# Sustainable Consumption and Production (SCP) Course Outline for National University of Laos

Prepared for

**United Nations Environment Programme (UNEP)** 

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T E R I. University, December 2017 Sustainable Consumption and Production (SCP) Course Laos	Outline for National University of
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# Introduction

As part of the Small Scale Funding & Agreement (SSFA) between United Nations Environment Programme (UNEP) and TERI University, an SCP curriculum has been developed for the undergraduates at National University of Laos. The methodological approach followed for developing the course outline includes review of literature and relevant documents from UNEP, SWITCH Asia, World Bank, ADB, OECD, and GIZ that were specific to SCP, related course outlines from distinguished universities and learning platforms such as University of Queensland and UNEP E-Learning Course, presentation on "The role of education in realizing more Sustainable Consumption and Production (SCP) patterns and the development of a national SCP curriculum" during the Inception mini-workshop held on 4th October 2017 and inputs from technical sessions and formal/informal discussion held during the ToT.

The contents of the course outline were shared with the NUoL participants for their adaptation for final delivery. The curriculum has been structured as follows:

- Course Description: This section introduces the background information about the SCP course and its significance in context of Lao PDR. The course description mentions the key sectors included in the curriculum that are important for mainstreaming SCP. It briefly highlights how the course will benefit the undergraduates and its ultimate objective.
- Course Objective: The course objective states the goals and the learnings that the undergraduate students will achieve from this course. It mentions that key concepts and the knowledge that students will attain which will help them in their career path.
- Course Contents: The course content introduces the name of the module and gives a
  brief description of the contents that make up the module. For this course, a total of 9
  modules have been identified out of which module 1-3 is allocated for imparting basic
  foundation on SCP and its concepts. Modules 4-9 are sector specific wherein each
  module is represented by a priority sector.
- Evaluation Criteria: The evaluation criteria specify how the course will be evaluated and assessed.
- Learning Outcomes: This section talks about what the students will have learnt by the end of this course and links the course objectives to the final outcomes.

# **Course Outline**







Course title: Sustainable Consumption and Production
National University of Laos

**No. of credits (Proposed):** 3

Learning hours (Proposed): 42-48

**Department:** 

Course coordinator/instructors: Course type: Core/ Elective

**Course description:** 

Lao PDR has witnessed rapid expansion in both population and GDP over the past few years with the GDP growth rate remaining over 7% during the period of 2010-2015. Laos has a young population with almost 55% of the people being in the range of age 15-50 years and thus the country is expected to rise and modernize rapidly. Due to this abrupt increase in modernization, there are certain sectors (transport, tourism, industrial, etc.) of the country that will face rapid expansion and as a consequence will lead to serious societal, environmental and health problems if ignored. This course critiques and examines these most important sectors and aims to mainstream SCP interventions to solve the various problems that will accompany the economic growth in these sectors. It is evident that future economic prosperity and transition to sustainability in Laos will be highly influenced by changes in development and businesses as well as in consumption patterns and lifestyles. There are noticeable awareness generation and capacity building initiatives aiming to promote a shift towards sustainable consumption and production (SCP) patterns and resource efficiency for green growth and poverty reduction in the country. The enabling policy environment needs to be strengthened through enhanced capacity of future decision makers in order to ensure balance between demand and supply side towards SCP. Advanced knowledge, skills and commitment of policy makers and graduates today are critical constituents necessary to structure and successfully implement sustainable development policies in future. Till now the significance of SCP and resource efficiency is not well introduced in the country, and hence imparting knowledge to policy and decision makers shall facilitate an enabling environment for comprehensive integration of SCP into policy making. This is being aimed through the first-of-its-kind post graduate course in Laos for young graduates from National University of Laos.

#### **Course objectives:**

 To impart knowledge on SCP concepts, significance and advancements within Laos and wider South East Asia region in order to create a pool of better informed sustainability professionals

- To equip young graduates from National University of Laos with knowledge on demand side and supply side challenges and opportunities relating to SCP
- To disseminate information to the young professionals on the key priority sectors having policy gaps and that require urgent need for mainstreaming SCP

Course Contents		
Module	Topic	
1	Introduction to Sustainable Consumption and Production (SCP)  a) Significance  • SCP and its significance for Sustainable Development  • Linking SCP with Sustainable Development Goals  • Review of SCP Targets under SDG and crosscutting targets and indicators  • Internalizing SCP elements in development goals of poverty reduction, resource efficiency, sustainable livelihoods, climate change mitigation/adaptation	
	<ul> <li>b) Theoretical context</li> <li>Sustainable Consumption in conjunction with Sustainable Production</li> <li>Life Cycle Thinking and Systems Approach         Customize policy discussion for Laos' economic/environmental scenario with specific reference to consumption, production and links with economic growth     </li> </ul>	
	<ul> <li>c) Contemporary thinking</li> <li>Reviewing SCP and SDG's transformative indicators.         Gap analysis relating to achieving SDGs (policy, practice, financing, technology gaps)</li> <li>International approaches: Global SCP Policies and Practices (Cases examples from countries which have adopted SCP goals).</li> <li>Innovative ideas for SCP that can integrate with existing policy features.</li> </ul>	
2	<ul> <li>SCP in Regional, National and Local Policy Frameworks</li> <li>Challenges and opportunities for SCP in emerging economies         <ul> <li>Regional focus on European Union, ASEAN and South-Asian sub-regional integration of SCP into public governance frameworks</li> </ul> </li> <li>National focus on Laos</li> </ul>	
3	SCP Strategies in Demand-Supply Side of Products: Sustainable Behaviors and Lifestyles  • Demand-side  - Consumer Choices and Behaviors: How do consumers determine ecofriendliness of products? Behavioral vs. regulatory obstacles to sustainable consumption choices, consumption 'hot spots', 'choice editing' and its effectiveness, advertisement control, etc.  - Mechanisms for promoting behavioral changes: Promotional activities to attract consumers, Sustainable Public Procurement, Green procurement'	

in government and private sector targeted through awareness and education campaigns on sustainability for consumers, Production optimization based on prevailing consumption patterns

#### Supply-side

- How producers, manufacturers and corporates are increasingly pushing sustainability in the supply chain? Global Reporting Initiative (GRI) G4 Guidelines, CDP reporting etc.
- Mechanism for Designing sustainability: Process, product and systems innovation, improved production processes, eco-friendly products, innovative low-impact technologies, supply chain management
- Adoption of cleaner production processes ( efficiency in production, resources management including energy, water and materials)
- Cleaner Production Process in SME Sectors.

# 4 Priority Sector (1) – Buildings & Construction

- Background/Challenges
  - GDP share, Foreign Direct Investment, Number of Projects,
  - Government strategies, current policies, visions and plans
     Challenges: energy use and efficiency, supply chain management,
     innovation and R&D funding for efficient lighting and design features of buildings and their construction.
- SCP Approaches
  - Sustainable approaches for strengthening the sector (Such as building codes, safety codes and standards, LEED and other certifications, energy efficiency, material use efficiency etc.)
- Case examples from other countries in South East Asian region and globally

(Examples - LEEDS certification of Embassy of United States, Vientiane, Vietnam Green Building Council, Green Buildings Rating System India)

## 5 Priority Sector (2) – Mobility & Transport

- Background/Challenges
  - GDP share, Foreign Direct Investment, Number of Projects
  - Government strategy, current policies, visions and plans (Vientiane Sustainable Urban Transport Project, Ministry of Public Works and Transport (MPWT) Public-Private Partnerships (PPP) project, Master Plan on Comprehensive Urban Transport of Vientiane)
  - Challenges: Increasing burden on carrying capacity of public transport, increasing demand on petrol and diesel fuels, trafficking, funding and innovation.
- SCP Approaches
  - Approaches such as biofuels, bio diesel, fuel switching, banning old vehicles, fuel pricing, fuel tax, bus rapid transport, and etc.
- Case examples from other countries in South East Asian region and globally

(Examples - Bus rapid transport, Vientiane, SWITCH Asia - Green freight transport and logistics in the Mekong Region, Odd-Even Scheme Jakarta, Bike lanes Bangkok, Car Free Day Manila, 10% ethanol blended petrol, India) **Priority Sector (3) – Tourism** 6 Background/Challenges GDP share, Foreign Direct Investment, Number of Projects Government strategies, current policies, visions and plans (Lao Tourism *Strategy 2006–2020)* Challenges: Waste management, material consumption, resource use, emissions, species count in heavily visited sites, tourism carrying capacity SCP Approach Standards and benchmarking, tourism laws, EIA, eco tax, tourism tax, code of conduct and guidelines, capacity building, waste management facilities etc. Case examples from other countries in South East Asian region and globally (Examples - Nam Ha Ecotourism Project Phase I, phase II, GMS Sustainable Tourism Development Project (2009–2013), The Responsible Tourism Guidelines in South Africa, Eco-tax Balearic Islands, Spain, Tourism Law Vietnam) 7 Priority Sector (4) - Food and Agriculture Background/Challenges GDP share, Foreign Direct Investment, Number of Projects Government strategies, current policies, visions and plans (Lao Agricultural development strategy 2020, Rice-Policy, Core Agriculture Support Program, ADB) Challenges: Unsustainable agriculture practices, less knowledge and funding on efficient agricultural practices, low export quality for agribusiness, low logistics performance, land management and benefit sharing. SCP Approach Approaches such as sustainable agriculture and food production, organic production, agriculture subsidies, financial incentive systems, land rights, microfinancing etc. Case examples from other countries in South East Asian region and globally (Examples - Sustainable Rattan production, Lao PDR, microfinancing for agricultural growth in Africa, agriculture subsidies India) Priority Sector (5) - Industrial 8 Background/Challenges

- GDP share, Foreign Direct Investment, Number of Projects
- Government strategies, current policies, visions and plans (FDI Law, 2009, Renewable energy development strategy, 2010, National Policy on Sustainable Hydropower, 8<sup>th</sup> NSEDP)
- Challenges: lack of technical assistance and knowledge on renewable energy development, proper land use, prevention of pollution and conservation of environment, lack of benefit sharing with immediately affected communities.
- SCP Approach
  - Economic and fiscal instruments, carbon tax, pollution tax, polluter pays principle, incentivizing clean production and other methods are explored.
- Case examples from other countries in South East Asian region and globally

(Examples - Sustainable coal mining, Maiganga, Nigeria, Sustainable Industrial development policy, Tanzania, SWITCH Asia Sustainable Product Innovation in Vietnam, Cambodia and Laos)

# 9 Inter-Sectoral Approach

- Synergies across multiple sectors addressing SCP
  - Examples:
  - Agriculture water -energy nexus
  - Tourism and waste management
  - Transport pollution energy
  - Others

#### **Evaluation criteria:**

Course assessment will be conducted through:

- Minor I: Oral presentation 20% on challenges and case examples of SCP
- Minor II: Sectoral analysis report 50%: Policy analysis report for an identified policy/sector
  and detailed critical analysis of gaps in existing policy, challenges in implementation,
  governance etc. and appropriate changes proposed to mainstream sustainability and SCP
  principles into the policy. Written report (around 3500 words).
- Written Exam: 30%

#### **Learning outcomes:**

On successful completion of this course, the students shall,

- Have an improved understanding of SCP and interrelationship between sustainable consumption and sustainable production with sustainable development.
- Be able to comprehend the global, regional and national level policy setting and the governance framework for SCP with reference to specific countries and economic sectors
- Be well versed with the concepts of demand and supply of SCP and the mechanisms for implementing SCP strategies for both consumers and producers.

 Possess an understanding on the priority sectors such as tourism, buildings & construction, industrial, food & agriculture, transportation and their potential synergy with SCP by examining the existing plans and policies

**Pedagogical approach:** The course will be delivered through a mix of classroom lectures, brainstorming tutorial and presentation sessions, study visits and exposure to national, regional and global case studies on the theme.

#### **Reading List**

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  Assessment, Strategy, and Road Map. Available at: <a href="https://www.adb.org/documents/lao-peoples-democratic-republic-transport-sector-assessment-strategy-and-road-map">https://www.adb.org/documents/lao-peoples-democratic-republic-transport-sector-assessment-strategy-and-road-map</a>
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- 7. FFRC eBOOK 8/2012, Future Energy Demand in Laos. Scenario Alternatives for Development, Finland Futures Research Centre, University of Turku, 55 p. 978-952-249-145-9. Available at: <a href="https://www.utu.fi/fi/yksikot/ffrc/julkaisut/e-tutu/Documents/eBook">https://www.utu.fi/fi/yksikot/ffrc/julkaisut/e-tutu/Documents/eBook</a> 2012-8.pdf
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- Phonsavath, T. (2017). Sustainable Consumption and Production in Lao PDR: Supporting the Transition to Sustainable Consumption and Production in Asian Developing Countries. 183-212. 10.1142/9789814730914\_0008. Available at: <a href="http://www.worldscientific.com/worldscibooks/10.1142/9862">http://www.worldscientific.com/worldscibooks/10.1142/9862</a>
- Chiu, S.F., Ward, J. V., and Massard, G., 2009. Introduction to the special issue on Advances in Life- Cycle Approaches to Business and Resource Management in the Asia-Pacific Region, Journal of Cleaner Production, 17(14): 1237-1240. Available at: http://www.sciencedirect.com/science/article/pii/S0959652609001383
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#### Other readings

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- UNEP 2013. Capacity Building and Policy Needs Assessment for Sustainable Consumption and Production. Available at: <a href="http://www.switch-asia.eu/fileadmin/user-upload/RPSC/policy-assessment/Needs-Analysis-Final-report.pdf">http://www.switch-asia.eu/fileadmin/user-upload/RPSC/policy-assessment/Needs-Analysis-Final-report.pdf</a>
- United Nations 2015. The Sustainable Development Goals in the context of the Lao People's Democratic Republic. Available at: http://www.la.one.un.org/images/publications/SDG adaptation to Lao PDR.pdf
- 4. UNEP 2011: Resource Efficiency: Economics and Outlook For Asia and the Pacific. Available at: http://www.gcpcenvis.nic.in/PDF/REEO AP Key.pdf
- SWITCH-Asia Projects, Case studies. See: <a href="http://www.switchasia">http://www.switchasia</a>.
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- UNEP, 2012. Sustainable Consumption and Production for Poverty Eradication. Available at: http://www.unep.org/10yfp/Portals/50150/downloads/publications/poverty/SCP\_for\_Poverty\_full.pdf
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#### Web links:

**Intended Nationally Determined Contributions to UNFCCC**; Online at:

http://unfccc.int/focus/indc\_portal/items/8766.php

#### **SCP Clearinghouse**

The Global SCP Clearinghouse is a unique one-stop hub dedicated to Sustainable Consumption and Production (SCP) and convened by the United Nations Environment Programme (UNEP) acting as the Secretariat of the 10 Year Framework of Programmes on SCP (10YFP on SCP);

Online at: <a href="http://www.scpclearinghouse.org/">http://www.scpclearinghouse.org/</a>

SCP Policies and the 10 Year Framework Programme, UNEP; Online at:

http://www.unep.org/resourceefficiency/Policy/SCPPolicies/tabid/55539/Default.aspx

SWITCH-Asia projects funded by the European Union; Available at: http://www.switch-asia.eu/projects/

UNEP's Resource Efficiency Programme; Online at:

http://www.unep.org/resourceefficiency/Home/Society/tabid/55529/Default.aspx

UNIDO projects on cleaner production topics;

Available at: <a href="http://www.unido.org/en/where-wework/">http://www.unido.org/en/where-wework/</a> asiaandthepacific/selected-projects.html

### Additional information (if any):

This first-of-its-kind post graduate course on Sustainable Consumption and Production has been developed for young policy and decision makers as part of the SWITCH-Asia Regional Policy Support

Component supported by UNEP and European Union.

## Student responsibilities:

Attendance, feedback and discipline: As per university rules.