

Local Community Engagement as a Pathway toward Sustainable Development through Higher Education Institutions (HEIs) in Cambodia

MAM Socheath^{1*}, KOVIN Chuenchanok² & SINTHUNAWA Chirapol³

¹Faculty of Education, Royal University of Phnom Penh, Russian Federation Boulevard, Toul Kork, Phnom Penh, Cambodia

²Faculty of Education, Chulalongkorn University, Pathumwan, Bangkok Thailand

³Faculty of Environment and Resource Studies, Mahidol University, Salaya, Phutthamonthon Nakhon Pathom Thailand

*Corresponding Author: MAM Socheath (mam.socheath@rupp.edu.kh)

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សង្ខេប

ក្រៅពីការបង្រៀននិស្សិតអំពីបញ្ហាគ្លីនិកនិរន្តរភាព គ្រឹះស្ថានខ្ពង់ខ្ពស់សិក្សាទាំងឡាយអាចលើកកម្ពស់ការអភិវឌ្ឍដោយចីរភាព ដោយបំផុសឱ្យនិស្សិតចូលរួមជាមួយសហគមន៍ក្នុងប្រទេសកម្ពុជា។ បន្ទាប់ពីបានសិក្សាលើឯកសារពាក់ព័ន្ធចមក អ្នកស្រាវជ្រាវបានសម្ភាសថ្នាក់ដឹកនាំគ្រឹះស្ថានខ្ពង់ខ្ពស់សិក្សាចំនួន ១៥នាក់ និងស្ទង់មតិនិស្សិតចំនួន៧២០នាក់ ក្នុងគ្រឹះស្ថានខ្ពង់ខ្ពស់សិក្សាចំនួន២៤។ លទ្ធផលនៃការសម្ភាស និងការស្ទង់មតិនេះត្រូវបានយកមកពិភាក្សារកមធ្យោបាយដែលសាកលវិទ្យាល័យអាចផ្សារភ្ជាប់ការចូលរួមរបស់និស្សិតទៅនឹងសកម្មភាពសង្គម និងកម្មវិធីស្ម័គ្រចិត្តនានាទាក់ទងនឹងការអភិវឌ្ឍដោយចីរភាព។ ការសិក្សាស្រាវជ្រាវនេះបានរកឃើញថា គ្រឹះស្ថានខ្ពង់ខ្ពស់សិក្សាភាគច្រើនបានរៀបចំឱ្យនិស្សិតចូលរួមក្នុងយុទ្ធនាការបង្កើនការយល់ដឹងស្តីពីបរិស្ថាន ដូចជា ការចូលរួមក្នុងទិវាសម្អាតបរិស្ថាន ជាដើម។ ប៉ុន្តែទោះជាយ៉ាងនេះក្តី និស្សិតដែលបានចូលរួមក្នុងកម្មវិធីរយៈពេលយូរនានា មានចំនួនតិចតួចប៉ុណ្ណោះ។ និស្សិតប្រមាណពី ៤០ ទៅ ៧០% បានលើកឡើងថា ការចូលរួមក្នុងកម្មវិធីនានារបស់ពួកគាត់នៅមានកម្រិតទាបនេះ មួយផ្នែកធំ គឺអាស្រ័យលើកម្រិតនៃការដឹងលើអំពី ឬការពាក់ព័ន្ធរបស់និស្សិតទៅនឹងប្រធានបទស្តីពីការអភិវឌ្ឍដោយចីរភាព។ ក្នុងនោះ និស្សិតភាគច្រើនចាប់អារម្មណ៍លើការអភិវឌ្ឍសង្គមដោយចីរភាពជាងគេ បន្ទាប់មក ការអភិវឌ្ឍបរិស្ថានដោយចីរភាព និងបន្ទាប់មកទៀត ការអភិវឌ្ឍសេដ្ឋកិច្ចដោយចីរភាព។ លទ្ធផលនេះបង្ហាញថា ការចូលរួមរបស់និស្សិតក្នុងសហគមន៍មូលដ្ឋានអាចបង្កើនដល់កម្រិតអតិបរមាបាន លុះត្រាតែគ្រឹះស្ថានខ្ពង់ខ្ពស់សិក្សាទាំងនោះមានគោលនយោបាយនិងការផ្តួចផ្តើមដើម្បីលើកកម្ពស់ការស្ម័គ្រចិត្តរបស់និស្សិត។ ហេតុនេះ គ្រឹះស្ថានខ្ពង់ខ្ពស់សិក្សាទាំងឡាយគួរពិចារណាលើការបង្កើតប្រព័ន្ធគាំទ្រច្បាស់លាស់មួយ ដោយបញ្ចូលការចូលរួមរបស់និស្សិតក្នុងសកម្មភាពសិក្សា ការ

លើកស្ទួយការអប់រំជាមូលដ្ឋានស្តីពីការអភិវឌ្ឍប្រកបដោយនិរន្តរភាព និងការផ្តល់គ្រឿងលើកទឹកចិត្តដល់ និស្សិតស្ម័គ្រចិត្ត។

Abstract

Beyond teaching students sustainability concepts, HEIs can promote sustainable development by fostering the engagement of students with local communities in Cambodia. In this study, interviews with fifteen university leaders, and a survey of 720 students from 24 HEIs in Cambodia were conducted after the document analysis. They were used to inform a discussion about how HEIs engaged their students in social activities and local volunteer programs related to sustainability to this end. It was found that many HEIs engage students in sporadic environmental awareness campaigns, such as clean-up days; however, few engage students in long-term programs. Between 40% and 70% of students suggest that the low involvement in these programs is mostly dependent on their level of exposure to sustainability topics. The social development aspect of sustainable development was found to be the most interesting to students, followed by environmental, then economic sustainability. This implies that student involvement in engaging local communities may be maximized through university initiatives and policies designed to promote student volunteerism. Thus, HEIs should consider the development of a clear student supporting framework, which includes student engagement in service learning, the promotion of sustainability literacy, and incentives for students to volunteer.

Keywords: Student engagement, local communities, sustainable development, higher education institute and Cambodia

Introduction

Education is widely recognized as an effective approach for promoting sustainability across the globe. Sustainable development aspires to the achievement of a long-term balance between the economic/employment, environmental/ecological, and socio-cultural/equity aspects of the development of society (Edwards, 2006; Murray, 2011; Ellit, 2013). For example, the Intergovernmental Earth Summit held in Rio de Janeiro from the 3rd to the 14th of June in 1992, as part of the United Nations Conference on Environment and Development (UNCED) released Agenda 21, which is focused on environmental action. Chapter 36 of this agenda suggests that education should be used to promote increased public awareness of the environment to change attitudes towards sustainable development (UNSD, 1992).

In 2012, the United Nations Conference on Sustainable Development (UNSD), also known as Rio+20, stressed the key role of Higher Education Institutions (HEIs) to this end when announcing the “Higher Education Sustainability Initiative (HESI) (UNSD, 2012). This initiative

reinforced the Gothenburg Recommendation on Education for Sustainable Development (ESD). It was adopted in 2008 following international negotiations between 2001 and 2008 aimed at providing clear direction on the role of higher education in promoting sustainable development. It called for governments, civil society, and educators to work together on ESD. Both Rio+20 and the Gothenburg recommendation focus on the active engagement of local communities by HEIs, as well as researchers. Besides teaching and research obligations, 'community outreach' activities were identified as a key responsibility of higher education institutions (Bilodeau, Podger et al., 2014; Holmberg et al., 2013; Müller-Christ et al., 2014). For instance, HEIs could promote sustainability concepts in villages and communes surrounding the university campus as a way of increase public awareness; as well as building the capacity of local people to respond to sustainability challenges in their everyday lives. As key stakeholders in these communities, HEIs have an obligation to make strong efforts to lead action related to the UN 2030 Sustainable Development Agenda.

HEIs may serve as a hub for student activity related to sustainability and dialogue about social development; as well as an agent for ensuring the quality of these initiatives (Müller-Christ et al., 2014). Through the role of addressing sustainability issues, HEIs may consider adapting their curriculum to be more responsive to community needs (Allen-Gil et al., 2005). This may be used to develop students with the capacity to respond to local community expectations, through the creation of knowledge required to solve problems in local communities. For instance, the Bangkok-based Asian Institute of Technology (AIT) has had success through the development of a "professional Bachelor degree program for poverty reduction and agricultural management (PRAM)". This program engages students in action research projects (Mochizuki & Fadeeva, 2010) by placing student practitioners in local communities to develop practice-based knowledge developed through fieldwork. University faculties and administrators take a leadership role.

The number of HEIs in Cambodia has increased from 14 in 1998, to 97 in 2012 (You, 2012), to 121 in 2017 (MoEYS, 2017) and to 125 in 2019 (MoEYS, 2019). Over 80% of these HEIs were established less than 15 years ago. Improving the low quality of education programs within Cambodian Higher Education Institutions (HEIs) has been described as a critical issue (Chet, 2009; Sam et al., 2012; Sen, 2013). While in practice, sustainability may be considered a new concept in Cambodian HEIs, the Royal Government of Cambodia (RGC) launched the Cambodia National

Sustainable Development Strategy in 2009. Sustainable development represents a major agenda within the National Strategic Development Plan of the RGC. However, the performance of higher education institutions in developing practical knowledge of sustainability among students is questionable. The majority of Cambodian university students enrolled in HEIs are engaged in coursework and most university activities are focused on teaching, rather than research (Kwok, et al., 2010).

A regular practice for Cambodian HEIs is to have mandatory requirements for students to attend classes, with optional research activities. Students have a choice of scheduled study times, which are applied to each academic term, or across the whole academic program. If students opt to study on weekdays, they can schedule either morning, afternoon, or evening classes. Alternatively, students can take weekend classes. With both options, students regularly have at least half a day with no scheduled activities. In general, it is doubtful if this time is used for off-campus extra-curricular activities for the benefit of society.

While some students are engaged with off-campus volunteer activities, such as study tours and environmental campaigns, there is no clear picture of how these activities contribute to education for sustainability outcomes. Knowledge is also lacking about how students may become actively engaged in promoting sustainable development in local communities. The aim of this paper is to reveal the diverse ways HEIs act to engage students with these types of extra-curricular activities in local communities. The study focuses specifically on student engagement in social activities; short-term university outreach activities; community service learning programs; and student participation in various dimensions of sustainable development.

Study Area and Research Methods

In 2019, there were 125 HEIs in Cambodia. Only 48 were public HEIs, while 77 were privately operated (MoEYS, 2017). Of these HEIs 76 were regulated by the Ministry of Education, Youth, and Sport (MoEYS), while the remaining 49 were under the administration of one of fifteen different ministries. Most HEIs offer undergraduate programs in English literature, business administration, accounting, or finance and banking. The national enrolment of students in these programs increased from 216,053 in the 2010/11 academic year (MoEYS, 2013) to 219,069 in the 2015/16 academic year (MoEYS, 2017) and 211 484 in the academic year 2017/18, of which

39.9%, 43.7% and 46.6% were female students, respectively. The present study examines the undergraduate programs of 38 of the 125 HEIs across the country across various disciplines. It focuses on the activities that students engage with in terms of the environmental, economic, and social aspects of sustainability. A mixed methods approach was used to inform a response to the research questions from multiple perspectives (Creswell & Plano Clark, 2007; Greene, 2007). Empirical data was collected using a document study, interviews, and a survey.

The document study was conducted as an efficient method to access a broad range of data using an “unobtrusive and non-reactive” approach. Researcher can use a sample frame within a certain period to fit the study (Bowen, 2009; Platt, 2006). It accessed a range of published information about university policies and activities, focused on student engagement in sustainable community development. Data was obtained from university handbooks, annual reports, and newsletters published between 2011 and 2017 by the 38 HEIs. It was supplemented with additional documents from the Department of Higher Education and published literature on service learning in Cambodia. Other data from the official websites of HEIs on student engagement in local communities was also studied, supported by interviews to minimize the bias of the author (Bowen, 2009). Then, content analysis of the qualitative data obtained from the documents was used for analysis.

Key informant interviews with fifteen university leaders were also conducted at local campuses between August and September 2015 to obtain a more detailed understanding of student engagement in local communities. These interviews focused on: (1) the local community engagement activities that students from the higher education institution were involved with; (2) the thematic aspects of sustainable development in community engagement activities; (3) how the higher education institution developed these activities; and (4) the difficulties the higher education institution faced in establishing these activities. Thematic analysis was applied to the interview data to obtain a comprehensive assessment of the experiences and perspectives of university leaders with respect to this focus.

To investigate the involvement of students in local sustainable development activities, a survey was used. The questionnaire used in the survey was based on the findings of the document study and policies outlined in the Cambodian National Sustainable Development Strategy. It contained questions about fifteen sustainability-related topics including *climate change*, *waste*

and pollution, energy conservation, recycling, biodiversity and natural resources, a culture of peace, gender equality, human rights, poverty reduction, social responsibility, economic growth, sustainable business development, production and profits, career development, and modern technology (RGC, UNDP, & ADB, 2009). The questionnaire comprised fifteen questions, with respondents prompted to indicate an answer on a Likert scale. Five responses ranging from 'never' to 'always' were possible based on the students level of engagement in community activities. The design of the questionnaire was reviewed by three experts in the fields of research methodology, higher education, and sustainability.

The survey cohort was selected using multi-stage sampling. First, cluster sampling by location was used to select the HEIs in the sample, with 14 major HEIs out of a total of 88 HEIs in the capital, Phnom Penh, being randomly chosen. With respect to provincial HEIs, 2 of 3 from the southeast region, 5 of 8 from the northern region, and 3 of 6 northeast regions were randomly selected. These are listed in order from 15 to 24 in Appendix 1. Then, a sample of 30 undergraduate students in the third or fourth year of their program was randomly selected from the various disciplines in colleges/faculties of each university/institute. During data collection, the researchers travelled to 24 HEIs across the country and distributed the questionnaire to a total of 720 students between August and September 2015. Descriptive statistics were calculated to determine the frequency and percentage of students involving in voluntary activities related to each sustainable development topic.

Results and Findings

Student involvement in social activities dealing with environmental issues

Official university websites suggest that HEIs in Cambodia tend to engage their students in social activities related to waste and pollution. For instance, between 2011 and 2014, students from several HEIs in Phnom Penh took part in the events focused on the environment such as "Let's Do It! Cambodia", "Clean City Day", and "Environment Day". In 2011, university students from a range of HEIs were among the 2,400 participants in the "Let's Do It! Cambodia" event organized by the Junior Chamber International (JCI) and Association Internationale des Étudiants en Sciences Économiques et Commerciales (AIESEC). Participants from the University of Cambodia (UC), Royal University of Phnom Penh (RUPP), Royal University of Agriculture (RUA),

National University of Management (NUM), Norton University (NU), Build Bright University (BBU), and University of Puthisastra (UP) were engaged, as well as staff from the Phnom Penh Municipal Office and the Ministry of Environment. They gathered in central Phnom Penh and removed rubbish from the seven locations most polluted with solid waste in the city. HEIs made regular announcements about the event on campus calling for student participation. Sixty students from UC alone volunteered at the event in 2011. Other HEIs such as RUPP, RUA, NUM, NU, BBU, and UP reported involvement by their students, however, the number of students was not specified.

In 2012, the name of the program was changed to “Let’s Do It! Phnom Penh” and was still focused on garbage collection. In 2014, university students continued to clean several locations in the city as part of the event, as well as organizing a public debate on environmental protection and sustainable consumption. Although the number of students participating in these events is limited, it enabled HEIs to promote sustainability and link this to student experiences of environmental protection. Increased efforts by HEIs are required to increase the number of students participating in this type of social activity, as well as other environmental campaigns. These activities have the potential to assist student in their personal development, as well as their capacity to promote local sustainable development.

Students from provincial HEIs also participated in annual “Clean City Day” events in their respective municipalities. For instance, students from the University of Battambang (UBB) and the University of Management and Economics (UME) collected rubbish from areas around the Sangkae River in Battambang province. The Provincial Hall organized the event and invited participation in the initiative as a social activity, which in general, is more likely to attract student interest. In Preah Sihanouk, a province surrounded by beaches, Life University (LU) developed community-based activities for students focused on health care and beach clean-ups. In this case, students participated as the activity organizers and attempted to realize the most sustainable outcome possible. University leaders revealed that students at most HEIs participate in activities related to improving the environment. This includes community field trips (pers. comm. UL01, UL02, UL03, UL05, UL06, UL07, UL10, and UL15), environmental awareness campaigns in areas near the university campus (pers. comm. UL01, UL03, UL05, UL14), and fundraising to help orphaned children and poor students (pers. comm. UL05 and UL09). One university leader stated:

‘[...] in regards to our involvement in community activities, our students participate in campaigns related to the environment, drug abuse, and humanitarian outcomes. They join community activities with the Cambodian Red Cross, Battambang Provincial Hall, and other Provincial Departments. There is no clear plan for these activities. It is flexible. [...] Once we receive the requests from the partners, we arrange for students to assist them. The participation of our students in social activities in the municipality, such as cleaning the city and traffic campaigns is more active than other HEIs [...] we organize between 10 and 20 activities per year, with approximately 100 students attending each activity. However, we are concerned that these activities may disturb their study time [...]’ (pers. comm. UL14, 23rd September 2015).

Student involvement in environmental activities demonstrates care for the society they are living in. While campaigns may help to promote environmental concerns to the public, organizing those activities only once a year seems insufficient. Cambodia lacks waste collection services and people still have low awareness of the need for waste management (Parizeau, et al., 2006). The public pays little attention to waste and pollution issues and continues to discard garbage in public areas. More frequent campaigns are urgently needed. HEIs may play a role in increasing public awareness that realizes a positive societal impact.

Short-term university outreach activities for community development

Official websites for some HEIs including the International University (IU), University of Puthisastra (UP), Life University (LU), Build Bright University (BBU), Norton University (NU), and Panasastra University of Cambodia (PUC) report engaging students in fieldtrips and university projects focused on health, the environment, and education. For instance, medical students from UP and IU in cooperation with the National University of Singapore (NUS) to participate in the “Sabai Project 2014”. This project was aimed at promoting health care, well-being, and the social welfare of villagers in Cambodia. In addition, UP students participated in a one-day field trip with the theme, “Youth and Community”, which involved students meeting with villagers to increase their environmental awareness through planting trees in a village. Moreover, a fieldtrip organized by NU to Chrakov village engaged students in facilitating health education activities for 355 families (1,681 villagers). In March 2012, BBU reported that the university organized and participated in 98 university outreach activities involving 6,493 students. Students were engaged

in public awareness campaigns about health care, traffic rules, and HIV-AIDS; fundraising to assist disaster victims; and in competitions and youth forums on the environment, gender, human rights, and the prevention of violence against children and women. In cases such as this, where HEIs have their own outreach programs students have the potential to lead to process of sharing knowledge with community members.

Thus, university leaders revealed that student were key participants in the involvement of their institutions in local communities and in some cases responsible for the developing of these activities (pers. comm. UL01, UL02, UL03, UL04, UL05, UL09, UL13, and UL14). Specifically, they stated:

‘We have a strategic plan for student community programs and we are considering how to develop a community service program to build the spirit of students to love local communities. The more our students love local communities, the greater possibility of sustainability. We want to engage those who study in business disciplines more knowledgeable about local communities. What’s more, those who are in the construction engineering discipline may better understand about negative impacts on the environment’ (pers. comm. UL01).

‘As a principle, our university is considering a vision [...] a target plan in 2023. In this plan, to integrate sustainable development concepts into the academic program and extra-curricular activities, we link students to communities. We promote the role of the current student senate of building a student structure to be more involved in community activities.’ (Pers. Comm. UL05).

Another leader revealed that their university prepared students before they became involved in outreach activities with villagers.

‘[...] our students to share knowledge with people in local communities. We do not determine the number of people as the target. But we consider targeted places depending on villager needs. [...] we train our students first and then put them into teams under the supervision of faculty members or an advisor. The university can support the project with a small budget, with the rest of the research expenses shared by the student team. In agriculture fieldwork, students share technical agricultural knowledge with villagers about growing crops so that they can promote their livelihood. Students from the law major share knowledge related to rights, behaviors, and responsibilities in the society [...]’ (pers. comm. UL15).

Other HEIs launched community development projects in collaboration with partners. For instance, the Royal University of Agriculture (RUA) faculty members led students in a project on community water resource management and community livelihoods. In another case, the Polytechnic Institute of Battambang offered free community-based training to nearby farmers on pig raising, natural fertilizer production, rice systems, and enterprise-based training on motorbike repairing and food processing. After offering these training courses, the faculty members and students followed up the outcomes within local communities. Likewise, the National Technical Training Center launched projects related to poverty reduction, involving faculty members and students. These type of university projects that assisting communities rely primarily on external donors and students serve as assistants to faculty members in their implementation.

Community service learning led by Cambodian HEIs

Remarkably, very few HEIs apart from RUPP and PUC engage their students through “Community Service Learning (CSL)” programs. These programs bring students in close proximity to villagers. Each semester, approximately 50 students from PUC volunteer as teachers and social workers working on both education for the poor and environmental education in nearby orphanages and non-governmental organizations. The university involves student volunteers in research projects in collaboration with local NGOs. These activities have clear schedules and are part of a program to assist a large number of villagers in the medium term. The university introduces the CSL program to new students at the beginning of each academic year, with faculty members acting as advisors to students in developing smaller projects.

‘In the community service learning program at our university, we focus our student activities on contributing to communities. The mission of the program is to provide services to communities purely as a volunteer, as well as to learn from communities. [...] Often students in their foundation year [first year] are encouraged to team up in a group of at least four people to volunteer in promoting education in a community. Each team is supervised by their lecturer from a particular course. The themes of the programs can vary from year to year depending on the interest of the students and partner NGOs. Students are expected to teach Khmer culture, Khmer language, English language, basic computer skills, child rights, personal sanitation, and traffic rules. [...] In

some cases, students become involved with the community development projects of NGOs. They work as research assistants in conducting surveys and needs assessments [...]’ (Pers. Comm. UL03).

Likewise, the CLS program at RUPP emphasizes student involvement in the community development projects of the university. These projects are funded by international donors and relate to “community-based conservation; partnership for environmental action and community empowerment; harmonizing nature and human society for sustainable development; and urban climate resilience”. For this project-based research, HEIs form research teams led by faculty members from relevant disciplines, with a few students recruited to each team as research assistants. Students mainly work on data collection and fieldwork activities within local communities. This volunteer work helps students to develop grounded knowledge of community development practices, as well as local sustainable development. However, many students are not able to access these opportunities, as the number of students that can be selected is limited.

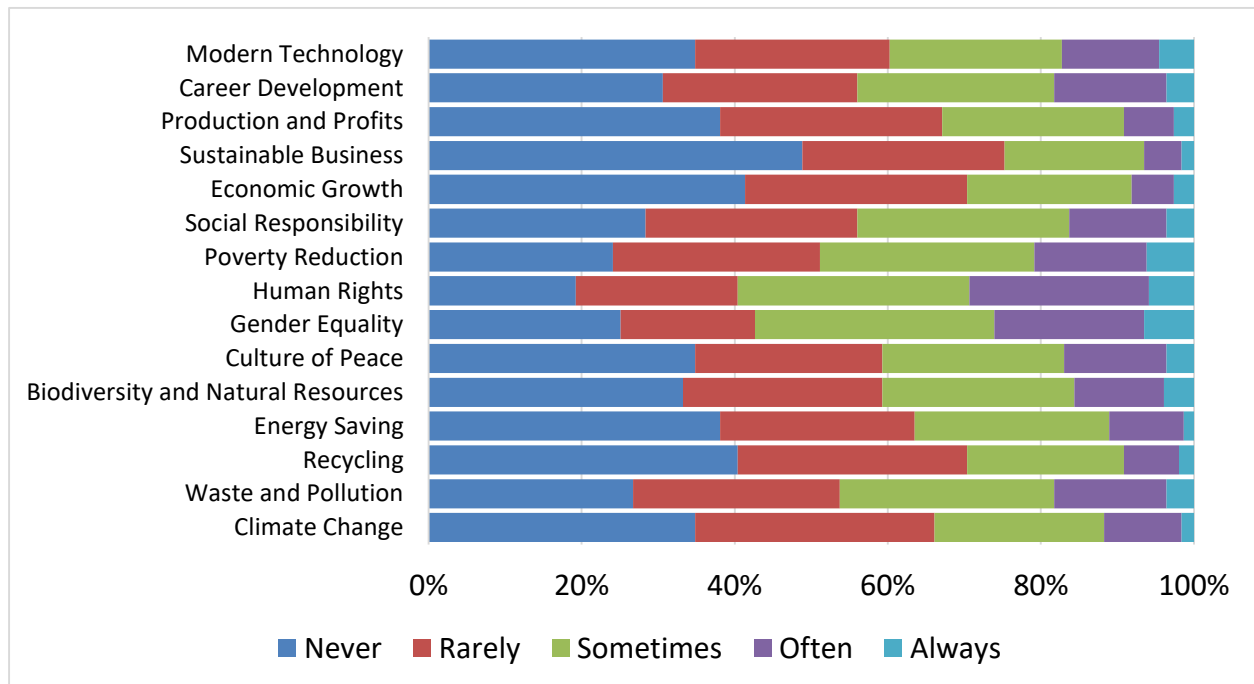
‘Community service learning is the heart of our university. [...] the program assists students to engage in voluntary programs and to build close relationship with villagers. [...] We’re sure that our students become attached to social responsibility concepts and can learn how to contribute to the society appropriately. Although they may not fully understand sustainable development concepts, they can consider and impacts of doing business. They are taught [...] to care for the environment and society’ (pers. comm. UL02).

The CSL program at PUC appears to be more comprehensive than the one at RUPP in term of student engagement. However, the program at RUPP appears to include a greater number of research projects related to community development and environmental conservation. Both HEIs have played important roles in establishing volunteer programs that enable students to learn about community development. However, these programs struggle over the long-term, as they depend on short-term project grants. University CSL programs will continue to struggle if they are not included in university curriculum and designed as part of a systematic framework that is updated over time. In this context, the program might be set as required extra-curricular work, which may include a range of options. In this way, all students would be able to form teams and choose activities designed to be implemented within time and budget constraints.

Student involvement in the various dimensions of sustainable development

A majority of students were found not to regularly participate in local community activities across their three-year university program. Of the 720 students surveyed, 30.3% ‘sometimes’ engage, 23.5% engage ‘very often’, and 6.5% ‘always’ engage in sustainable development activities in local communities. Overall, a small number of students actively get involved. Student participation in activities related to social development appears to be more popular. The survey indicates that the most attractive aspects of sustainable development for students include poverty reduction, human rights, gender equality, waste and pollution, and career development. The environment and economic development aspects of sustainable development appear to be less popular with students. They indicate lower levels of involvement with activities related to sustainable business, economic growth, production and profit, recycling, and climate change. Overall, the involvement of Cambodian university students in promoting sustainable development in local communities could be considered low due to a lack of opportunities to become engaged.

Figure 1. Student involvement in various aspects of sustainable development in communities.



The study outlines how student participation in local communities occurs through at least one of four different forms. First, university students may receive invitations to participate in social activities/events related to public campaigns. Second, HEIs develop short-term programs

that build links between university students and local communities. Such programs are usually arranged to be completed in the short term involving field trips focused on the environment, health care, or education. Third, students may take part in research projects as assistants, where faculty members manage the projects and HEIs served to cooperate with partners or donors regarding their development. These joint projects are often associated with the environment and poverty reduction. Fourth, a few HEIs engage their students in community outreach activities, through community service learning programs over a regular schedule of at least one semester. In general, student participation in community activities is noticeably low. Activities related to the environmental and economic aspects of sustainable development are even less attractive to students.

Discussion

This research suggests that student involvement in community development activities has significant potential to increase the impact of the sustainability-related activities of Cambodian HEIs. However, HEIs in part need students to be responsible for organizing these activities, with HEIs having a role of assisting or helping to coordinate activities. Students were found to most commonly engage with activities such as environmental and road safety awareness campaigns, fieldtrips focused on environmental awareness and basic health care, and fundraising to support orphaned children or poor students. The nature of student engagement in Cambodia appears to be similar to that of a study on a Chinese university that provides opportunities for students to keep public spaces clean both within and outside of the campus (Niu et al., 2010). Students may also become involved in university programs or research projects focused on environmental education and community development. Student participation in these activities may be classified as part of the “informal curriculum”, which includes volunteering, internships, and participation in club and societies or campus events (Hopkinson et al., 2008). This type of student engagement appears to be consistent with the “common experience of sustainability” described by López (2013).

Student participation in informal curriculum activities seems to only be moderately in Cambodian HEIs. While, these activities have potential to guide the spiritual development and sense of social responsibility of students outside the classroom, it is an area which receives little

attention. This is unfortunate as these experiences are meaningful and help students to become global citizens. There is a shortage of university activities that build regular, strong relationships between students and the community across the entire with academic term. Very few HEIs appear to have established CSL programs and thus few students are able to participate in them. This is unfortunate, as CSL has significant benefits in enabling students to learn about issues relevant to communities through practice-based knowledge (Keen at al., 2015).

CSL at one Cambodian university was shown to help develop the personality of students and an attitude of “kindness” to people in within society. This kindness was associated with the Buddhist ethics (*brama-vihara*) of goodwill/loving-kindness (*metta*), compassion (*karuna*), empathetic joy (*Mudita*), equanimity (*Upekkha*), and a common good (Ly, 2013). These qualities are strongly related to the competency in sustainability (Mochizuki & Fadeeva, 2010), with individuals requiring these qualities to be able to behave in a sustainable manner (Murray, 2011). Despite these benefits, after spending three years participating in a university program, around two-thirds of all students indicate a poor level of engagement in activities related to sustainability, both on-campus and within local communities. A majority of students tend to miss out on the opportunity to become involved with voluntary activities as learning opportunities to understand how to behave in fashion that supports the common good in society.

When participating in voluntary activities, students reveal a higher level of concern for the social aspects of sustainability, particularly activities related to poverty reduction. The participation of students in these activities is thus linked to responding to one of the biggest challenges faced by Cambodia. While the RGC has prioritized poverty alleviation (Ministry of Environment and UNDP Cambodia, 2011) leading to a reduction in poverty from 53.3% in 2004 to 20.5% in 2011 (WorldBank, 2014) and to 14% in 2017 (ADB, 2019). This reinforces the need for HEIs to pay attention to the level of student engagement in the social aspects of sustainability.

Contrary to this, student engagement in community development activities related to climate change was found to be less attractive to students. This is despite many Cambodian citizens, farmers in particular, being poorly prepared to respond to the impacts this has on the country (Phorn, 2015). The Ministry of Environment (MoE) has worked on developing climate change policies since 2002. Moreover, the current Cambodian Climate Change Strategy (2014-2023), as well as the Cambodia Climate Change Action Plan (2016-2018) emphasizes the need for

“curriculum” and “public awareness raising” about climate change (MoE, 2016). The Ministry of Health (MoH) has also notified citizens about the increased likelihood of hot weather, with temperatures predicted to be as high as 40°C in Cambodia by mid-2016. They have recommend that citizens to pay greater attention to the need to save water to ensure there is sufficient amounts available for ongoing consumption (Eng, 2016). This suggests that there is also an urgent needs for university students to be involved in voluntary activities that increase public awareness about climate change. The same could be said for the aspects of sustainable development related to green growth and recycling.

HEIs were found to have a strong influence whether students become engaged with local communities as part of their education. Most student volunteer activities were found to be inspired by HEIs. For instance, HEIs that had initiated their own voluntary programs showed higher levels of active participation in the local community by students. To address the challenge of increasing this level of student engagement in the local community related to the promotion of sustainability, Cambodian HEIs should consider the development of a engaging student volunteer programs that incorporate four interventions.

First, HEIs should develop a clear policy framework on community engagement for sustainability, namely the 6-P framework involving “psychological, physical, personal, public perception, price, and policy factors” (Too & Bajracharya, 2015). Second, HEIs should establish a well-integrated student engagement program that promotes sustainability over the long-term period. For example, CSL programs have been shown to have many ongoing benefits for both the university and communities. These programs need to be applied in a way that covers the various aspects of sustainability, that is, be interdisciplinary in nature (Clark & Wallace, 2015). Third, HEIs have an obligation to orient students with what is required of them to successively engage with local communities and conduct outreach activities related to sustainability (Allen-Gil et al., 2005) & Mochizuki and Fadeeva, 2010). HEIs may consider how to develop the capacity of students in terms of both practical interdisciplinary skills and knowledge of sustainability. This is central to learning how to be guided by a values-based framework (Sipos et al, 2008). Finally, HEIs should identify appropriate incentives to motivate the active involvement of students in voluntary programs, while also attracting a greater level of student engagement with local communities. HEIs may consider organizing community events to orientate students with sustainability projects

and promote volunteer opportunities both on-campus and within local communities (McKinne & Halfacre, 2008).

The outcomes of student involvement in voluntary activities have the potential to lead to personal development outcomes for students, which are difficult to promote in a classroom setting. These activities provide additional value to the quality of learning experienced by university students and supports. They also support the policies within the Cambodian Education Strategic Plan (2014-2018) focused on improving the quality and relevance of higher education. With respect to quality of education, a university curriculum that focused only on teaching and learning in the classroom is insufficient. HEIs have an obligation to create more opportunities for students to engage in extra-curricular activities. Relevant stakeholders such as the MoEYS, HEIs, civil society, and the private sector should establish a workable mechanism that encourages students to pursue personal development opportunities outside the classroom in collaboration with local communities. In particular, HEIs should continue to strive for innovation in terms of their policy, planning, and curricular programs to ensure that students have appropriate opportunities to grow physically, mentally, emotionally, and spiritually. Students should not engage in only sporting activities, but also social events, with a budget allocation representative of the significance of the outcomes outlined in this paper.

Beyond these recommendations, this study has some limitations. It had not provided insightful analysis on the design and implementation of programs that have the capacity to develop competency in sustainability, such as CSL and other student support. This is required for HEIs to have the capacity to motivate student interest. The level of financial investment required to sustain these kinds of programs in the long term has also not been addressed. A further study on a design, implementation and costing these programs is recommended.

Conclusion

This study provides a general overview of the contribution of Cambodian university students to community development activities within student volunteer programs, as well as university outreach programs and activities that involve students. Initially students tend to become involved in one- or two-day volunteer community outreach activities focused on environment or health campaigns. Many HEIs organize these short-term activities and these

provide limited opportunities for students to learn from local communities. A smaller number of HEIs have existing CSL program that assists students to develop attitudes that benefit society and a community spirit. These programs are not able to attract large number of students. Re-thinking the design of CSL programs should be taken into consideration.

A minority of students were found to actively participate in voluntary activities in the local community related various sustainability aspects. This is related to the failure of university initiatives and activities to engaging students in community outreach. Thus, university leaders should consider increasing the number of planned student activities focused on community outreach and find ways to improve the awareness, motivation, and participation of students. HEIs could start with simple social activities before transitions to more comprehensive CSL programs. HEIs should not wait to be invited, but be driven to perform by drivers oriented towards sustainability. For HEIs to be successful they need to learn how to generate new local knowledge to address sustainability issues (Sedlacek, 2013). HEIs have a responsibility to transforming the orientation of students towards sustainability by learning how to engaging them in voluntary activities. Should HEIs intend to better understanding the concepts of CSL in the Cambodian context, they could consider the CSL models of established at RUPP and PUC as a guide. An even better approach would be to identify ways of contextualizing their own CSL model that attracts and motivates students within their own institution. Further studies are recommended aimed at guiding HEIs to enrich their programs orientated towards sustainability. This study should aim to understand how to inspire and motivate student participation as part of building strong university-community cooperation.

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Appendix 1. List of HEIs involving in the Survey Study

N.	Name of Higher Education Institutions	Province	Regions
1	Royal University of Phnom Penh (RUPP)	Phnom Penh	Central
2	National University of Management (NUM)		
3	Build Bright University (BBU)		
4	Panasastra University of Cambodia (PUC)		
5	University of Cambodia (UC)		
6	Western University (WU)		
7	Asia-Europe University (AEU)		
8	University of Puthisastra (UP)		
9	BELTI International University (BIU)		
10	Intered Institute (IEI)		
11	Preah Kossomak Polytechnic Institute (PPI)		
12	National Technical Training Institute (NTTI)		
13	National Polytechnic Institute of Cambodia (NPIC)		
14	Royal University of Agriculture (RUA)		
15	Chea Sim University of Kamchaymear (CSUK)	Prey Veng	Southern
16	Svay Rieng University (SRU)	Svay Rieng	
17	University of Battambang (UBB)	Battambang	Northwest
18	University of Management and Economics (UME)		
19	Angkor University (AU)		
20	University of South-East Asia (USEA)	Siem Reap	Northern
21	Meanchey University (MCU)	Banteay Meanchey	
22	University of Angkor Khemara (AKU)	Kampot	Southwest
23	Regional Decho Sen Polytechnic Institute of Kampot (RSPIK)		
24	Khmer University of Technology and Management (KUTM)	Sihanouk	

Appendix 2. List of University Leaders as Key Informants for Interviews

Code	Appointment of University Leaders	Code	Appointment of University Leaders)
UL01	Vice-President	UL09	Director, Academic Program Office
UL02	Director, Academic Program Office	UL10	Dean, Faculty of Agriculture
UL03	Vice-President	UL11	Dean, Faculty of Management
UL04	Dean, Faculty of Education	UL12	Director, Research Office
UL05	Dean, Faculty Social Science	UL13	Vice-Dean, Faculty of Agriculture
UL06	Director, Quality Assurance Unit	UL14	Dean, Faculty of Community Development
UL07	Vice-President	UL15	Dean, Faculty of Tourism
UL08	Vice-President		
