technologies and their potential impact on Cambodia's economy have been the center of policy discussions in the last few years. Anecdotal evidence suggests although it remains at an early transitional stage, the country's garments and footwear industries

have already experienced automation and adoption of new technologies in their production management and assembly lines while some factories are expecting to face similar directions.

Garment and footwear industries have been a driver of the country's economic growth in the last two decades and the sector employed more than 700,000 workers in 2019, majority of them are young female and low-educated workers migrated from rural provinces. A regional study¹ by the ILO in 2016 suggested that Cambodian salaried-workers in the garment and footwear sectors are at high risk of automation (88%), the highest level compared to other countries in the region. Due to the low-skilled and industry-specific nature of the employment in this sector, getting jobs elsewhere or turning into entrepreneurs themselves will be a daunting challenge for factory workers without adequate facilitation and supports from relevant stakeholders.

In addition, the absence of evidence-based information about the technological changes within the industry, factories' constant difficulties in recruiting new workers and potential costs associated with an investment in machinery and new technologies have made key stakeholders relatively reluctant and undecided in terms of designing related and appropriate policy responses. Despite these concerns, yet there was no common agreement and understanding among key stakeholders and experts inside Cambodia's garment and footwear manufacturing industry. The questions to be answered consist of: what kind of automation and new technologies have happened and will happen? what are the factory's strategic plan and adaptation capacity? how key stakeholders perceive the trend? and what is the potential impact on employment prospect and skills development among current factory workers and workers to be.

Therefore, understanding the depth of the issues from a youth employment and skill development perspective including the threats and opportunities brought about by the automation and technological adoption will help young workers, factories, policymakers and concerned stakeholders to better prepare and design appropriate responses to the transition and to harmonize this youthful workforce with the new technologies within the industry as well as opportunities in other sectors.

4. Objectives of the study

The overall objective of this assignment is to assess and review the adaptation capacity of Cambodia's garment and footwear industry toward automation and new technologies in terms of cost/investment, time, infrastructures, workforce planning and arrangements, skills development, and future job opportunities for young workers. This includes the review of existing literature and the collection of basic information and insights from the factory's production process, factory management, and workers' and trade unions' views on the adoption of new technologies.

The research findings and subsequent program interventions are expected to contribute to advocacy work which results in relevant policy changes and benefit factory workers and Cambodian young men and women in their transition and participation in the future of work.

5. Scope of Work

To achieve the above objectives, the study should address the following aspects:

- 1. Assess and review adaptation capacity of Cambodia's garment and footwear industry toward automation and new technologies** by reviewing existing literature and collecting primary information at factories' production workshops and consulting directly involved stakeholders to

¹ ILO,2016, ASEAN in Transformation: How technology is changing jobs and enterprises, p.xxii.

establish evident-based information and basic understanding around automation and technological adoptions and their outcomes in the garment and footwear manufacturing. The service provider will:

- a) Thoroughly conduct a literature review concerning automation and technologies adoption in the garment and footwear industry in the country.
 - b) Identify key factors preventing factories from adopting and/or pressuring factories to adopt new technologies. This also includes an analysis of government policies to prepare its workforce for the changing nature of the industry.
 - c) Collect data and information on new technologies/machines introduced in the factory's production process and other areas including supply chain planning and workforce management. This includes rolling out a structured survey with management representatives from at least 100 factories in the industry and some factory visits (number of visits to be identified in the detailed research plan).
 - d) Measure the magnitude/kind of job displacements and job creation that has happened and will happen in garment and footwear factories driven by the adoption of new technologies/automation. The analysis shall be supported by quantitative data and case studies.
 - e) Survey and analyze basic views of GMAC, major brands, relevant ministries and key stakeholders on the adoption of new technologies and impact on the young workforce.
 - f) Collect relevant initiatives and assess existing skill upgrading programs offered by factories and the factory's future investment to upgrade the skills of their workers.
 - g) Interview and conduct focus group discussions with workers and trade unions from at least 5 factories for their concerns, understanding and knowledge of technologies and perception towards the arrival of new technologies.
 - h) Suggest approaches and advocacy tools for sensitizing the issues and engaging factories workers, employers, governments in identifying strategies to minimize the potential impact while benefiting from emerging opportunities driven by the adoption of new technologies and harmonizing workforce with these technologies.
2. **Develop policy brief summarizing the key findings and doable approaches for policy and program interventions** to raise public understanding and engagement of stakeholders with the issues, support vulnerable youth groups in skill development and facilitate their transition and participation in this new form of economic structures.

6. Expected Outputs and Deliverables

The final output is the development of evidence-based information on the industry adaptation toward digital technologies and automation:

- Finalized study report incorporating comments/feedback from UNDP team (100 pages max excluding annexes) with an executive summary no longer than 5 pages
- Where relevant, the analysis and comparisons between young men and women, urban and rural and social-economic status might be made and highlighted.
- A policy brief with specific and practical recommendations in response to the key issues and intervention opportunities found in the study.
- A PowerPoint presentation (methodologies, findings, and recommendations)

The service provider is required to meet the following expected milestones and timelines:

N	Deliverables/Outputs	Target Due Dates	Review and Approvals Required
1	Output 1: An inception report which layouts the detail process, methodologies, and work plan correspondent to the scope of the study submitted to UNDP for endorsement	25 October 2019	Youth Employment Coordinator, Program Analyst, and ARR-Programme and Results Unit
2	Output 2: Completion of literature review and list of study questionnaires covering the two sectors.	15 November 2019	
3	Output 3: Submission of a draft research report and present the key findings and recommendations to UNDP.	20 December 2019	
4	Output 4: Submission of a final research report, policy brief, powerpoint presentation after incorporation of feedback/comments from the UNDP project team.	20 January 2020	

7. Institutional Arrangement

The service provider will be working under the direct supervision of the UNDP's Youth Employment Coordinator. The service provider will also be working closely with Programme Analyst in charge of youth employment, country economist and other UNDP's youth employment project team where relevant.

The service provider is expected to liaise closely with relevant government departments (in particular, MoLVT, MoEYS, MoEF), public and private universities/TVET training providers, employers/factory management, workers, employees and youth groups. The service providers are expected to contact informants directly, with limited support from UNDP where the need arises and shall maintain regular communication and timely submit the above deliverables to the project team and program analyst.

The deliverables will be reviewed by the Youth Employment Coordinators and Programme Analyst and subsequently approved by the Head of Programme Unit of UNDP based on confirmation of satisfactory outputs from the reviewers.

8. Duration of the Work

The assignment is expected to be performed within the period of 20 October to 25 January 2020

9. Duty Station

The duty station of the work is a combination of home-based, in Phnom Penh, and short travels to factories located in Phnom Penh, Kandal, Takeo, and Kampong Provinces. The Daily Substantive Allowance (DSA) and transportation for the visits to factories shall be included in the price proposal.

10. Minimum Qualifications of the Service Provider

UNDP is seeking to procure a service provider who can supply three experts with the following required skill sets and experiences for this assignment.

	Service Provider	One Nation Team Leader/Senior Researcher	One National Researcher
Education:		Advanced university degree (at least masters) in a discipline relevant to labor economics, development studies, public policy, employment policy, enterprise management, garments/footwear production, business administration and e-commerce, or other related interdisciplinary	Advanced university degree (at least masters) in economics, public policy, enterprise management, garments/footwear production, industrial engineering (IE), human resource planning, ICT related subjects, skill training or other related interdisciplinary
Experience:	<ul style="list-style-type: none"> • Minimum 5 years of professional experience in research (quantitative and qualitative) and impact analysis work related to manufacturing in garments and footwear, workforce planning, youth employment and skill development, labor market policies, industrial development policy, digital economy and e-commerce. • Previous substantial work engagement in garments and footwear industry, the e-commerce sector is preferred. • Experience working with the private sector, garment factories, multilateral organizations and the UN system is preferred 	<ul style="list-style-type: none"> • Minimum 5 years of professional experiences in research and impact analysis work related to manufacturing in garments and footwear, youth employment, skill development, labor market policies, industrial development policy, digital economy and e-commerce • Previous substantial work engagement in garments and footwear industry, the e-commerce sector is preferred. • Experience working with the private sector, garment factories, multilateral organizations and the UN system is preferred • Experience in youth employment programming is an advantage 	<ul style="list-style-type: none"> • Minimum 3 years of professional experience in research data collection, consolidation and presentation to national stakeholders and beneficiaries • Experience in conducting a survey or working for the private sector (factories, tech-companies) is preferred • Experience in coordinating mission, liaising with diverse stakeholders, and facilitating information and data collection • Experience in human resource management, workforce skill training, or production planning/industrial engineering for enterprises or related work • Experience working with the private sector, garment factories, multilateral organizations and the UN system is preferred

	<ul style="list-style-type: none"> • Experience in youth employment programming is an advantage 		
Competencies:	<ul style="list-style-type: none"> • Possesses up to date knowledge and conceptual understanding of labour economics, industry 4.0, digital economy, automation in apparel and footwear manufacturing, digital/platform economy, Cambodia’s industrial development policies, labour policies, youth skill development and employment creation • Ability to facilitate and conduct research and working with diverse groups include governmental officers, factory management, entrepreneurs, factory workers, and youth • Demonstrates excellent interpersonal skills and ability to work in and with teams • Result orientation • High standard of integrity, gender and diversity sensitivity, discretion and confidentiality 	<ul style="list-style-type: none"> • Concrete knowledge and conceptual understanding of industry 4.0, digital economy, automation in apparel and footwear manufacturing, digital/platform economy, Cambodia’s industrial development policies, labour policies, youth skill development and employment creation • Ability to facilitate and conduct research and working with diverse groups include governmental officers, factory management, entrepreneurs, factory workers, and youth • Demonstrates excellent interpersonal skills and ability to work in and with teams • High standard of integrity, gender and diversity sensitivity, discretion and confidentiality 	<ul style="list-style-type: none"> • Possesses concrete knowledge and conceptual understanding of industry 4.0, digital economy, automation in apparel and footwear manufacturing, digital/platform economy, Cambodia’s industrial development policies, labour policies, youth skill development and employment creation • Ability to facilitate and conduct research and working with diverse groups include governmental officers, factory management, entrepreneurs, factory workers, and youth • Demonstrates excellent interpersonal skills and ability to work in and with teams • Result orientation • High standard of integrity, gender and diversity sensitivity, discretion and confidentiality
Language Requirement:		Fluency in English is required	Fluency in English is required and some ability to communicate in Chinese is an advantage.

Criteria for Evaluation and Selection of the Service Provider

No.	Summary of Technical Proposal Evaluation Forms	Points Obtainable
1	Expertise of organization	300
2	Proposed approach and methodology	350
3	Proposed Personnel	350
	Total	1000

No.	Technical Proposal Evaluation Form 1: Expertise of organization	Points Obtainable
1	Minimum of 5 years' experience in research work and relevant work experiences in related fields.	50
2	Experiences in research and in labour economics, employment policies, labour market survey, the production process in apparel and footwear manufacturing, research related to garment/footwear sector, and skills training and development.	150
3	Significant knowledge of country's economic landscapes, garment and footwear sector, industrial development policies, youth and employment policies, industry 4.0, and the digital economy.	100
	Total:	300

No.	Proposed Approach	Points Obtainable
1	To what degree does the service provider understand the task? Have the important aspects of the task been addressed in sufficient detail?	100
2	Is the scope of task well defined and does it correspond to the TOR?	150
3	Is the presentation clear and is the sequence of activities and the planning logical, realistic and promise efficient implementation?	100
	Total	350

No.	Proposed personnel	Points Obtainable
1	<p>Senior Researcher (Team Leader)</p> <ul style="list-style-type: none"> Advanced university degree in social science, labour economics, development studies, employment policy, enterprise management, industrial engineering, garments/footwear production or related interdisciplinary (20 points) Minimum 5 years of professional experiences in research and impact assessment in industrial sectors, employment and labour market policies, skills development, and industrial development policy (50 points) Previous substantial engagement and sound knowledge in garments and footwear industry, automation and technological 	200

	adoption in the sector, industry 4.0 and digital economy, and youth employment programing (40 points) <ul style="list-style-type: none"> • Ability to facilitate workshops, conduct research and work with diverse groups including governmental officials, enterprise management, factory workers and communities (20 points) • Experience working with the private sector, garment factories, multilateral organizations and the UN system (20 points) 	
2	National Researcher (Team Member) <ul style="list-style-type: none"> • Advanced university degree in economics, public policy, enterprise management, garments/footwear production, industrial engineering (IE), human resource planning, ICT related subjects, or other related interdisciplinary (20 points). • Minimum 3 years of professional experience in research data collection, consolidation and presentation to national stakeholders and beneficiaries (30 points) • Experience in private sector, human resource management, workforce skill training, or production planning/industrial engineering or related work (30 points) • Experience in coordinating mission, liaising with diverse stakeholders(private sector, garment factories, multilateral organizations and the UN system (20 points) 	150
	Total	350

11. Payment Milestones

The consultant will be paid on a lump sum basis under the following installments.

N	Outputs/Deliveries	Payment Schedule	Payment Amount
1	Upon satisfactory completion of output 1 and 2	20 November 2019	30%
3	Upon satisfactory completion of output #3	25 December 2019	60%
4	Upon satisfactory completion of output #4	25 January 2020	10%

Approval

Signature: _____

Name: Dr. Rany Pen

Title/Unit/Cluster: ARR-Programme

Date: _____