

7-31-2020

Cross-border development: A long-term role for Universities

Robert Brian Smith

Walailak University, Thailand, r.b.smith@unswalumni.com

Nucharee Nuchkoom Smith

Walailak University, Thailand, nucharee.sm@wu.ac.th

Follow this and additional works at: <https://scholarhub.ui.ac.id/ajce>



Part of the Adult and Continuing Education Commons, Adult and Continuing Education Administration Commons, Civil and Environmental Engineering Commons, Curriculum and Instruction Commons, Educational Leadership Commons, Higher Education Administration Commons, Scholarship of Teaching and Learning Commons, University Extension Commons, and the Vocational Education Commons

Recommended Citation

Smith, Robert Brian and Smith, Nucharee Nuchkoom (2020). Cross-border development: A long-term role for Universities. *ASEAN Journal of Community Engagement*, 4(1).

Available at: <https://doi.org/10.7454/ajce.v4i1.1077>

Creative Commons License



This work is licensed under a [Creative Commons Attribution-Share Alike 4.0 License](https://creativecommons.org/licenses/by-sa/4.0/).

This Review Article is brought to you for free and open access by the Universitas Indonesia at ASEAN Journal of Community Engagement. It has been accepted for inclusion in ASEAN Journal of Community Engagement.

Cross-border development: A long-term role for Universities

Robert Brian Smith^{a*}, Nucharee Nuchkoom Smith^a

^a*Walailak University, Thailand*

Received: March 13th, 2020 || Revised: June 25th, 2020 || Accepted: July 29th, 2020

Abstract

Low-income economies are experiencing potential serious threats in terms of long-term sustainability and social development. At the same time, most developing economies are grappling with possible disruptions from the Fourth Industrial Revolution and the current COVID-19 pandemic and its economic consequences. However, every economy has the same goal of elevating its status to that of a developed country. This research uses the narrative/case study approach to examine cross-border development and the role that universities can play as important actors in the development of society. Moreover, this research combines observations and literature analysis. Universities are clearly best placed to play an important role in helping the development of a country and assisting less-developed neighboring countries. However, this role will require continuous long-term commitment. In numerous cases, universities must make significant internal changes to meet the challenges posed by the Fourth Industrial Revolution. Three issues are identified as priority areas to be addressed: the quality of higher education, complex government bureaucracies, and ineffective on-the-job training. These issues will require universities to provide high-quality offerings that are relevant to their community and the broad world market. Moreover, universities must improve the foreign language skills of students and staff to enable them to communicate and learn from worldwide developments. Finally, universities should be proactive in creating opportunities rather than reactive and waiting for others to provide them with opportunities.

Keywords: capacity development; institutional strengthening; sustainable development; university outreach; community empowerment; cross-border development; higher education.

1. Introduction

A vast range of issues affect developing countries. An issue in one country may not necessarily be an issue in another. Often, development is impacted by the aftermath of a civil war, the activities of ethnic armed groups, genocide, civil unrest, earthquakes, tsunamis, catastrophic cyclones, and so on. Unfortunately, each of the countries in South Asia and Southeast Asia has experienced at least one of these natural or human catastrophes. Several countries, such as Myanmar, have suffered from at least three such events. Although a long list of issues affecting economic development exists, three issues are particularly relevant to the role of universities in cross-border development, that is, the quality of higher education, complex government bureaucracy, and ineffective on-

* Correspondence Author: r.b.smith@unswalumni.com

the-job training. These examples can provide snapshots of issues that must be addressed. Universities and the vocational sector must ensure that their curricula are relevant to countries' and industries' needs.

Much of the developing world is experiencing an existential crisis, which is exacerbated by the current COVID-19 pandemic. Although every country recognizes the crisis caused by the pandemic and is fighting to bring it under control, numerous countries are continuing to adequately address the underlying pervasive issue of sustainability due to inadequate leadership coupled with problems such as climate change, poverty, sustainable agriculture, poor service delivery, and poorly maintained infrastructure. Low-income economies are experiencing potential serious threats in terms of long-term sustainability and social development. At the same time, most developing economies are grappling with possible disruptions from the Fourth Industrial Revolution (Smith, 2020; Tijaja, 2019). The current study examines cases from Nepal and Thailand, which are developing countries in South Asia and Southeast Asia, respectively. In other cases, though their location is unknown, such threats seem to recur across a number of different countries. One such threat is the long-term sustainability of development projects funded by international financial institutions (see Table 1).

Table 1. Value of Grants, Technical Assistance, and Loans Approved by Major International Financial Institutions during the 2017 Fiscal Year

International Financial Institution	Grants & Technical Assistance (US\$ billion)	Loans Approved (US\$ billion)
African Development Bank	-	7.66
Asian Development Bank	0.20	20.01
Asian Investment Infrastructure Bank	0.002	1.61
CAF - Development Bank for Latin America	-	1.65
European Bank for Reconstruction and	-	13.98

	Grants & Technical Assistance (US\$ billion)	Loans Approved (US\$ billion)
International Financial Institution		
Development		
International Fund for Agricultural Development	0.06	1.24
Islamic Development Bank	0.0014	9.8
World Bank	3.17	38.89
Total	3.43	94.84

Source: (Smith, 2019b)

Industries built around the international development sector are extensive (Smith, 2019b). According to Table 1, the listed major international financial institutions lent developing countries nearly US\$100 billion in concessional loans, technical assistance, and grants in 2017. In addition, significant bilateral aid was provided.

A major and pervasive issue observed in numerous countries lies within departments responsible for service delivery, such as the construction and maintenance of civil infrastructure. For international development projects, the processes of international finance institutions ensure that specifications are robust and that, provided they are followed, an infrastructure is fit for its specified purpose. Work is overseen by an agency's project management unit with international consultant support. Most members of the consultant team are citizens of the recipient country. However, informed clients are essential. For example, a wide range of trained and skilled agency staff are required for a road construction project, including planners, construction engineers, road safety engineers, bridge engineers, geotechnical engineers, materials engineers, social scientists (focusing on resettlement, gender, poverty alleviation, and empowerment), environmentalists, information technology professionals, drafters, procurement specialists, occupational health and safety professionals, and accountants. This arrangement is particularly crucial during the planning and preparation stage, as consultants work on behalf of the client agency. In addition, an agency must ensure that all requirements are met and that the work conforms with all associated laws and

regulations. A problem encountered in numerous developing countries is that many of the required professionals are not employed by a government agency and if so, are too busy to commit the required time to a project.

Another issue is that the local staff employed by a consultant should be suitably qualified and experienced. Unfortunately, local staff may lack knowledge and experience. This problem is further compounded by the fact that their tertiary education background is often inadequate for the current needs of a developing country. International consultants and contractors have the necessary technical skills and are keen to train agency staff. However, their in-country time is limited, and in the end, they accomplish the work independently, without the required immersion of agency staff in the process. Universities must play a considerable role in developing their country and assisting less-developed neighboring countries. This role will require continuous long-term commitment. In many cases, universities must make significant internal changes to meet the challenges posed by the Fourth Industrial Revolution. Thus, this need is urgent. Three priority areas are identified and discussed in Table 2.

Table 2. Three Priority Areas as Opportunities for University Assistance

Priority area	Comment
Quality of higher education	The quality of higher education varies between and within countries. It may also be program dependent within the same university. To complicate matters, it is also dependent on the foundations of primary and secondary sectors.
Complex bureaucracy	Bureaucracy in many developing countries is often hindered by an inordinate number of rules and a duplication of roles. Critical thinking at lower levels of an organization is not encouraged.
Ineffective on-the-job training	On-the-job training at every level may be ineffective or given low priority. Immersion training, where staff members are assigned to work in sponsoring organizations, must be developed.

Source: Authors

1.1. Quality of Higher Education

Unfortunately, in some developing countries, higher education is built on poor foundation. The United Nation Development Program (UNDP) classified quality of primary and secondary education in terciles in six indicators, including the Programme for International Student Assessment (PISA) score, which covers mathematics, reading, and science (UNDP, 2019). Meanwhile, though the data of ASEAN members presented in Table 3 are incomplete owing to lack of reporting by individual countries, two features stand out. Singapore has the best PISA score, whereas Vietnam has a lower score owing to poor performance in the reading section. Thailand and Indonesia are in the bottom tercile for all three PISA subjects. Expecting Cambodia, Lao PDR, and Myanmar to join Thailand and Indonesia in the bottom tercile for all three PISA subjects is reasonable. This result clearly shows that remedial, bridging, or foundation courses should be considered in such countries to increase participation in further and higher education.

Table 3. Quality of Primary & Secondary Education in ASEAN Members

Quality of Education (Six Indicators)	Top Third	Middle Third	Bottom Third
Brunei Darussalam	1	1	-
Cambodia	1	-	1
Indonesia	1		4
Lao PDR	1	1	-
Philippines	1	-	1
Malaysia	3	-	-
Myanmar	1	1	1
Singapore	5	-	-
Thailand	2	1	3
Vietnam	3	2	-

Source: UNDP (2019)

The extreme example of Nepal, which is one of the poorest countries in Asia, provides a snapshot of issues that can affect the higher education sector in low-income economies. Nepal faces significant challenges, as their universities have a rapidly expanding student population. However, the country claims that quality of education is poor, infrastructure and staff are lacking, staff have limited knowledge in their subject matter and little or no practical knowledge, the teacher-to-student ratio is extremely small, the operation of universities and appointment of staff suffer from political interference, and courses and curricula are not necessarily relevant to the nations' needs (Upadhyay, 2018). Despite these criticisms, Upadhyay (2018) found that different stakeholders are satisfied with the effectiveness of higher education in Nepal. Nevertheless, Upadhyay (2018) recommended a number of changes, including the implementation of a faculty development program; improvement of infrastructure, evaluation systems, curricula, course content, teaching methodology, and pedagogy; and the establishment of proper collaboration between academic institutions and industries.

Only over 20% of university students enrolled in professional disciplines such as medicine and engineering complete their studies. This low number is attributed to a poor level of preparedness in technical fields at the secondary level, programs that are costly to operate, and high tuition fees, with passing rates at times as low as 25% (Dilas, Cui, & Trines, 2018). This finding means that many students choose to study overseas (Ghimire, 2019). An estimated 75% of the 62,800 students who obtained government approval in the 2017–2018 fiscal year opted to study abroad. Numerous academics argued that this outflow will continue to increase until a substantial improvement in the quality of higher education in Nepal is attained (Rual, 2019).

Political apathy and policy imperviousness are considered as major bottlenecks in Nepal's higher education reform (Wagle, 2019). Moreover, urgency to improve this situation is apparently lacking. The university system is extremely political, with the government evidently more interested in appointing political cadres to key executive positions than the most qualified and experienced individuals. In addition, corruption, immorality, and petty acts by high officials are rampant. These matters are regularly reported in the Kathmandu English language press.

Meanwhile, analysis showed that Thailand's higher education system must focus on appropriately skilled workers with nurtured critical thinking abilities and honed

communication skills (Jones & Pimdee, 2017). According to Smith (in press), this endeavor is a challenge in many developing economies as well as in Thailand, where critical thinking and questioning are generally not part of the culture, which in many ways focuses on conformance.

A highly positive activity performed by the ASEAN University Network (AUN) involves promoting quality assurance within its network as well as in other universities in ASEAN member states (AUN, 2019). Key statistics are shown in Table 4. The large number of audits conducted in Indonesia and Vietnam is noteworthy. However, scholars should bear in mind that other quality assurance systems are in operation in most, if not all, universities across ASEAN members.

Table 4. Statistics for AUN-QA Network

ASEAN Member	AUN Member	AUN-QA Member	Number of Assessed Study Programs by end of Mar 2019	Number of Assessed Institutions by end of Feb 2019
Brunei Darussalam	1	2	-	-
Cambodia	2	4	-	-
Indonesia	4	31	182	2
Lao PDR	1	1	-	-
Philippines	3	16	54	1
Malaysia	5	6	14	1
Myanmar	3	7	-	
Singapore	3	3	-	
Thailand	5	12	21	
Vietnam	3	36	130	3
Total	30	118	401	7

Source: AUN (2019)

1.2. Complex Bureaucracy

At the policy level, ineffective public administration is identified as one of the factors hindering Thailand's goal of reaching developed-country status (Teanravisitsagool, 2019). A recent analysis of Thai bureaucracy stated that it has a huge and complex structure that is inflexible, with an excessive number of rules, thereby leading to cases where a new department with responsibilities similar to those of an existing one and conflicting or irrelevant rules and regulations is established (Phuengpha, 2019). A previous case study on the role of bureaucracy in developing the renewable energy industry of Thailand identified the duplication of roles of various departments and opacity in decision making as factors leading to complex bureaucracy (Smith, Smith, & Smith, 2014). Additionally, the sector-specific ministries of ASEAN members often operate in siloes from other ministries of the country. This practice allows policy dialogues across member governments but may lead to incomplete or overly narrow solutions to complex issues (Parks, Maramis, Sunchindah, & Wongwatanakul, 2018).

From personal observations, a pressing need clearly exists to streamline bureaucracies to make them efficient and effective. Often, individuals who graduated from the education system of Thailand and thus are professions lack critical thinking abilities (Jones & Pimdee, 2017). This finding is supported by the observations of the authors of the current paper, who observed that staff members are often reluctant to express their opinions or ask questions, especially in the presence of a senior colleague.

The negative impact of bureaucracy can also directly affect the performance of higher education. In numerous countries, such as Costa Rica, degree programs must be approved by ministries and considered to be professional activity and are often regulated by outdated laws that do not allow the evolution of new professions (Müller, 2018). By adopting new technologies, on-the-job training is crucial for sectors of the economy to remain resilient and competitive. The bureaucracy must learn to adapt to changing stakeholder needs and develop skills required to devolve responsibility and authority within organizations without risking the integrity of the system.

1.3. Ineffective On-the-Job training

In Skills development the readiness of ASEAN members for the impact of the Fourth Industrial Revolution, the ASEAN Integration Monitoring Directorate (AIMD) noted that

tapping ASEAN members' digital economy, which accounts for approximately 7% of their gross domestic product, could uplift their economy by US\$1 trillion by 2025 (Tijaja, 2019). Citing two influential studies, the assessment noted several severe constraints. First, a study by Bain & Company published in 2018 indicated that only approximately 16% of micro, small, and medium enterprises utilize digital tools. The second study, which was published by the International Labor Organization in 2017, predicted that Cambodia, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam would likely lose 54%–56% of their current jobs to automation. If this prediction proves accurate, then the impact on the social fabric of these economies would be enormous. The AIMD assessment highlighted that among the key actions needed to address these concerns, the most important is addressing the need for skills development.

Skills development seems to be a low priority in the manufacturing sector of numerous countries. For instance, the number of firms offering formal training is low across the four ASEAN economies analyzed by Smith (2020), as shown in Table 5. Firms are likely to offer workplace skills training; however, this type of training is relatively low in the manufacturing sector, except for that of Thailand, where its provision is extremely high.

Table 5. Selected Data from World Bank 2016 Enterprise Surveys

Parameter	Cambodia	Lao PDR	Myanmar	Thailand
Firms offering formal training (%)	22	7	6	18
Firms offering training, proportion of workers trained – manufacturing firms only (%)	44	38	58	94

Source: World Bank Data analyzed by Smith (2020)

Xing and Marwala (2017) claimed that high-end innovative talent is lacking in developing or under-developed countries. The authors argued that this shortcoming requires a country's higher education system to cultivate innovative talent and focus on training knowledge-based skilled individuals. This recommendation is supported by Brown-Martin (2017), who predicted that tasks that can be measured or based on rigid rules will likely be automated. As a result, Brown-Martin emphasized that focus should be placed on areas where humans have a distinct advantage, such as creative endeavors, social interactions, and jobs requiring physical dexterity and mobility. Workers need to commit to lifelong learning, agility, and continuous upskilling. The role of the government should be to create a climate for entrepreneurship, with institutions conducive for entrepreneur, manager, and worker communities to thrive.

Education should focus on providing appropriately skilled workers (Jones & Pimdee, 2017). Moreover, innovation and creativity require individuals with critical thinking abilities and satisfactory communication skills, and individuals should be able and willing to ask questions. In Thailand, (Jones & Pimdee, 2017) identified the problem of lack of foreign language and culture skills.

2. Methods

This research uses the narrative/case study approach to examine cross-border development and the role that universities can play and a combination of observation and literature analysis. The data are based on the first author's observations over the last eight years as a senior international development consultant specializing in capacity development in South and Southeast Asia. In the past eight years, the first author spent considerable time serving as a team leader in India, Myanmar, Nepal, and Sri Lanka. Moreover, the first author engaged in short-term assignments in Bangladesh, Cambodia, Papua New Guinea, and Timor Leste. This information is supplemented by the observations of the second author, who studied at three different universities in Thailand at undergraduate and postgraduate levels. Furthermore, the second author has a master's degree and PhD from Australian universities and is currently an academic at a Thai university.

In Section 1, the authors identify priority areas that must be addressed to allow universities to become effective. First, the quality of higher education in a country and

within institutions should be addressed. This assessment will in turn enable universities to become a catalyst for change in government bureaucracy. The authors also identify three prerequisites that are detailed in Section 3, that is, the quality of higher education, relevance, and improved communication/language skills. Once these prerequisites are met, significant opportunities for cross-border community engagement are discussed.

3. Result and Discussion

3.1. *Call for action to enable Universities to become effective partners in community development*

The authors consider at least three essential steps before a university can become an effective partner in cross-border development (see Table 6). These steps are described in detail below.

Table 6. Essential Steps before a University can become an Effective Partner in Cross-border Development

Step	Description	Comment
1	Improve higher education quality	The quality of several universities is internationally high; thus, this step can be skipped. Universities are likely to possess strengths and weaknesses, with only certain academic areas requiring quality improvement. In any case, without continuous improvement, a university may regress.
2	Enhance relevance	Curricula should be relevant to the development goals of a country and the aspirations of its citizens.
3	Improve foreign language skills	Language can be a major barrier to cross-border interaction, as countries in Asia have unique national languages and scripts.

Source: Authors

3.2. *Improving the quality of Higher Education*

Sharma (2018b), who is a Nepali expatriate lecturing at a university in the United States, postulated that higher education must be three-dimensional, including knowledge acquisition, workplace skills development, and lifelong learning, to shape minds and instill values. Sharma stated that in the current university environment, “teachers can design teaching/learning activities and assignments to foster educational and professional skills - both abstract and concrete” (Sharma, 2018b, p. 1). Moreover, Sharma argued that the role of a university is to not only develop the skills of engineers but also their well-rounded personality to use their engineering skills to serve society while enjoying a successful and happy life. Furthermore, the academic environment should support struggling students while providing outlets for the most talented scholars.

Research should not be the sole preserve of elite international universities. Scientists and scholars from the developing world should conduct general and applied research that is responsive to social demands and the interest of the nation (Sharma, 2019). Sharma (2019) considered that in any country, research that is not driven by social demands can become too abstract or esoteric and thus be ignored by the public and demotivate researchers. Scholars, particularly those from developing countries, must look beyond the global toward the local society and economy, where their intellectual input is anticipated, as the primary mission of universities is to create new knowledge for communities and societies (Sharma, 2019).

The need for academic staff to conduct research is clearly a priority. To facilitate this endeavor, universities should have a enough academic staff, thereby enabling them to balance their required teaching, research, and administrative tasks effectively as well as their private life. This goal is a challenge particularly with the rapid growth of student populations. Clearly, research should be published, but certain barriers exist. Researchers, particularly those in which English is their second language but plan to publish in this language, must be trained to identify predatory journals and low-quality conferences.

The role of universities should not be restricted to teaching and research. Universities must also address the need to nurture individuals who in turn will provide nurturing to aspiring leaders. The futurist Marr (2019) identified 14 essential leadership skills

required by the future workforce (Table 7). Clearly, such skills will need to be taught and developed, which can be accomplished by management training institutions.

Table 7. 14 Essential Leadership Skills Required by Future Workforce

Essential Skills	
Agile, can embrace changes and be empathetic to their emotional needs and those of their workforce	“Humbly confident”; accountable; a visionary; courageous in moving forward but ready to change course, if necessary; and flexible
Can understand new technology and continually introduce appropriate technologies for the organization’s sustainability	Intuitive, collaborative, quick learners, culturally intelligent, authentic, and focused

Source: [Marr \(2019\)](#)

Simply introducing a design-thinking course “cannot fundamentally help students to think more creatively” ([Lee & Yuan, 2018](#)). Students need support to transition from the current “exam-oriented didactic educational setting to an inquiry-based experiential learning environment” ([Lee & Yuan, 2018, p. 109](#)). This transition requires assisting learners to unlearn and relearn as they respond to the “complexity of real-life issues” ([Lee & Yuan, 2018, p. 111](#)).

The authors of this study are not calling for a “dumbed-down” degree but rather for content that is relevant to the development goals of a country. Critical thinking and communication skills can be included as part of a delivery method for current curricula, and consultations can be performed to develop new curricula ([Smith, 2020](#)).

Quality assurance is considered as one of the most important challenges in cross-border higher education ([Kosmützky & Putty, 2016](#)). [Kosmützky and Putty \(2016\)](#) argued that risks and new program limitations will dominate unless this quality issue is addressed adequately. However, the definition of “adequately” has yet to be settled.

Another issue that needs to be addressed is what the authors consider as “academic inbreeding.” In this scenario, staff members are selected based on their conformance to

the views, outlooks, or political affiliations of the staff of a hiring institution. Is the recruitment of young staff without real-life skills and experience the best choice for the future of an academic department? Surely, as William Cowper's poem "The Task" (1785) states, "Variety is the very spice of life, that gives it all its flavor!"

3.3. Enhancing the relevance of the Higher Education sector

The need for economies to become sustainable and meet future technological challenges provides opportunities for local educational institutions, either independently or in collaboration with international colleagues, to provide required long-term support in terms of institutional strengthening and capacity building. To be successful, this endeavor will require various institutions to change their course offerings and teaching methods to meet challenges. Focus on needs-based, student-centered, and stimulating education at all levels is necessary.

Sri Lanka has experienced a rapid increase in its knowledge-based economy, but members of the work force may need to upgrade their skills continuously to ensure their future employability (Wickramasinghe, 2018). Wickramasinghe (2018) argued that higher education institutions should have the capability to create life-long learners by being flexible by offering part-time, evening, weekend, and distance-learning programs. In this regard, four key sectors with a need for enhanced competitiveness are identified in Thailand (see Table 8). Identifying and delivering the necessary skills and knowledge will be a huge undertaking for the higher education and postsecondary training sectors.

Table 8. Sectors Identified for Enhanced Competitiveness in Thailand

Sector	Proposed Action
Agriculture	Traditional farming must become smart farming
Small to medium enterprises (SMEs)	Conventional SMEs must become smart SMEs and start ups
Services	Move from providing low value-added services to high value-added services
Workforce	Move from a low-skilled workforce to a high-potential workforce

Source: [Teaavisitsagool \(2019\)](#)

Note: A number of educational delivery methods can be considered.

If properly delivered, distance education can be a very viable option. Distance education allows students to study at a high-quality institution in their home country and expatriates to continue their studies as they travel the world. This approach can be used by a university in a developing country to offer crucial subjects using courses from a partner institution if it lacks academic staff to conduct such courses.

Universities should work with stakeholders to provide on-going short courses and extension activities to enhance staff skills and competencies. Moreover, international guest lecturers should be engaged as needed. Notably, in-country training reaching large numbers of staff has more benefits than sending selected professionals abroad for training.

How universities can employ massive open online course (MOOC) providers should also be considered. MOOCs are online courses that comprise online sessions, with individuals as the target group, with free participation ([Hüther et al., 2020](#)). MOOCs have no formal qualification standards, and a certificate of participation/attendance can be issued either free of charge or for a fee. Universities offering courses in a wide range of disciplines are considered to have a better chance of survival than those with limited offerings. German universities have four main reasons for offering MOOCs: (1) as a catalyst for the further digitization of local teaching at universities, (2) for image and visibility, (3) as an internationalization strategy for recruiting international students, and (4) to generate research data on digital learning. In other words, at this stage,

German universities do not place a high priority on the use of MOOCs to solve local problems of higher education.

Finally, universities should encourage students to enroll in intensive courses on spoken and written English, as the connected world requires such skills. Other language skills should also be encouraged. Nevertheless, language understanding is affected by the concepts and culture of different parties and is complex in much of Asia, where indigenous scripts are used. For instance, translation is particularly problematic for understanding technical documents, such as legislation (Smith, 2019a).

At the same time, universities should engage actively with the wide community by developing centers of excellence in conjunction with other universities and government agencies. This endeavor will empower universities to develop strategies and techniques that are relevant to their stage of development while seeking to become innovative and providing on-going mentoring and guidance to staff in various agencies.

Extension services supporting every sector of the economy could be a significant driver of change and a potential dual role of universities. First, universities are training grounds for professionals who will serve as staff in such extension services. Second, universities can and often provide extension services.

Many professions require their practitioners to undertake continuing professional development (CPD) to maintain their accreditation. CPD requirements include updating current skills, knowledge, and experiences. Numerous universities support such activities, and those that do not should do so.

Universities should review their relationship with the vocational training sector. Should career paths be clearly defined, for instance, from technicians to engineering graduates? Should universities increase their postgraduate offerings? What should be their mode of delivery? Should course offerings be constrained by international boundaries? Some institutions would adopt this type of role with relish, whereas others, as is their right, would feel that such a role is inappropriate. Thus, how should universities participate in cross-border development?

3.4. Role of Universities in cross-border development

Established, renowned, and successful universities from advanced economies play a clear role in “twining” with local universities to help them develop their course offerings

and quality of teaching and research. Most universities possess acknowledged strengths; thus, “twinning” could occur with numerous institutions. Furthermore, staff and student exchanges should be encouraged. As a precursor of future initiatives, universities developing and promoting the positive potential of cross-border development are extremely important ([van den Broek, Benneworth, & Rutten, 2019](#)). Meanwhile, for students to become highly flexible, incentivizing the teaching staff to undertake professional activities to provide the skills necessary for effective educational processes for internal and cross-border education is important ([Legkonogikh, Mezinova, Popova, & Karimova, 2019](#)).

The AUN, which was established in 1995, is an excellent starting point model ([Charter of the ASEAN University Network, 1995](#)). The AUN is a key implementing agency for the ASEAN’s sociocultural portfolio, promotes and improves cooperation among ASEAN institutions of higher education, and supports programs on Southeast Asian studies ASEAN regional research projects ([Parks, Maramis, Sunchindah, & Wongwatanakul, 2018](#)). Furthermore, multilateral cooperation is generally more effective than bilateral cooperation ([AUN, 2016](#)).

These initiatives are only the start, as universities can and should play a much larger role in cross-border development. As previously stated, Thailand is used as an example. Overseas development cooperation in Thailand is evident in sectors where the country excels, namely, health, agriculture, rural development, and tourism. As new issues and development challenges arise, Thailand reorients its role to address these new challenges ([Parks, Maramis, Sunchindah, & Wongwatanakul, 2018](#)). Universities are clearly part of this success story, as they educate and nurture students to excel in such fields. By focusing on their strong areas, other countries can and often undertake development assistance where they can provide the most benefits. Universities can play a leading role in such initiatives.

Often, poor economies are agrarian based and lack quality seed stock and fertilizers to improve crop yields and benefit farmers and the national economy from the agricultural sector. Issues may be similar across different countries, but each country has its own peculiarities. Thailand is successful in improving the productivity of its agricultural sector and downstream supply chain ([Smith, 2020](#)). Thus, agriculture is a field where Thai institutions can aid. However, this assistance will require the

development of long-term community-based rural extension services and trials to improve productivity and collaborate with the government to develop downstream opportunities for processing, marketing, and logistics. Universities can play a key role in assisting the development of local agricultural institutes to create seed stock that is well suited to local conditions and help in crop diversification. The government or private sectors should lead in providing infrastructure and human resources. Although universities may have the capacity to work within their own communities and thus should adopt such a role, they can provide only a supporting role in the larger endeavor. The role of universities involves conducting research and training community-based staff. As tasks increase, their role would, by necessity, be to train the trainers. Properly implemented, such an initiative would raise the living standards of local populations and allow them to pursue improved education opportunities and obtain superior health services for their children. Such a model could be developed for most industries, such as the garment industry. Opportunities for cooperation are endless.

Local people are not empty barrels waiting to receive and integrate knowledge “but should be trusted to articulate their own knowledge within a context of co-creation, co-diffusion, and cointegration if development targets are to be sustainable” (Mbah, 2019, p. 19). Relevant knowledge should be obtained locally rather than from a distance and involves “targeted collaborative engagement underpinned by mutual trust” (Mbah, 2019, p. 19). A research in Latin America concluded that indigenous knowledge can potentially provide innovative solutions and strategies that can benefit other parts of the world (Tyson & Vega, 2019).

Twinning arrangements among universities should be nurtured, and clear goals should be set. The goals must be long term and ensure the cross fertilization of ideas, knowledge, and understanding. Heeding the words of Sharma is important while writing about the relationship between local Nepali scholars and overseas Nepali scholars, which can provide important lessons for those working in international development. Sharma argued that local personnel may not lack talent, knowledge, or skills and are “far more knowledgeable about the local context, including its challenges and opportunities”; however, “a positive and healthy environment of exchange and collaboration, and that should be done through collaboration and slow, humbling process of learning” is required (Sharma, 2018a, p. 1).

Clearly, some of these initiatives will require additional funding, which will necessitate universities to build on their strengths and develop strategic partnerships with government agencies and seek their support. Agencies are highly likely to have limited funding. However, the key is to seek funds rather than wait for opportunities to arise. Even a small allocation from a donor, which could be an international development bank, a nongovernment organization, a foreign government, or a philanthropic organization, would bring significant benefits to a country.

4. Conclusion

This study, which is based on published research and the authors' intimate study of the international development sector, identified the key roles that universities can play in cross-border development. However, before universities can perform such roles, they must put their own house in order. This endeavor will take time and should be a step-by-step process aiming for improvement and eventual success. Universities as educational institutions have a duty to educate students. Therefore, universities have an advantage in cultivating beliefs and imparting knowledge to students. Graduates and current students are an important force for change in society. Change cannot be imposed from the outside and must consider the actual needs of an organization rather than the wants of its staff.

Essentially, the higher education sector should assess its operations and effectiveness in meeting the needs of its various stakeholders and address its shortcomings. Moreover, institutions should identify areas/subjects/processes to be implemented to increase their relevance. Furthermore, universities should consider the roles they can play in cross-border development, which should be built on their recognized strengths. Very few universities, if any, excel in every academic domain. Finally, universities should be proactive and identify opportunities. Success is not guaranteed, but the need is real, and universities are best suited to play a significant role in the development of their nation and that of the entire region.

Author Contribution

Robert Brian Smith and Nucharee Nuchkoom Smith conceived of the presented idea. Nucharee Nuchkoom Smith developed the theory. Robert Brian Smith verified the

analytical methods and performed the computations. Nucharee Nuchkoom Smith encouraged Robert Brian Smith to investigate a critique and way forward using Universities as the driving force and supervised the findings of this work. All authors discussed the results and contributed to the final manuscript.

Acknowledgments

To all our concerned colleagues who have shared their concerns and hope for more sustainable outcomes.

References

AUN. (2016). *Managing multi-university collaboration activities: The AUN way version 1.0 2016*. Bangkok: ASEAN University Network (AUN).

<http://www.aunsec.org/pdf/publication/Workshop%20Result%206th%20IRO+3%20Managing%20Multi-University%20Collaborative%20Activities.pdf>

AUN. (2019). *ASEAN University Network Annual Report 2018-2019*. Bangkok: The ASEAN University Network (AUN) Secretariat.

<http://www.aunsec.org/pdf-2019/AUN%20Annual%20Report%202019%20Revise%20Final1.pdf>

Brown-Martin, G. (2017). *Education and the fourth industrial revolution*. Groupe Média TFO. Toronto.

<https://www.groupemediatfo.org/wp-content/uploads/2017/12/FINAL-Education-and-the-Fourth-Industrial-Revolution-1-1-1.pdf>

Charter of the ASEAN University Network (1995).

https://www.parliament.go.th/aseanrelated_law/files/file_20170808180642_txtattachEN_.pdf

Dilas, D. B., Cui, J., & Trines, S. (2018, April 3). Education in Nepal. *World Education News + Reviews*.

<https://wenr.wes.org/2018/04/education-in-nepal>

Ghimire, B. (2019, March 1). As study abroad numbers rise, Nepali students land in trouble. *University World News*.

<https://www.universityworldnews.com/post.php?story=20190301101826555>

Hüther, O., Kosmützky, A., Asanov, I., Bünstorf, G., & Krücken, G. (2020). *Massive open online courses after the gold rush: International and national developments and future perspectives*. Kassel: International Centre for Higher Education Research – Kassel.

<https://doi.org/10.15488/9775>

Jones, C., & Pimdee, P. (2017). Innovative ideas: Thailand 4.0 and the fourth industrial revolution. *Asian International Journal of Social Sciences*, 17(1), 4-35.

<https://doi.org/10.29139/aijss.20170101>

Kosmützky, A., & Putty, R. (2016). Transcending borders and traversing boundaries – A systematic review of the literature on transnational, offshore, cross-border and borderless higher education. *Journal of Studies in International Education*, 20(1), 8-33.

<https://doi.org/10.1177/1028315315604719>

Lee, R. M., & Yuan, Y. S. (2018). Innovation education in China: Preparing attitudes, approaches, and intellectual environments for life in the automation economy. In N. W. Gleason (Ed.), *Higher education in the era of the Fourth Industrial Revolution*. Singapore: Palgrave Macmillan.

Legkonogikh, A., Mezinova, G., Popova, S., & Karimova, C. (2019). Development of cross-border education in regional University. *SHS Web of Conferences* 70(Paper 02007).

<https://doi.org/10.1051/shsconf/20197002007>

Marr, B. (2019, May 13). 14 Essential leadership skills for the 4th Industrial Revolution. *Forbes*.

<https://www.forbes.com/sites/bernardmarr/2019/05/13/15-essential-leadership-skills-during-the-4th-industrial-revolution/#465f6018a3a0>

Mbah, M. (2019). Can local knowledge make the difference? Rethinking universities' community engagement and prospect for sustainable community development. *The Journal of Environmental Education*, 50(1), 11-22.

<https://doi.org/10.1080/00958964.2018.1462136>

Müller, E. (2018). Regenerative Development in Higher Education: Costa Rica's Perspective. In N. W. Gleason (Ed.), *Higher Education in the Era of the Fourth Industrial Revolution*. Singapore: Palgrave Macmillan.

- Parks, T., Maramis, L., Sunchindah, A., & Wongwatanakul, W. (2018). *ASEAN as the architect for regional development cooperation*. San Francisco: The Asia Foundation.
<https://asiafoundation.org/publication/asean-as-the-architect-for-regional-development-cooperation/>
- Phuengpha, N. (2019). Thai bureaucracy system. *Jurnal Stisopol Waskita Dharma*, 6(1), 11-19.
<http://ejurnal.waskitadharma.ac.id/index.php/jamak20191/article/viewFile/45/43>
- Rual, D. (2019, August 2). How to keep Nepali students from flying abroad. *Kathmandu Post*, 7.
- Sharma, S. (2018a, September 11). Expats and experts. *myRepublica*.
<https://myrepublica.nagariknetwork.com/news/expats-and-experts/>
- Sharma, S. (2018b, October 23). Making education three-dimensional. *myRepublica*.
<https://myrepublica.nagariknetwork.com/news/making-education-three-dimensional/>
- Sharma, S. (2019, July 25). Localizing knowledge production. *myRepublica*.
<https://myrepublica.nagariknetwork.com/news/localizing-knowledge-production/>
- Smith, R. B. (2019a). *Harmonisation of laws in ASEAN: The issue of English*. Paper presented at the International Seminar on Politics, Administration and Development 2019 (INSPAD2019), Walailak University, Nakhon Si Thammarat, Thailand.
https://www.researchgate.net/publication/343178725_CODE_026_HARMONISATION_OF_LAWS_IN_ASEAN_THE_ISSUE_OF_LANGUAGE/references
- Smith, R. B. (2019b). Sustainability: Lenders know best - A practitioner's view. *ATINER'S Conference Paper Series*.
<https://www.atiner.gr/papers/CBC2018-2613.pdf>
- Smith, R. B. (2020). How can least developed member countries of ASEAN benefit from the 4th Industrial Revolution? *Walailak Journal of Science and Technology (WJST)*, 18(1).
<http://wjst.wu.ac.th/index.php/wjst/article/view/6502>

Smith, R. B., Smith, N. N., & Smith, D. R. (2014). Law, bureaucracy and electric power from renewable energy in Thailand. *Southeast Asian Journal of Contemporary Business, Economics & Law*, 5(4), 1-5.

<https://seajbel.com/wp-content/uploads/2014/12/LAW-8-Law-Bureaucracy-and-Electric-Power-from-Renewable-Energy-in-Thailand.pdf>

Teanravisitsagool, P. (2019). *Thailand 4.0: The Fourth Industrial Revolution Strategy from the National Perspective*. Paper presented at the Special Session on the Fourth Industrial Revolution in ASEAN, Bangkok.

<https://drive.google.com/drive/u/0/folders/1y3Cxx6pP2kpSFTR-3crmY9uWletQhe7r>

Tijaja, J. (2019). *Assessment of ASEAN Readiness for the Fourth Industrial Revolution*. Paper presented at the Special Session on the Fourth Industrial Revolution in ASEAN, Bangkok.

<https://drive.google.com/drive/u/0/folders/1y3Cxx6pP2kpSFTR-3crmY9uWletQhe7r>

Tyson, L. S., & Vega, V. W. (2019). Why we need to talk about lifelong learning and intercultural universities. *London Review of Education*, 17(3), 347-361.

<https://doi.org/10.18546/LRE.17.3.10>

UNDP. (2019). *Human Development Report 2019*. New York: United Nations Development Programme.

<http://hdr.undp.org/sites/default/files/hdr2019.pdf>

Upadhyay, J. P. (2018). Higher Education in Nepal. *Pravaha*, 24(1), 96-108.

<https://doi.org/10.3126/pravaha.v24i1.20229>

van den Broek, J., Benneworth, P., & Rutten, R. (2019). Institutionalization of cross-border regional innovation systems: the role of university institutional entrepreneurs. *Regional Studies, Regional Science*, 6(1), 55-69.

<https://rsa.tandfonline.com/doi/pdf/10.1080/21681376.2018.1562367?needAccess=true>

Wagle, A. (2019, July 23). The collapse of Nepal's higher education system. *Kathmandu Post*.

<https://kathmandupost.com/columns/2019/07/23/the-collapse-of-nepal-s-higher-education-system>

Wickramasinghe, V. (2018). Higher education in state universities in Sri Lanka: Review of higher education since colonial past through international funding for development. *International Journal of Educational Management*, 32(3), 463-478.

<https://doi.org/10.1108/IJEM-01-2017-0028>

Xing, B., & Marwala, T. (2017). Implications of the fourth industrial age for higher education. *The Thinker*, 73, 10-15.

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3225331