Development of a Framework for the Local Implementation of the SDGs – Phase II

Final Report

Sayamol Charoenratana

Cholnapa Anukul

Smriti Das

Nanung Agus Fitriyanto

Normaliza Abdul Manaf

Tarek Katramiz

Nestor T. Castro

Executive Summary

The emergence of a new pandemic like Covid has exposed the uncertainty of the era we are living within. These types of global societal and environmental issues typify the unsustainability of our current world, which is our core challenge. To achieve SDGs localization, community engagement is necessary. The project *'Development of a Framework for the Local Implementation of the SDGs – Phase II' is* a collaborative research among universities from six countries including Keio University (Japan), TERI School of Advanced Studies (TERI-India), Universiti Sains Malaysia (USM-Malaysia), Universitas Gadjah Mada (UGM-Indonesia), University of the Philippines Diliman (UPD-Philippines) and Chulalongkorn University (CU-Thailand). The main purpose of Phase II is to enhance the capacities of higher education institutions to engage with communities by localizing SDGs. To meet our objective, qualitative methodology was used to examine the past and current practices of those working in HEI to collaborate and engage with local communities towards sustainable development. Tools was developed as pre-prepared questionnaires, one for the institution and one for individuals of an HEI to collected data. Face to face interview, self-response, online survey, online interview and telephone interview were used differently in accordance with each country research context. National conference, local meeting, focus group were organized in each country to verified the data between July-August 2021. The international online conference: "Development of a Framework for the Local Implementation of the SDGs" was held on August 18, 2021 between 11.00 a.m. - 01.15 p.m. (Thailand Time) to sharing our report and collecting other practices from other scholars. The 136 surveys are consisted of 16 respondents from India, 41 respondents from Indonesia, 6 respondents from Japan, 33 respondents from Malaysia, 8 respondents from Philippines and 32 respondents from Thailand. Existing community engagement practices were collected through surveys. Models and methodologies were inspected to analyze the way HEIs can collaborate with local communities. We propose four central roles of HEIs, which are crucial for community engagement within the SDGs localization process, consisting of teaching and learning, research, service and knowledge exchange, and student initiatives support, which are all crucial for community engagement. Furthermore, we highlight sustainability leadership, which is a fundamental support for local engagement practices within HEIs activities Our research findings point to three common challenges among HEIs in six countries, which are unsustainable funding, ranking competition, and centralized governance. The policy recommendations put emphasis on encompassing new roles of HEIs and the sustainability leadership, with awareness of mutual challenges.

TABLE OF CONTENTS

Chapter 1

Introduction

Background

The ownership of the implementation of the UN Sustainable Development Goals (SDGs) by local authorities and communities, civil society and the scientific and academic community is paramount to the realization of the goals. Across Asia and the Pacific, while many national governments promote partnerships and local implementation in the national SDG action plans, differences abound in the extent of the implementation as well as in actual practices. Further efforts are needed to explore how the local implementation of the SDGs can be facilitated and accelerated more effectively, as well as how local authorities and communities can be empowered to implement the global goals at the local level.

Higher education institutions can play a key role in this endeavour by supporting, through research and education, local authorities and communities for the effective implementation of the SDGs at the local level. In this context, the project "Development of a Framework for the Local Implementation of the SDGs," was launched in 2018. Bringing together four member universities of ProSPER.Net, the project aims to investigate how universities can support local authorities and communities for their effective implementation of the SDGs.

In Phase I, case studies were conducted in the respective countries of the participating institutions – India, Japan, Philippines and Thailand - to understand the current situations of the local implementation of the SDGs. The case studies demonstrated that learning took place for various stakeholders involved in the process, including the researchers themselves, the graduate students in the research teams, the local schoolchildren, youth, community residents, and government officials, as they discussed and analyzed sustainability issues in the community.

The Project I experience yielded insights into the role of higher education institutions in the implementation of the SDGs at the local level, including a number of guiding principles for higher education institutions to support local authorities and communities effectively for the implementation of the SDGs. At the same time, it also revealed the need for more investigation into ways in which higher education institutions can foster collaboration with local communities and facilitate local and academic knowledge to be brought together to support the local implementation of the SDGs.

Building on the achievements and lessons learnt from Phase I, Phase II of the project will explore models of collaboration between higher education institutions and communities for the local implementation of the SDGs through the documentation and analysis of existing experiences among ProSPER.Net member institutions. In order to garner relevant knowledge and experiences widely, Phase II will broaden the scope of participating institutions and will be addressed not only with the ProSPER.Net members but also with higher education institutions that are leading RCEs in the Asia-Pacific region.

The knowledge yielded from Phase II will be consolidated as a resource material for use in higher education, and disseminated widely for broader audience. The project contributes to all the SDGs, in particular SDG 4 (Education) and SDG 17 (Partnerships).

Objectives

The overall objective of Phase II is to enhance the capacities of higher education institutions to collaborate with local communities for the implementation of the SDGs at the local level.

The immediate objectives are the following.

1. To take stock of existing practices of higher education institutions' collaboration with local communities in education and research for sustainability;
2. To explore models and methodologies of collaboration between higher education institutions and communities for the local implementation of the SDGs.

The intended results are the following.

1. Increased understandings of higher education institutions' practices in their collaboration with local communities in education and research for sustainability.
2. Enhanced interest and engagement among higher education institutions in collaboration with local communities for SDG implementation.

Methodology

The project aims to explore and reimagine the role of HEI in supporting the implementation of the Sustainable Development Goals (SDGs) at the local level by examining the past and current practices of those working in HEI to collaborate and engage with local communities for sustainable development. To meet our objective, qualitative methodology was used to conduct this research. Tools was developed as pre-prepared questionnaires, one for the institution and one for individuals of an HEI for researcher to collected data. Face to face interview, self-respond, online survey, online interview and telephone interview were used for collected the data difference from each case study.

National conference, local meeting, focus group were organized in each country to verified the data between July -August 2021.

The international online conference: "Development of a Framework for the Local Implementation of the SDGs" was held on August 18, 2021 between 11.00 a.m. - 01.15 p.m. (Thailand Time) to sharing our report and collecting other practices from other scholars.

Study area

6 case studies were selected from 6 HEIs from 6 countries, Keio University (Japan), TERI School of Advanced Studies (TERI-India), Universiti Sains Malaysia (USM-Malaysia), Universitas Gadjah Mada (UGM-Indonesia), University of the Philippines Diliman (UPD-Philippines) and Chulalongkorn University (CU-Thailand). (Figure 1)

Figure 1 Study areas among six countries

Population

This study consisted of case studies of six countries, each of which collected data from both individual and institutional respondents. The 136 surveys were categorized as 16 respondents from India, 41 respondents from Indonesia, 6 respondents from Japan, 33 respondents from Malayasia, 8 respondents from Philippines and 32 respondents from Thailand. (Table 1)

Table 1 Population by Study Area

Study area/ country	Respondents
India	16
Indonesia	41
Japan	6
Malayasia	33
Philippines	8
Thailand	32
Total	**136**

Limitations

COVID pandemic was the significant limitation of this study. During the study period, all countries was faced with the pandemic in wave one and wave two. Some country like India was suffering with effected cases and death cases numbers. Some countries were sitting in the continuing pandemic like Thailand, Philippines, Indonesia and Malaysia. The project was behind the schedule from May 2020 till March of 2021 because all researchers cannot conduct the research. However, difference techniques were adapted to collected data in each case study. (See country survey reports)

India

Assoc. Prof. Dr. Smriti Das
Ms. Garima Bisht
TERI School of Advanced Studies

Role of HEIs in Promoting SDGs through Community Engagement: Study into the Various Models of C.E. in Indian HEIs.

Introduction

SDGs and Higher Education

The current study seeks to identify the different approaches or models of community engagement (C.E) observed in the Indian higher education system. The main aim is to draw out the role of Higher Educational Institutions (HEIs) in promoting awareness and building capacities with respect to the UN Sustainable Development Goals (UNSDG) as they interact with various communities in their own ways.

Succeeding the Millennium Development Goals, the SDGs present integrated goals that envision a future based on social, economic, and environmental equity. India is committed to the SDG agenda, with policies that are framed to bring holistic development to every Indian. NITI Aayog (the Government of India's think tank) oversees mapping of schemes and also identifies the various ministries and supporting offices that relate to the goals. However, El-Jardali, et al. (2018) call for action and not just policy analysis from a distance as they talk about possible "fatigue" in regarding the SDGs and their implementation due to disconnect between the government, the academic community and the key actors which, the writer suggests, is a reason for the slow pace of their achievement. Franco and Derbyshire (2020) propose an understanding of "Education for Sustainable Development" (ESD) policies, formulated at an international level, and how they fit into a national, institutional, and a local discourse. The authors draw conclusions about possible inconsistencies and reasons for failure of ESD policies by thoroughly analysing stakeholder partnerships and collaboration.

India after independence has had a fair share of highs and lows with respect to its socio-economic situation. At the stroke of midnight of 15th August 1947, India awoke to freedom but also a country ravaged with poverty, strife, severe social inequity, among others. The first Prime Minister, Jawaharlal Nehru, was a great proponent of rational, logical thought, and believed that with knowledge and education most evils of society can be overcome. With a vision to provide an equitable education for all, India has seen the establishment of many great institutions of today, like the Indian Institute of Technology, National Institute of Technology, All India Institute of Medical Sciences, and many other Central, State, and private universities over the decades since 1947. According to the University Grants Commission (UGC), as of 31st December 2020, a total of 993 universities and 39,931 colleges are listed, which indicates a respective

increase of 36 and 80 times since Independence when there were 27 established Universities and 498 colleges. The All-India Survey on Higher Education (AISHE) report of 2018-19 pegs the Gross Enrolment Ratio (GER) in higher education for India at 26.3%. GER is defined by UNESCO Institute for Statistics as the "number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education." That means 26.3% Indians in the age group of 18-23 are enrolled in some form of higher educational institution. This percentage is still below the Government of India target of 30% by 2020; but the overall expansion of higher education poses questions as to the viability of these places of intellectual inquiry about their pertinence in societal issues that plague our societies and communities. Singh and Tandon (2015) argue that issues such as "inequality, degradation, insecurity and exclusion" raise the importance and present "Community University Engagement" as a pragmatic way of building bridges between universities and society in order to bring forth sustainable answers to said challenges.

HEIs & Community Engagement

Among the primary roles a university or an educational institution is seen to be undertaking, teaching and research activities remain the primary contributions. A higher educational institute is a place of cultivating intellect and propagating theoretical concepts. These activities, however, come off as paternalistic as these concepts are seen to be residing in an ivory tower, circulating within academics as abstract concepts. Community engagement implies reciprocity, a flow of these ideas into the communities surrounding these metaphorical, often perceived to be inaccessible, centres. Engagement between higher educational institutions (HEIs) and communities has been defined by Bender (2008) to include "initiatives and processes through which the expertise of the institution in the areas of teaching and research are applied to address issues relevant to its community". Bender uses three models of community engagement to describe approaches various institutions might employ in order to exist in a symbiotic relationship (Jacob, et al. 2015) with the community at large. It is largely acknowledged that HEIs are centres of research and innovation, and teaching. But the third "silo", as Bender describes, is community development. In the 'silo' model, these "silos" exist independent of each other and community engagement is predominantly a separate and, often, voluntary endeavour, both at an institutional and individual level. Intersecting model presents C.E. to be an "irreducible and unavoidable" part of the existing institutional activities, be it course work or the establishment sponsored co-curricular.

> *"Scholarly publications, research reports, media coverage and public forums are also modes of engaging with communities, which could be seen as a natural extension of the core work of universities in teaching and research."*
>
> *~Bender (2008:88)*

Where the intersecting model doesn't pre-suppose the need to make sweeping efforts to indulge in C.E, the cross- cutting or the infusion model puts engagement with these "specific, local, and collective interest groups" in the forefront of the functioning of an HEI. A "community engaged university" envisions engagement to be engrained within all learning and research and

not as a by-product. Proponents of this approach to C.E argue that service of the community and engagement should be held essential for improving the relevance of what is taught and not relegated as something separate like a charity.

There are multiple ways in which HEIs engage with the communities in the Indian context. Several traditional social science disciplines have community work embedded in their curriculum. This reflects in the extensive fieldwork desired by courses in disciplines of Sociology, Anthropology and so on. On the other hand, many applied science courses and extension activities (for instance, by agriculture universities or other technical universities) also require extensive community interaction. Through the decade of 1980s and 1990s, the diversity of courses and programmes and the changing development paradigms (rise of participatory research, decentralization and so on) has also seen rise of number of new field-based capacity building programmes that have stressed on community participation- thus seen in social work, rural development, rural management and similar programmes. Today the development ecosystem stresses a lot on systems thinking and thus also simultaneously stressing upon innovations and entrepreneurial skills, smart technology in all of HEIs can play a huge role to bridge the knowledge and awareness gaps and also to build necessary skills and strategizing. They have taken a leap forward and responded to the situation- thus we see many extension activities, ideas like evidence-based policy, citizen science initiatives and so on.

Community Engagement in the Indian Higher Education Context

In 1969, the Ministry of Youth and Sports Affairs launched the National Service Scheme in 37 universities, where the students and teachers established constructive relationships with the communities. As of 2015, NSS covers over 298 universities and its volunteers work in villages, slums, and other voluntary communities to complete a set number of hours during an academic year. Singh and Tandon (2015) argue that though this helps engage the students and faculty in worthwhile activities, it becomes an extension of teaching and learning. In 2006, the National Assessment and Accreditation Council of India (an autonomous body funded by the UGC) embarked to release a 12-part series on "best practices" in various aspects of an institution's functioning, one of which presented case studies on best practices of community engagement in 15 HEIs in India. NAAC's philosophy of setting an example of what should be ideal and normative is brought out by the "best practices approach". It also fuels the "accreditation agenda" which strives for improvement of an institution and an elevation in the quality of higher education.

The erstwhile Planning Commission's 12th–Five Year Plan mapped out some guidelines for "Centre for Fostering Social Responsibility and Community Engagement" which established "engagement", and not "outreach", as a core value for places of knowledge dissemination. Engagement projects mutuality, which is essential as HEIs are often regarded as being "ivory towers" which are in dissonance with the social realities. The document talks about the possible friction between the local cultures, where an institution is set in, thereby challenging the 'universality of the university' which essentially brings forth the critique levelled against places of higher education: HEIs being universally inaccessible. This Five-Year Plan endorsed problem-centric scholarship at institutions, an approach where community engagement and service

learning take the forefront in every aspect of the university. This resonates with the "cross-cutting model" given by Bender (2008) which says that C.E and service is embedded in all aspects and priorities of a HEI's functioning. The UGC provided 12 objectives for setting up the "Centre for Fostering Social Responsibility and C.E." in universities and an assistance plan, which included financial endowments with an upper ceiling of Rs. 2.5 crore.

In 2018, the Unnat Bharat Abhiyan was evolved from this wherein a "Subject Expert Group" on educational institutions' social responsibility was set up. This group developed a report on "Fostering Social Responsibility and Community Engagement in HEIs in India". It vied for HEIs bringing in social responsibility and C.E in their vision and mission and recommended development of institutional mechanisms to achieve a holistic and applied approach to C.E. in order to encapsulate the three functions of HEIs: teaching, research, and service. Based on global and national approaches to C. E in HEIs this document provided key principles to guide C.E which include:

- Mutual learning and respect
- Engagement which is not limited to any particular discipline
- Credit based system for students
- Credits for the teachers involved in promoting C.E
- Pushing for linkages with local institutions like NGOs, CSOs, local government, etc.

This expert panel's report talks about forms of C.E and operational guidelines for implementing a national curriculum along with a module.

Table 2 Module by UGC

S. No.	Module Title	Module Content	Assignment	Teaching/ Learning Methodology	No. of Classes
1	Appreciation of Rural Society	Rural lifestyle, rural society, caste and gender relations, rural values with respect to community, nature and resources, elaboration of "soul of India lies in villages' (Gandhi), rural infrastructure	Prepare a map (physical, visual or digital) of the village you visited and write an essay about inter-family relations in that village.	- Classroom discussions	2
				- Field visit**	4
				-Assignment Map	2
2	Understanding rural	Agriculture, farming, landownership, water management, animal husbandry, non-farm	Describe your analysis of rural household economy, its challenges and	- Field visit**	3

#					
	economy & livelihood	livelihoods and artisans, rural entrepreneurs, rural markets	possible pathways to address them	- Group discussions in class	4
				-Assignment	1
3	Rural Institutions	Traditional rural organisations, Self-help Groups, Panchayati raj institutions (Gram Sabha, Gram Panchayat, Standing Committees), local civil society, local administration	How effectively are Panchayati raj institutions functioning in the village? What would you suggest to improve their effectiveness? Present a case study (written or audio-visual)	- Classroom	2
				-Field visit**	4
				-Group presentation of assignment	2
4	Rural Development Programmes	History of rural development in India, current national programmes: Sarva Shiksha Abhiyan, Beti Bachao, Beti Padhao, Ayushman Bharat, Swachh Bharat, PM Awaas, Skill India, Gram Panchayat Decentralized Planning, NRLM, MNREGA, etc.	Describe the benefits received and challenges faced, in the delivery of one of these programmes in the rural community; give suggestions about improving implementation of the programme for the rural poor.	-Classroom	2
				-Each student selects one programme for field visit **	4
				-Written Assignment	4

**Recommended field-based practical activities.

Source: UGC Unnat Bharat Abhiyan https://www.ugc.ac.in/e-book/UNNAT%20BHARAT%20ABHIYAN.pdf

There are a number of suggested activities, that are prescribed in the UGC document to fulfil the course goals, like interaction with SHG women members, and study of their functions and challenges; visiting MGNREGS project sites; field visit to Swatchh Bharat project sites; interactive community exercise with local leaders, panchayat functionaries, grass-root officials and local institutions; visit rural schools, etc.

Contextualizing the Survey

Research Institution

For the India segment of the project, undertaken by TERI School of Advanced Studies, the methodology remains largely qualitative. In reviewing previous works to build a theoretical framework we have assimilated the various techniques used to collect data for similar objectives. Qualitative analysis has been hailed as being able to "reduce methodological limitations" (Franco and Derbyshire, 2020) and the most common qualitative research tools and techniques encountered in the majority of literature analysed include, policy analysis, semi-structured, open-ended interviews, survey questionnaires, focus group discussions with stakeholders, and field observations. Reliability is foremost in any research enterprise and techniques like triangulation, which capture data from different perspectives, come in the picture to help achieve that.

TERI is a private varsity located in New Delhi, India. It is an establishment that promotes a sustainable way of life, which it teaches as part of the curriculum and also as part of its social responsibility. Set up as a Trust by The Energy and Resources Institute, in 1998, it was a non-for-profit, independent research institute dedicated towards scientific and policy research in the fields of energy, environment, and sustainable development. It was granted the "deemed to be University" status in 1999 by the University Grants Commission, and has since then postured itself as a place of enabled learning that develops young minds in their preferred discourses. TERI School of Advanced Studies has a vision dedicated towards sustainability through knowledge creation and human capacity building. There are some "Core values" that are embedded in the teaching- learning ecosystem at its "green campus" in Vasant Kunj, Delhi; a systemic approach to problem solving, commitment to environmental protection and social justice, engaging in deliberative processes, and promoting critical, solutions-oriented approach.

Information about Participating Institutions/Individuals

The data collection for this phase of the project started in March 2021, as it was largely assumed that the country had seen the worst of a deadly pandemic as the cases seemed to be waning. The prospective participants were identified after scouring websites of higher educational institutions. The list of HEIs and the list faculty or informant were drawn up after careful consideration about aspects like geography (where the institution is located), presence of a department or division of sorts which tackles social responsibility, availability or ease of access to the contact information of the participant, and possible personal channels via which to contact, etc.

March turned to April and the country saw an upward trend in Covid-19 cases as once again the Indian populace prepared to face another wave, which seemed to be deadlier than the last. From hoping to get 25 responses to the distributed surveys, by April 20th we had only three. Situation was quite dire by May and the research seemed to be at quite a standstill as there were reports of a huge death toll across Indian states, when we also kept receiving news of many fraternity members falling prey to the disease or someone in their families being sick. It is in such a situation that a researcher has to improvise, even upending the previously laid out plans. It was decided that we would work with whatever responses we got by the end of the month of

May and conduct a focus group discussion with a group of experts that would, hopefully, yield extensive information about the various aspects covered in the ProSPER.Net survey and beyond. In addition to this FGD with experts, an interaction with PhD scholars was deemed beneficial in order to bring in fresh perspectives to this discourse. It was also decided to build a case study from a participating institute (here, TERI SAS), showing stellar data and/or had some best practices regarding C.E. which had extensive societal impact, like the Covid-Task Force initiated by the Eco Club at TERI SAS, the members of which were interviewed

Institutions were categorized as those that fall under the Union government's directives, those managed by the State machinery, and those that are privately funded. Among these we identified institutions with a spearheading community engagement activity or division and staff or faculty who showed special affinity to such an endeavour. In India, the higher education structure comprises of public and private institutions which include universities set up by the Act of Parliament (Central Universities) or by an Act of a State Legislature (State Universities), "deemed to be university" or "deemed university" (institutions which have been accorded the status of university and have authority to award degrees by the UGC Act, 1956), Institutes of National Importance (status awarded by the Parliament of India to prestigious establishments), and Institutions established by State Legislative Act and colleges which are affiliate to universities (government or otherwise). Institutes like the Indian Institute of Technology (IITs), Indian Institute of Management (IIMs), National Institute of Technology (NITs), etc., are considered "technical" establishments which train the students to excel in engineering, management, pharmacy, hotel management, etc.

Table 3 List of Participating HEIs

S.NO.	Institution/Individual Interviewed	Type (Public/Private)	Position of survey participant
1	BIMTECH, Uttar Pradesh	Private	Assistant Professor
2	Department of Anthropology, University of Delhi	Public (Centrally Funded)	Assistant Professor
3	GITAM University	Private (Deemed to be)	Director in charge, Professor
4	Indian Institute of Management-Ahmedabad, Gujarat	Public (Autonomous)	Professor
5	Indian Institute of Management-Kashipur, Uttarakhand	Public (Autonomous)	Assistant Professor & Assistant Dean (Academics)
6	Indian School of Business, Hyderabad	Private	Assistant Professor
7	Institute of Rural Management Anand (IRMA), Gujarat	Autonomous	Professor

8	Nalanda University, Bihar	Public (Centrally Funded)	Professor and Dean
9	TERI SAS, New Delhi	Private (Deemed)	Assistant Professor
10	TERI SAS, New Delhi	Private (Deemed)	Lecturer
11	TERI SAS, New Delhi	Private (Deemed)	Associate Professor
12	TERI SAS, New Delhi	Private (Deemed)	Research Scholar (PhD Student)
13	TERI SAS, New Delhi	Private (Deemed)	Research Scholar (PhD Student)
14	TERI SAS, New Delhi	Private (Deemed)	Master's Student
15	TERI SAS, New Delhi	Private (Deemed)	Master's Student
16	Xavier School of Rural Management, Odisha	Private	Associate Professor

Central and State institutions are ones which fall under the purview of the corresponding governments and are fully funded by them. We will club them under "public" establishments. Deemed is a status of autonomy granted to a university by the Department of Higher Education under the Ministry of Human Resource Development. These have full autonomy over courses, syllabi, fee structures, etc., and some can grant degrees as well. Private Universities are UGC approved institutions, which run entirely on privately sourced funding. They can grant degrees but cannot have off-campus or affiliated colleges. Autonomous HEIs are those that exercise independent control over their operations and fall under the administrative control of the Department of Higher Education, MHRD. "Autonomous Institutes" cannot grant degrees but only diplomas. However, some institutes like the IIMs and IITs, NITs, AIIMS, etc., are permitted to give out degrees but they cannot be called "universities" (MHRD Annexure).

For the purpose of this study, we will categorize the HEIs from where we received responses as "public" (govt. funded) and "private" (other sources of funding; deemed & autonomous). Table 2, "List of Participating HEIs", is a list of participating institutions. It includes a list of individuals who responded to our questionnaires, participated in the focus group discussion, or were interviewed.

Methodology

Qualitative methodology was used to bring forth themes and ideas around higher education and how it becomes a possible vehicle to carry ideas of sustainable development and as an extension, the UN Sustainable Development Goals. Using pre-prepared questionnaires, one for the institution and one for individuals of an HEI, the researcher was able to conduct semi-structured but free-flowing interviews, which meant that though the flow of the conversation was

guided and structured there was room for adding open ended questions. The initial plan was to use the "institutional forms" to gather responses from faculty representing various institutions, spread all across India. The "institution" specific form was sent to faculty and people overlooking a management or administrative role, like the Director, Vice-Chancellor, Head of Department, etc. After collecting a couple of piloted forms, the public health crisis due to COVID-19 suddenly escalated and the flow of responses ceased. It was then decided to send the individual forms to faculty we could entreat personally and analyse them as standalone responses. By doing a thematic analysis first, it was decided we would pick out repeating themes or vocabulary, which could then be segregated into the pre-decided "SWOT analysis" framework. Based on the framework, it was understood that the responses would be categorized as followed: -

Table 4 SWOT Mapping

STRENGTH	WEAKNESS

• internal/present or existing
 	
    o Strengths are factors, elements and/or aspects that are supporting or enabling the project/activity for increasing community engagement and addressing the SDGs at the local level.
 	
    o They include, but are not limited to, funding, innovation, addressing community needs, policy, dedicated human resources, capacity-building, resource materials, diverse stakeholders, etc.
	• internal/present or existing
	
	    o Weaknesses are factors, elements and/or aspects that are limiting the project/activity's community engagement for addressing the SDGs at the local level.
	
	    o What does the researcher/institution want to improve if she/he/they were to do the project/activity again?

OPPORTUNITY	THREATS

• external/future
 	
    o Opportunities are factors, elements and/or aspects that can be utilized or mobilized to strengthen the project/activity in the future.
 	
    o How will the researcher/institution do things differently in the future or in the next project?
 	
    o What else can help increase community engagement? Are there any trends, resources, or
	• external/future
	
	    o Threats are factors, elements and/or aspects that can undermine the project/activity's sustainability in the future.
	
	    o What can undermine the project or institution's future community engagement?
	
	    o They include, but are not limited to, competition among the university researchers, focus on academic achievement over community service/action,

| emerging aspects that can strengthen the project/activity's community engagement | government budget, political changes, institutional priorities, bureaucracy, etc. |

Given the paucity of responses and a genuine concern related to the growing Covid-19 cases in India, the researchers had to adapt in order to mould the project methodology in such a way that still brought forth maximum, relevant data. It was decided that instead of aiming for a higher quantity of responses we would focus on "individual" forms and through them identify cases that stood out among the rest as "case studies". Through a case study an investigator is able to pick at an issue in a multi-faceted, detailed way, which has the potential to stand through time and serve as a cornerstone for further research. Another research method that could help expand the scope of the answers we received was "Focus Group Discussions", as it provides the opportunity to discuss the topic of interest in a short span of time, collectively with people of interest. It has the potential to yield a lot of qualitative data and "permits a richness and a flexibility in the collection of data" (Mishra, 2016), which might be missed during individually administered surveys.

Having re-strategized our research techniques thus, it was decided that a focus group discussion with faculty from all over India would yield an inclusive discourse. For this exercise we invited participants who had filled out the ProSPER.Net survey and even those who had not. Some gaps that emerged after we analysed the questionnaire responses and found that certain areas remained overlooked and through this meeting, we also hoped to address those. One can't help but acknowledge the resilience that comes with being an academic when one adapts and quickly accepts something as the new given when it was considered an "anomaly", when every teacher in this world is rapidly shedding their "old ways" and racking their brains to dispense knowledge as effectively as possible, as quickly as possible. During the initial ice-breaking one of our experts pointed this out, while mentioning how they miss the "physicality" of giving a lecture in class which involved dynamic back-and-forth with their students. Conducting online lectures comes with its fair share of difficulties, another expert pointed out, but at least it's without interruption!

The biggest drawback of a FGD pertains to it being "bound in time and space" (Stewart & Shamdasani, 2017) and the need to identify and gather a group in a single space and at the same time for the discussion. With the onslaught of the second Covid wave, this would be virtually impossible. However, technological advances and innovation in the field of telecommunication, with platforms like "Zoom" and "Microsoft Teams" meant that we could possibly override the problems of "space and time". So, after we gathered the responses on the survey circulated, we invited the respondents to participate in a virtual FGD held over "Microsoft TEAMS". This virtual discussion was recorded and transcribed and then analysed thematically to extract the commonalities among the distinguished speakers along with any unique perspective that came up during the conference.

LIMITATIONS

A worldwide pandemic for the better part of 2020 meant that everything was thrown into disarray. Be it previously drafted deadlines, or set semester dates. Because the normal school year did not start in July 2020, most people we contacted cited time crunch to squeeze in two semesters into a highly contracted school year. One informant proposed to be interviewed but refused to type in the survey we had sent over. As the second wave hit India, it became increasingly evident that in-person data collection will not be advisable nor possible. This proved to be our biggest challenge as people had already made clear of how tedious they found our request to fill surveys.

Another limitation was to brief the participants on the subject matter of the proposed research. Often, they wouldn't be consciously compartmentalizing activities into community engagement or C.E, which helps in the furthering of the UN SDGs. So, while telephonic interviews provided the opportunity to delve into each question and discuss with the participants, the surveys we received without any prompt of ours could be slightly lacking in information.

Analysis

Individual Survey Analysis

In this section we individually assess the responses received from BIMTECH, Department of Anthropology, University of Delhi, GITAM School of Gandhian Studies, Indian School of Business, Indian Institute of Management- Kashipur, Institute of Rural Management Anand (IRMA), TERI School of Advanced Studies, and Xavier School of Rural Management, Xavier University. The responses thus analysed were placed under the "Strength, Weakness, Opportunity, Threat" matrix which was developed in advance. We often noticed that the strength of an institute could be a future opportunity for another or even a weakness. Similarly, what is deemed as a weakness by one respondent could be worrying another as a potential future threat? Along with each individual SWOT table, a description of its corresponding HEI is also provided.

TERI School of Advanced Studies, New Delhi

TERI stood out among the responses received as a place with a deep community involvement as seen from the responses and after a thorough study of their website. We see that there are dedicated programs that are targeting, and fulfilling, the UN SDGs. The university has an outreach committee which engages with community at various levels with programs like the "School University Network", which is an initiative to sensitize and promote the impacts and implications of sustainability and all its aspects like climate change, energy efficiency, waste management, water management, gender equality, etc. among school-going youth. We see a pattern where this HEI throws its weight behind empowering various stakeholders like students, teachers, and the community in general with programs like "Google Earth Education" (which was an online training program conducted in June of 2020, with an aim to train teachers on the use of Google Earth Tools and Applications as teaching aids for integrating Environment Sustainability education in the school curriculum), take off to roll the ball for change.

Table 5 SWOT Analysis TERI

STRENGTH	WEAKNESS
- Leadership and vision: foundational orientation towards sustainability - Diversity of stakeholders and stakeholder engagement: ranging from government bodies to local stakeholders. - Proactive engagement with various stakeholders - Use of technology and media/social media to communicate and increase outreach. - Adaptability and resilience of institutions/faculty/researchers/staff- sustenance of the activities during COVID - Possibility of sustained action through influencing young minds and capacity building through curricular enhancement.	- Lack of incentive: no reward mechanism or credit system to account for the time and efforts by faculty/students; activities generally remain voluntary. - Lack of funds: acts as deterrent - Inter-departmental collaboration: is inadequate. - Lack of active engagement between HEIs and regulatory authorities/other government bodies- policies/guidelines remain far removed and thus limited engagement occurs towards larger societal impact.
OPPORTUNITY	**THREAT**
- Potential to bridge knowledge and information barriers. - Reaching out/collaborating with younger students (for example: school students) to create awareness and action at early stages. - Trust and acceptance: HEIs have greater acceptance among various stakeholders and their active engagement has greater potential to reinforce principle of gender equality, social equity and more inclusive societies; their ethical stance also helps long-lasting relationship.	- Community support: Sustainability of community engagement is difficult in absence of adequate recognition, and/or, societal/government resistance to such engagement. - Community seldom looks for material or visible benefits: if a mutual understanding does not develop, such engagements may not last long. - Funding - Openness to new ideas: HEIs have to break the traditional mould and pedagogy. - Walk the Talk: Adopt sustainable practices themselves, then reach out to communities. - Infrastructure facilities and access: has come up as a limitation, particularly for the economically and geographically disadvantaged groups (especially during COVID)

From the survey we gathered that TERI has numerous stakeholder engagements through curated programs like SUN and also through coursework. From school students to village residents and policy makers to traditional artists, this institution engages with community members to enhance their capacities for sustainable living. Stakeholder engagements are also mobilized for sustainable solutions to environmental problems. Organizations like UNEP, USAID, SOLIDARIDAD, Coca-Cola, ICEWarm, and a range of local/civil society organizations like Foundation for Ecological Security, NIWCYD, Sevamandir etc., act as enablers and partners in helping TERI realize these programs.

Researchers at TERI

We administered the individual surveys to two PhD scholars to get another perspective on community engagement in HEIs. This was followed by an online interview session where we tried to understand how engagement differs for doctoral students during the length of their research as field data collection is often a major component of PhD study. Our two participants have conducted extensive field-based, ethnographic research for their respective inquiries. Both the participants undertook community-based activities as part of their Master's as well as PhD, including engagements with "coal-belt" residents of Jharkhand, the administration and MLA representatives of the area, various indigenous communities of states like Rajasthan, Odisha, Maharashtra, Madhya Pradesh. They organized consultations with groups to get a sense of prima facie needs of the community; capacity building for self-help groups (especially women's); assess gender responsiveness of policies and gender equity in resource management, etc. Through this interview we gathered that for young researchers, fieldwork, data collection and, as an extension, community engagement is most important. One of the interviewees pointed out that understanding a community takes utmost importance in both action and research engagement and thus rapport building is the most crucial step.

Further, on-the-ground research can help in facilitating India's commitment to the UN SDGs. Between the two of our participants, they were able to advance SDGs 1, 2, 3, 5, 10, 12, 15 in direct and indirect ways. For instance, one of the participants mentioned that their work, doing impact assessment and need assessment, helped bring direct action while during their PhD they did documentation and review of policies which was produced as recommendations for the authorities, which indirectly assuaged the path for SDGs.

As both these researchers are or were once affiliated with TERI SAS, they recall how TERI not only helped them but is quite proactive with community engagement in general as well. However, hindrances in entering and being accepted into a community remain a big challenge. One participant mentions that as part of anyone's PhD fieldwork, time is the biggest constraint; from mapping the area, gathering demographic estimates, building rapport and acceptance within a community to actual data collection. Similar to our conversations with the faculty and expert groups, this interview session also brought forth the challenge of resistance from community. Here, the role of CSOs and NGOs comes to the fore. Both of our participants mentioned that at some point or the other, they benefitted from such organizations, which were already working on the ground as they helped them get acquainted with the people, the issues, the policies, and challenges, etc. The need for innovation in the way research is done in a "post-Covid" world was also discussed during the interview session. While there was optimism regarding things

going back to normal, both felt that the most important part of research is the human component and we will have to find ways to get primary information by coming up with various methodologies.

BIMTECH, Noida, Uttar Pradesh

A private institute, founded in 1988 under the aegis of the Birla Academy of Art and Culture and supported by the Birla Group of Companies, Birla Institute of Management Technology (BIMTECH) offers Post-Graduate Diploma Courses in Management with specialties in International Business, Insurance Management, and Retail. The institute is driven by the vision to promote ethical entrepreneurship with inclusive and sustainable growth. They boast of transformative potential of education system- academically, socially and personally. BIMTECH is approved by the AICTE and also facilitates transnational learning through opportunities to take part in exchange programs in countries like Austria, Poland, Finland, etc.

Table 6 SWOT Analysis BIMTECH

STRENGTH	WEAKNESS
- Foundation (dedicated CSR centre promoting community engagement). - Dedicated Funding: Institutional funding for engagement activities. - Impact: addressed community need of education and awareness- Impact visibility encourages further engagement with communities (positive reinforcement). - Diversity of stakeholders and stakeholder engagement: ranging from government bodies to local stakeholders.	- Lack of incentive and recognition: for individual efforts towards CE. - Lack of interdisciplinary/inter-institutional collaboration.
OPPORTUNITY	THREAT
- Curricular engagement and training of students/researchers in community engagement and problem solving. - Promotion of diverse interests: Engagements with diverse stakeholders have helped promote social entrepreneurship, break disciplinary barriers, and promote active collaboration between academic and other communities.	- Threat to deep and sustained engagement as there is lack of incentive. - Bureaucratic challenges: Too many administerial hurdles in place before reaching out to the community can hinder the enthusiasm and zeal of researcher.

The responses obtained from a member of the faculty of this establishment threw light on how they promote their mission of equipping students with a global way of thinking so that they are able to develop as leaders with ingrained ethics, a sustainable outlook, and drive for inclusive growth. With a 'Centre for CSR for Sustainability', led by the senior faculty, they are engaged in designing and implementing projects that lead the charge for community engagement while promoting the SDG. In Neemka Village, UP, the institute undertook "Life Skills Education, Digital Empowerment and Livelihood Program" for adolescent girls, which is an effort towards capacity building and empowerment of vulnerable sections of the society. The institute acknowledged the role of enablers like the local government, NGOs, the institute itself, and the role played by the stakeholders of these engagements like schools, teachers, community leaders, etc. For instance, when there was resistance from some families in letting their daughters be part of the project, a local schoolteacher's intervention helped the process.

As part of suggestive measures, the informant brings forth a perceived weakness, which is lack of encouragement for promoting inter-university and inter-departmental collaborations. Though BIMTECH as an institute offers business-oriented diplomas only, the individual champions strongly for an interdisciplinary approach, especially in the aftermath of the pandemic.

Department of Anthropology, University of Delhi, New Delhi

The Department of Anthropology comes under the purview of the University of Delhi, which is a Union government funded, public university. Unlike other departments in the university premises that exclusively offer post-graduate studies, the department of anthropology holds classes and lab exercises for bachelor students as well. Housed in heritage building, the department boasts of a museum of artefacts and received patronage from none other than late Prime Ministers, Pt. Jawaharlal Nehru and Smt. Indira Gandhi.

The department is committed to holistic teaching and research, keeping pace with the ever-changing societal scenarios and polity. On its website the world around us is called a "congregation of 'several worlds'" which occurs via interactions among people, communities, ideologies, and cultures. It is with such a view that the department envisions to impart knowledge about concepts, methodologies, and the agendas of research and teaching through programs like Bachelor of Science (Honours), Master of Science, M.Phil., and doctoral degree in anthropology and a Master's and certificate course in Forensic Science. One of the primary focuses, inculcated in all these course offerings, is on the practical exercises. The practical sessions for both, undergraduate and graduate, programs involve exercises that usher the students into the "field" to carry out research. Though small, it helps hone their grasp on various methodologies. Also, part of the curriculum is a mandatory fieldwork-based dissertation, where the final year students of the Bachelor's and Master's programs go to villages or other identified areas of research.

The respondent has cited numerous examples of practical exercises undertaken by the students, which helped them learn research methodology in real life settings. The faculty and researchers in this field often overlook the embeddedness of C.E. in the curriculum, as expressed by the respondent. Since the students go through the syllabi while picking up different socio-political issues to observe, the department prepares a contingent of researchers who are community engaged. The department hosts organizations like the National Commission for

Women, DU, UNICEF, CSO like Save the Children, Clinton Health Action Initiative, etc., which also act as enablers and funders for seminars, projects, and research undertakings.

Blurred boundaries between coursework and C.E. can be interpreted as a weakness as it was felt by the interviewee that possible impact of their exercises was being lost as there is no clear-cut objective of engagement. Though the department does not have a pointed directive referencing sustainability, it is broadly advised by the guidelines of the central varsity and bodies like the UGC. Table 7 SWOT Analysis Department of Anthropology, University of Delhi

STRENGTH	WEAKNESS
- Curriculum: C.E. is part of the curriculum. - Resources/Funding: Central University affiliation helps in steady funds - Collaborations with CSOs/ NGOs: help to promote different SDGs directly and indirectly.	- Gaps in Institutional policy: No clear-cut guidelines within dept. on community/stakeholder engagement - (Dis)Incentives: The engagement through curriculum being overlooked for its impact.
OPPORTUNITY	THREATS
- Ties with organizations: Access and willingness of CSO/NGO/govt/etc. to be part of events. - C.E embeddedness: Fieldwork/practical exercises allow ample opportunity for engagement.	- Blurred boundaries between C.E and coursework. - Impact unmeasured: Not aware of engagement happening through coursework.

GITAM School of Gandhian Studies, Vishakhapatnam, Andhra Pradesh

In an effort to replicate the values of Mahatma Gandhi, referred to as the father of India, the Gandhi Institute of Technology and Management (GITAM) seems to preach a community engaged curriculum which includes a "Service Learning" course comprised of 100hours of community engagement where the students are assessed on a service-learning portfolio they gather by the end. GITAM was founded in 1980, with a vision to realize Mahatma Gandhi's dream of a socio-economically thriving nation propelled by all-encompassing education, which was not sectarian. Universities are places of higher learning, which are supposed to be free of linguistic, racial, caste, and other social biases. This institution is quite clear of its engagements with the surrounding communities. Unlike the depart of anthropology we see an awareness regarding the impacts its programs might have on issues like poverty, conservation, gender inequity, etc. The respondent explained how service-learning activities through their programs help the scholars experience issues from close quarters.

"Our students teach in the local schools for the challenged, conduct sports activities for these children, build libraries in schools that are underprivileged, volunteer at animal shelters,

participate in biodiversity conservation programs like the Olive Ridley Turtle Nesting Program, volunteer in kitchens that provide food to schools as part of the mid-day meal scheme and offer counselling and support services to women and the elderly."

~Director (GITAM school of Gandhian Studies)

The respondent conveyed that the institution puts forth what C.E. is NOT. The students are made aware that the NSS, CSR related activities, charity, etc., do not come under GITAM's idea of wholesome engagement with the community. The bottom line is that engagement can be impactful only when it is sustained and blossoms into a constructive collaboration between the community and the institution. GITAM as an institution does not endorse a "top-down" approach.

Table 8 SWOT Analysis GITAM School of Gandhian Studies

STRENGTH	WEAKNESS
- Curriculum: C.E part of curriculum - Leadership: University leadership enabling C.E - Geographical proximity to local communities: helps the institution stay engaged with local issues. - Impact- several issues like biodiversity conservation, counselling for women and elderly, support for children, etc. are addressed, thus, directly and indirectly fulfilling several SDG. - Diverse stakeholders**:** pre-Covid stakeholder engagement was high. The stakeholder portfolio was also diverse. - Resilience of the researcher: Persistence in approaching communities helps establish a rapport	- Lack of incentives: There is no incentive for staff. - Institutional direction: There is no formal guideline for engagement.
OPPORTUNITY	THREATS
- Credit-based reward system for students: can help them realize their roles as stakeholders in the communities and help them become aware of issues. - Leveraging IT and closeness to the local communities: proves as opportunity.	- Lack of incentives**:** for staff supervising the "service learning" assignments can derail the C.E activities if the supervisors feel that the gratuitous benefits are not worth the effort.

STRENGTH	WEAKNESS
- Learning/feedback systems: Building upon the "lessons learnt" during the pandemic a future action plan can be charted so that C.E never stops even during unforeseen circumstances. - Role of CSO in approaching communities.	- Absence of formal guidelines on how to contact stakeholders can threaten C.E by being haphazard. - Resistance from communities

The responding faculty from GITAM explained how they introduced C.E. as an intimate part of some of the courses and even had a mandatory course in the undergraduate program, called "Service Learning" wherein 100 hours of C.E is facilitated for three full credits and 100 marks. The students are required to prepare a "Service Learning" Portfolio. Faculty coordinators monitor this and other engagements and track the number of hours spent by students on such assignments. There is no incentive for the faculty, which emerges as a weakness and further threatens to disrupt morale. The institution engages with local stakeholders like "tribals of Eastern Ghats, animal welfare organizations, homes for elderly, schools, etc.", which is facilitated by the geographical closeness but also due to the institution's ethos. A concern arises, here, of the students' motivation to take up such programs. The respondent believes that for quality, impactful, and sustained engagement the students shouldn't be pushed.

Indian School of Business, Hyderabad

Table 9 SWOT Analysis Indian School of Business

STRENGTH	WEAKNESS
- Clear institutional policies: Guidelines in place on how to engage - Enabler for CE: The institution put staff's mental and physical wellbeing first during the pandemic.	- Lack of explicit political support: for all community-based intervention.
OPPORTUNITY	**THREAT**
- Willingness of community: intent and commitment for their own benefit; partnership with CSOs (local org) can yield better results - Support of funding agency: new opportunities particularly during covid; organizations have the opportunity to adopt a new model of C. E	- Distrust: threatens the range and effectiveness of C.E - Meaning of C.E: still limited in H.E in India.

The Indian School of Business (ISB) claims to recognize the rising need for quality business-oriented discourse in the Indian landscape, which will support future leaders through its innovative programs. This B-School is a private, not-for-profit entity, funded by private corporations and individuals. The vision statement of the institution is geared towards achieving great accolades by a being research driven and independent management institution, which nurtures future leaders of India and the world. This could be realized if the 'missions' ISB has set for itself are observed closely. Along with fuelling research-based knowledge and expertise to engage with businesses, the government and society, ISB wants to contribute to the welfare and development of various communities at local, national, and even global level.

The programmes at ISB are designed to suit different classes of knowledge seekers, the one-year "Post graduate programme in management", or the short-duration "Executive Education" programme for middle and senior management, or part-time offerings like the Post graduate programmes for working professionals, and even Management Programme for family business for young business leaders of businesses, etc.

The respondent highlighted weakness as institution's inability to mobilize cooperation between various stakeholders due to power differentials. In this case, the stakeholders included government bureaucracy, the Forest Department, which is a stakeholder in the forest and wildlife of an area, the institution, and the indigenous communities. ISB has a project titled "Upscaling Community Forest Resource (CFR) Rights and Governance in India", which aims to bring to fruition the "latent transformative potential" of the Forest Rights Act (FRA) of India. The project aimed to look beyond the temporary systems of sustenance and community development, creating a reformed outlook and approach towards rights over land and forest resources as enshrined in the FRA. The objective is to expand collective tenure over large contiguous forest areas in selected geographies of India through political and administrative involvement with identified civil society stakeholders to enable sustainable forest governance, strengthen community institutions, and increase livelihood security. There is a feeling that there is inadequate political will to engage in discourse over transfer of rights over land to the indigenous.

The larger implication is that despite best efforts resistance from any one of the political stakeholders, bureaucracy or the community can result in a setback for the action-oriented projects/programmes. This brews distrust and suspicion among communities which threatens the range and effectiveness of C.E. of an institution. However, possibilities of sustained engagement are also not ruled out.

Xavier School of Rural Management, Xavier University, Odisha

The Xavier School of Rural Management is part of the Xavier University, Bhubaneshwar, and was initiated in 1995 with the goal of developing committed professionals who will address the challenges of rural development in India with contextual learning and specialized management knowledge. Their MBA program in Rural Management has a "rural living and learning experience", during which the students spend 45 days in a village to absorb the socio-economic and political lived realities of the residents. This is a mandatory and integral experience the MBA batches have while being attached to developmental organizations like the "Khadi and Village Industries Commission" (KVIC). XSRM works in conjunction with it and supports it through a "cluster development program", where artisans are given training and marketing

support. Such programmes have guidelines, formed in agreement with the KVIC and their rules and regulations, which assuage the engagement of XSRM with the artisans.

The respondent feels that though there are no explicit incentives for engaging in C.E. activities, there are annual reviews that assess the kind of community service employees have overseen. The institution has programs in place that ensure engagement like the presence of an implementing wing called "CENDERET" which looks after the logistics of exercises. Students' committees, overseen by the administration, are put in place to inculcate socially responsible behaviour among students, which might lead to good citizenship. Governmental programmes are perceived to be discordant with community needs; while they do dictate guidelines, their approaches are often implemented in blueprints only. According to the respondent, governmental schemes seem to be target driven only, aiming to utilize funds irrespective of tangible impact. This lack of flexibility hinders C.E. goals of the institution.

Table 10 SWOT Analysis XSRM, Xavier University

STRENGTH	WEAKNESS
• Measurable impact: for instance, through artisan training and market support activities • Presence of specific guidelines: to assuage agreements with the community in question. • No pressure on faculty: to engage in the programs of CE.	• Absence of dedicated dept. (with closure of dedicated department there is no dedicated program promoting CE). • C.E. exercises available only in one stream and not across the institution. • Lack of incentive.
OPPORTUNITY	THREAT
• Socially responsible students: Opportunity to inculcate social responsibility in students to prepare them as good citizens. • Researcher's interest: is a potent enabler that can drive C.E. • Understanding community from close quarters: gives an opportunity to understand what the issues are. This can help researchers conduct informed and knowledgeable scholarship. • Creating linkages between community and academia enabled by administration.	• Lack of flexibility in government programs: threatens to derail community work envisaged by the institution's goals. • Non recognition of C.E and its forms as a measure of achievement: can have a subduing effect on zeal of the staff and others towards future C.E exercises.

There is opportunity to foster linkages between academia and community, which should be encouraged by the local administration and gram panchayats. The respondent suggests that the Union government should not be involved in such "academic-community" collaborations. Rather, ensuring CSR grants and other pathways for funding can provide more assistance.

Indian Institute of Management-Kashipur, Uttarakhand

Set up in 2011, by the Government of India, IIM-Kashipur aspires to promote excellence in management education by using innovative teaching methods, promoting high quality research and practicing sustainable leadership. The institution promotes applied and interdisciplinary research to realize its vision for a positive societal impact. It offers post-graduate courses in Business Administration in the form of MBA, PhD, and even an executive education for working executives. However, in its mission it also adds how the emerging business leaders and researchers trained at the institute will be socially conscious, competent and ethical while being capable of critical thinking, innovation and entrepreneurship. Empowerment of local stakeholders and upliftment of economically challenged section finds space with the mission statement, thus instilling hope of concerted effort towards CE.

Table 11 SWOT Analysis IIM-Kashipur

STRENGTH	WEAKNESS
- Curricular emphasis: Efforts to introduce C.E in the curriculum in the form of experiential learning by directly engaging with the communities or engaging with those who are directly involved with communities. - Community Involvement: Involvement of community leaders helped in easier introduction into the community.	- Lack of support from institutional leadership.
OPPORTUNITY	THREAT
- Student orientation: Programs with embedded C.E. aspects expose students to think about the SDGs directly and indirectly.	- Dwindling interest in C.E aspects of the course: both from the students and job market. - Regulatory environment: Overbearing nature of govt involvement in setting guidelines/regulations.

IIM-Kashipur boasts to be the only IIM to have experiential learning in their course work. According to the collected response, students are expected to engage with communities directly or interact with those who engage directly with the communities. This way students are exposed to ground-realities and since this is a "core curriculum credit" they are expected to prepare reports on various development agenda including financial strategy, marketing, rural development and more democratic and progressive decision making. The students conduct a 360degree audit that

will be useful to continue work uninterrupted in the villages. We feel that this indirectly exposes the students to think about Goal-10 (reduced inequalities) and Goal 11 (sustainable cities and communities) of the SDGs.

Institute of Rural Management, Anand, Gujarat

The Institute of Rural management Anand (IRMA), was founded in 1979 by the "Father of White Revolution in India", Dr. Verghese Kurien, who revolutionized the dairy sector and uplifted many associated with it. The institution's motto is to bring in professional management and solutions to empower the "underserved" section of society, just like its founder. The focus is trained on creating management professionals who will bring about sustainable, eco-friendly, and equitable growth at grassroots level.

Table 12 SWOT Analysis IRMA

STRENGTH	WEAKNESS
- Institutional support: for projects and initiatives floated by the faculty and even students. - Emphasis on immersive activities: for instance, staying with a nearby village, to build sensitivity and empathy for the local communities. - Curriculum: C.E. thought of as part of curriculum and not an extension. Research and learning are embedded in the coursework with rigorous fieldwork. - IRMA has instituted fellowships and internships in order to encourage students in finding a footing in the economy. - Interdisciplinary nature of engagement as their management programs has an element of social sciences like gender sensitivity.	-Institutional policies/regulations: Some guidelines from the authorities are not clearly relayed to the institutions.
OPPORTUNITY	THREAT
- C.E as strength: CE can be leveraged as strength and a differentiating factor for institutions to set them apart in the job ecosystem.	-Regulatory environment: HEIs being wary of regulations could derail benefits, discipline and accountability.

The respondent says that they try to push for engagement outside the scope of the classroom walls, which encourages students to think about societal issues with a problem-solving lens. The HEIs should be aware that they are not an "island" but a part of the community. IRMA tries to develop long term engagement that also creates impact as seen by the "Dhwani Rural Information System" platform, founded by former students who perceived the "need" for "harnessing the power of technology for social change". This was an effort to reduce technological roadblocks for NGOs, CSOs, and other non-profit organizations by empowering and arming them with tailor-made technology.

The informant relays that they feel that IRMA's outlook on how they train students is quite unique and lucrative but some cutbacks in internships or programs have happened. They believe that this is a step back as students of today are quite involved in societal issues and don't shy away from learning through C.E.

Focus Group Discussion

One thing that was agreed upon by all the esteemed people was that "community" means different things than what is generally associated with "community service". It is not synonymous with the "poor, disenfranchised, marginalized", but rather has fluid boundaries which pose the biggest challenge in limiting your definition but also broadening it enough to be inclusive. Another stark agreement is that a community shares a "commonality", a shared identity, which can be "interest-based, geographical, practical, circumstantial, social, political, or economic, etc.", which is more often than not, intersectional. So, before starting on C.E. visions and missions, it is important to identify the overlapping, all-encompassing communities that can exist. Another major theme that emerges is laying out the capacity to engage. "Engagement" can only be defined by what an institution, or an individual, can practically accomplish and not what is theoretically prescribed as "engagement". An example given by the participant from IIM-Kashipur throws light on how there are numerous societal and environmental problems that plague the State, Uttarakhand, where the institute is located, but with what they can, and want to engage with, regardless of policy mandates, becomes engagement.

This entire effort to define these terms, brought forth an essential takeaway, which is the role of an HEI. As places that are disseminating knowledge to scholars who will constitute the work force of a nation, they have the onus of helping these students assess, delineate, and identify the shifting boundaries of a community in order to carry out meaningful engagement. HEIs can make, not just students, but also the general public receptive of what could constitute a community and the challenges in carrying out meaningful engagement keeping in mind the similarities and differences, power plays and hierarchies inter- and intra- communities. The participant from Xavier School of Rural Management highlighted two types of engagement; passive, where the researcher learns FROM the community members, and active, which involves action by the researcher to bring about dynamic changes in the community. On the topic of community engagement, the representative from GITAM first laid out what C.E. is NOT. They explained that their institution does not believe in propagating the idea that "charity", NSS-linked activities, and CSR-exercises backed by corporations, which propel a "saviour-marginalized" type of power dynamic. They maintained that researchers should never think that their engagement with a community is the only factor that uplifts and empowers. They emphasized that C.E. is rather, a "constructive collaboration" which requires "deeper immersion" in a "sustained manner".

Another point of inquiry for us was to deduce the extent of embeddedness of C.E. in the curricula of the diverse HEIs. The general consensus on this was that students should be given the choice to engage and immerse in different communities in order to attain a deeper understanding of the practicalities of the subjects they study. However, if institutions have an embedded C.E. program/exercise in their curricula, the engagement might not run deep. Nalanda University posed a question which describes this catch-22 situation: "if there is embeddedness, is there incentive to do it wholeheartedly?" This is to be asked not just with regards to the students, but teachers/professors as well. Having a mandatory service-learning course in the curricula can invite pushback, like GITAM's representative pointed out, from students, parents, and maybe even the government's regulatory guidelines. Another challenge to having a provision for incorporated C.E. is if students are nudged along into doing C.E. the chances of interest-based, deep and sustained learning go down. The educators on the panel also pointed out how they have to navigate a time crunch they face if they have to incorporate field-based service-learning into their syllabi which also leads to the challenge of introducing nuance into the understanding of "community engagement". An interdisciplinary approach will go a long way in learning as it will help in developing a holistic perspective in the students.

The role of the faculty emerged as another highlight into this discussion on C.E. immersion in the coursework. As a faculty, in charge of numerous academic lives, our panellist from IIM-Kashipur proposed that the profile of the faculty can play a big role in shaping the future of his students. He mentioned how he feels a sense of responsibility in constructing his syllabi as it will affect the employability of his students. In this "market-centric" world, which is increasingly competitive, a person's skills and their past learnings are judged minutely. The representative from the University of Delhi points out how it is also a faculty's responsibility to "know their students and their aspirations", as they are exponentially exposed to the market via various social media, the students are incontrovertibly sure of what they want out of a course in order to become more "employable" in the eyes of the job market. Which brings us to the question: whether having C.E. as an inextricable element of a course will attract a pool of candidates?

The enabling role of the authorities was touted as one of the strengths of an institution's foray into C.E., while we were analysing the initial surveys. The governmental/administrating bodies of any country have huge stakes in the success of their HEIs for which they roll out regulations and mandates. We asked our experts what they thought of such regulations (if any) or interventions or the role any governmental authority can play in enabling a conducive learning environment, especially regarding the bounds of C.E. It was concurred that the government shouldn't have an overt regulatory role in that it should not be dictating what comprises a "community" and what will and will not be deemed "engagement". Their capacity as an enabler is huge and potentially diverse in the form of grants, funds, accreditation, acknowledgment, etc., which should be harnessed instead of having an overarching presence which threatens to suffocate an institution's innovation. When regulations become law, anything achieved beyond that mandate is not even recognized.

One of the many insights we gathered from this discussion was how HEIs engage with the government or administerial community. There is a sense of distrust in the dialogue where the bureaucracy is perceived to be non-receptive of the academia's impact or potential impact. There is a need to create more channels of dialogue between these communities as HEIs are places which can mobilize huge human resources towards policy making and nation building while the governing community is a place which can aid, sustain, and be an underpinning factor of success for programs that help promote discourse about sustainability. Our experts pointed out how once you start talking about sustainability in one area, you invariably end up talking about other areas which is the elemental basis of the Sustainable Development Goals: they are

integrated. It is apposite to expect HEIs to be the vehicle which assists the communities of every kind to start conversations about sustainable development and help recognize that action in one area reflects on another issue and that to achieve meaningful development, we must have balanced and sustainable social, economic, and environmental progress.

Case Study - TERI School of Advanced Studies, New Delhi, India

Being a privately run establishment, with little governmental oversight (apart from broad policy guidelines and some general laws of the land) and funding sources, TERI has managed to stand out among the responses received as a place with a deep community involvement. Based on the responses from three departments (out of six) and after a thorough study of their website, we see that there are dedicated programs that are targeting, and fulfilling, the UN SDGs. Faculty respondent explains how CE is embedded in the curriculum in several post graduate programme that it offers. For instance, there is a phased immersion that is planned for the Masters programme in Sustainable Development Practice. The students, who have already experienced complex sustainability challenges in the first fieldwork in first semester, gradually learn to live with and appreciate communities' perspectives on development in the second semester. Data from this community needs assessment exercise feeds into the course on Project Design and Management, where they see their ideas being realized into projects. Depending on the interest and receptivity of the local organization in the area, these proposals have sometimes led to design of real-life projects for community development. Several other applied courses offer the opportunity for field immersion; and, so do various research projects undertaken by the faculty and research staff. We came across interesting projects from these departments where faculty and researchers engage with range of stakeholders from local communities to municipal authorities and other arms of the government. Capacity building in new and emerging areas for sustainable resource management, renewable energy, remote sensing and other analytical fields are several.

The university has an outreach committee which engages with community at various levels with programs like the "School University Network", which is an initiative to sensitize and promote the impacts and implications of sustainability and all its aspects like climate change, energy efficiency, waste management, water management, gender equality, etc. among school-going youth. This SUN program of TERI has reached out to nearly 30 schools in the last five years, where high school students (grade 9-12) are invited to the university campus to take part in workshop on the above-mentioned themes. The students of TERI lead this using multiple pedagogical tools to interact with the students.

The students and faculty of TERI undertook a great initiative to help the masses during the troughs of the pandemic, which was even acknowledged on a major Indian radio program, Red FM, where the Eco Club launched a "Covid Task Force". This eight-member group of students and faculty has now grown to 150-odd people with 4 branches, which overlook several cities like Allahabad, Lucknow, Kanpur, Bangalore, Chennai, Mumbai, and Punjab. Working with NGOs like Kranti and Harappa Sustainable Life, they have formed a contact line with doctors, ADMs, counsellors and clinical psychologists on one side and people in urgent Covid-related needs on the other. This network helped to provide relief within 6-12 hours of queries related to hospital beds, ICU beds, oxygen, medicines, etc. The RJ of Red FM remarked how the "students are a country's future" which goes to show how empowered students and their

engagements and linkages with a community leads to exemplary stories. Students of this institution also volunteered in a study requested by the All-India Council for Technical Education (AICTE) on behalf of the Minister for Human Resource Development, Government of India, on the best practices in Covid-19 response in four villages in Gurgaon district of Haryana. An online discussion around "Gendered Impacts of Work from Home during the COVID-19 Pandemic" was held which deliberated on the magnitude of the impacts of the pandemic which was able to bring forth the discussion on the dynamics of work from home and how they impact different genders. This discourse also made its 50-odd participants ponder on how this global crisis affects people of different social vulnerabilities.

COVID TASK FORCE (CTF)

The "Covid Task Force" came into the picture on 22nd April 2021, as a way to help the faculty, staff and students of TERI SAS affected by the brutal second wave of Covid-19. What initiated as an eight-member Eco-Club effort started receiving SOS from outside the bounds of the institute and is now approximately 450 members strong and operating in states like Uttar Pradesh, Hyderabad, Tamil Nadu, Uttarakhand, and Punjab working in conjunction with villages, NGOs, individual volunteers like doctors and lawyers, etc. The initial goals of this enterprise were to help the people of TERI through the second wave when it was getting difficult to get medical help and treatment. As the members started arranging for hospital beds, oxygen cylinders, and even financial help, this operation grew to help out people of Delhi/NCR and gradually built a network which started getting SOS from places like Ajmer, Lucknow, and other nearby villages. The group tried to deliver basic ration needs, awareness about things like where to get medicines (as there was a rise in the number of fraudulent people selling counterfeit or fake drugs ex. Remdesivir), government/ICMR guidelines regarding Covid treatment, etc. through videos. Soon they had volunteers and other community members reach out having identified, for instance, villages that needed help.

Of course, this wasn't an easy undertaking, especially as mostly students of the institute helmed it. In an interview session with three core members of CTF, we could gather the following challenges:

- **Verifying the genuineness of a resource**: There were reports of severe shortages of drugs, hospital beds, and oxygen supplies in many places in India. People were scrambling for procuring anything to save the lives of their loved ones. It was noticed that there were many duplicitous people who were taking advantage of such a crisis, which proved to be a big challenge for the CTF as well. To substantiate the leads for drugs, oxygen and hospital beds, the members engaged with only those sources who accepted "cash-on-delivery" payment.

- **Financial troubles of patients**: The pandemic has seen people lose their employment, lose a breadwinner, and unexpected hospital admissions, further burdening their finances. Often the people CTF helped would run into financial troubles. This became a challenge as despite promoting various fundraisers the demand for assistance was quite high and it became increasingly difficult to find donors.

- **Trouble identifying hospitals**: Initially the team ran into dead-ends finding available hospital beds for critical patients. It was a tough undertaking as after verifying the availability after numerous calls, the beds would be gone within 1-2 hours.

- **Scepticism regarding blood/plasma donations:** Although now not an ICMR recommended treatment for critical Covid-patients, plasma of recovered Covid patients was being used for critical patients. Calls and pleas for donation were desperate but were often met with lukewarm response as people were sceptical.

The students were supported by the institute and the faculty and staff along with finding partners like Srishti Rana (former Miss India) and Master Fact (Instagram handle with massive following) who helped increase the reach of their efforts. Others included Kranti NGO, Foundations like Milaap and Run, and TERI alumni and faculty who set up a "Students' Welfare Fund" for those who were facing financial difficulties due to losing their breadwinner or losing their jobs due to Covid. TERI even emptied their industrial grade oxygen containers to be filled with medical grade oxygen in order to help those in desperate need of oxygen.

The three participants feel that it will be too "utopian" to think that educational institutions can do a lot in terms of tackling such a mass crisis, but they can take supportive actions for their own students and faculties. TERI had created provisions to keep checking on students and provided counselling for those affected by Covid-19.

As part of SWASH 2020 (Save Water, Save Humanity), youth, members of "Resident Welfare Associations, practitioners, policy and decision makers, representatives from CSOs, corporates, academia, and NGOs etc., were invited to participate in an online workshop spread across 3days which addressed topics of rainwater harvesting, estimating water demand and potential RWA rainwater harvesting setup planning, costing and maintenance. This workshop was a successful effort which highlighted community level water conservation need. This raised awareness about how intensifying climate change has led spatial and temporal variability in rainfall patterns, which is important because it delivers a more nuanced understanding about such issues to the stakeholders of the community.

We see a pattern where this HEI throws its weight behind empowering various stakeholders like students, teachers, and the community in general with programs like "Google Earth Education" which was an online training program conducted in June of 2020, with an aim to train teachers on the use of Google Earth Tools and Applications as teaching aids for integrating Environment Sustainability education in the school curriculum. TERI School of Advanced Studies claims to be a unique institution with an exclusive focus on sustainability, which can contribute towards steering the conversation towards the SDG agenda. Through its variable outreach embedded in a curriculum which prepares its scholars to have a finger on the sustainability pulse while being mindful of any community's needs which further fulfils the SDG agenda towards social justice.

Discussion

Beyond academics, HEIs in a neoliberal competitive regime have also come forward and leveraged the opportunities to contribute to change. Several research projects initiated by the HEIs now seek to either build capacities to bring change or directly engage in action projects where communities themselves become harbingers of change. There are several models in the process: some are typical research projects that examine the development challenges and reflect

upon the future possibilities-in the process building capacities of students and stakeholders alike; there are other instances of donor funded research or action projects- which includes funding from national governments, international organizations or corporations; there are other models of where community engagement happens through extension activities- like neighbourhood projects, or disaster/distress relief activities. The models as illustrated by Bender (2008) give us a springboard to assess where and which type of engagement takes place for an institution. The following section puts forth emerging trends of C.E as observed from our data. There is a need for updating the models of C.E. in a world where there is continuous, dynamic construction of definitions and ideas around community, engagement, and C.E. While Bender's models talk about the different extent of C.E. in HEIs, we want to explore the way HEIs approach engagement with different communities. It is an attempt to add to the discourse on the models of engagement by HEIs based on how they view engagement and how they define a community, and what they *want* out of their engagement.

We attempt to explore emerging models from our collected data, which can further explain the C.E. ecosystem based in contemporary research styles. One variation of engagement we have observed is **"embedded"** in the curriculum or coursework of institutions as seen in the anthropological enquiry of the Department of Anthropology (University of Delhi). This sort of engagement is almost omniscient in the syllabi that the faculty and researchers often overlook the impact it may be disseminating. We can think of it in terms of Bender's "cross-cutting" engagement model where C.E. is the end-all of all activities sponsored by an institution. However, the key difference from the "embedded model" is the *intent.* Bender explains cross-cutting approach as when the university is considered to have two fundamental functions- teaching and learning, and research- while C.E. is a fundamental idea and perspective, which informs and guides most of its teaching, learning and research activities. Engagement embedded in the curriculum was found to be overlooked as it was an "obvious part" of the syllabi.

Another model we can attempt to categorize is a **"reciprocal model"** wherein we see a process of symbiotic learning. It is often a critique of academic research that it only "takes" from the target communities or subjects, in the form of data and time. Or, doing engagement with the idea of being superior and working in communities with a saviour complex. However, with increasing interdisciplinary and multidisciplinary modes of inquiry, academia is starting to dismantle the power dynamic between itself and the communities, as benefit is a two-way street. Increasingly, the focus is shifting on learning *from* the community or doing *charity for* the community to *empowering* its members in order to address the issues that plague the society. Though it is also equally valid that not all engagements are equal opportunity for both parties and becomes lopsided to the advantage of the HEIs or the "funders". In one of the responses received, it was pointed out how the communities tend to harbour a sense of distrust and often, disillusionment. Since they have experienced previous "researchers" come and go after collecting data, or have seen "schemes"/ "programs" launched with great fanfare, without long-term benefits or sustained interaction, there is a threat of failure of future, genuine engagements. We have to be careful of indulging in projects/exercises that help only the HEIs in producing research papers, which leave behind their "subjects" in the same states they were before.

The reciprocal model (along with the next model we attempt to distil from our data) has certain overlaps with Bender's "intersectional model" which states that a university/HEI has three roles- teaching and learning, research and C.E., with some overlaps between them.

The third model involves **"direct action"** or strives for direct change. When an institution has very specific engagements within communities that seek specific results, through volunteer activities, directed coursework, or community outreach, we can see overlay in its teaching and learning, research and engagement functions. This direct-action model differs from the intersectional approach to C.E. in that it strives to take action, which results in tangible impact. We see this in GITAM's "Olive Ridley Turtle Nesting Program" which introduces its students to conservation while taking dynamic action showing impact. Similarly, ISB diverts its research efforts in empowering forest communities to know their rights over land.

The following is a consolidated SWOT table, which has picked up overlapping themes from the responses we garnered.

Table 13 Composite SWOT Analysis

STRENGTH	WEAKNESS

- Vision and Leadership: Presence of a dedicated department/centre/division that overlooks and promotes C.E.
 	
   - This includes an enabling leadership that not just supports C.E. initiatives but also prioritizes the well-being of its staff.
 	
   - A separate budget for C.E. activities.
 	
- Impact/Outcome: Tangible impacts that address the needs of a community like education, public health concerns, conservation, etc.
 	
- Stakeholder engagement: Diversity in stakeholder engagement; HEIs not limited by geographical or technical challenges.
 	
   - Proactive engagement that targets community issues with ever evolving methods, which have the capacity to increase outreach (especially in the aftermath of COVID-19).
	- Incentives/rewards: Lack of incentive for the time invested by the staff/faculty. No reward mechanism. No recognition beyond regulatory guidelines.
	
	- Relation with government: Scarce engagement between HEIs and regulatory authorities, often stemming from mutual distrust.
	
	- Funding support: Lack of funds at institutional and local/national government level.
	
	- Mode of engagement and sustainability: Interdisciplinary collaboration, learning, and understanding required for a sustained and sustainable engagement is inadequate.
	
	- Embedded engagement is overlooked and taken for granted, as C.E. is not an explicit goal of some courses. Impact that is being generated is lost.

OPPORTUNITY	THREAT
- Curricular embeddedness shows sustained and deep engagement	

OPPORTUNITY	THREAT
- Space for innovation: To promote social entrepreneurship, break disciplinary barriers, and further collaboration between academic and other communities. - Trust and Reputation: HEIs have greater acceptance among various stakeholders and their active engagement has greater potential to reinforce principles of gender equality; social equity and inclusive societies; their ethical stance also helps long-lasting relationship - Digital age: Leveraging IT and closeness to the local communities. - Ways to engage and sustain: Building upon the "lessons learnt" during the pandemic, a future action plan can be charted so that C.E sustains even during unforeseen circumstances. - Network with NGOs/CSOs: can help in understanding and approaching communities; and in participatory planning - C.E can be leveraged as a strength and a differentiating factor for institutions to set them apart in the job ecosystem	- Funding: Inadequate funding. - Missing trust/Sustainability: Distrust and disillusionment within a community regarding the extent of material or immediate impact. - Infrastructure: Challenges in terms of access to people and communities and dissemination of information (e.g., during COVID infrastructure has come up as a limitation for particularly the economically and geographically disadvantaged groups) - Impact of C.E. through curricular activities overlooked. This may dissuade interested students. - Lack of incentives for staff supervising the "service learning" assignments can derail C.E activities if the supervisors feel that the gratuitous benefits are not worth the effort. - Market pressures and reducing student interest could make C.E. centred courses archaic. - Non recognition of C.E and its forms as a measure of achievement can have a subduing effect on zeal of the staff and others towards future C.E exercises. - Relationship with the government: Clash between government and institutional mandate for engagement might derail meaningful engagement.

A thorough reading of the individual forms in an effort to discern the "strengths, weaknesses, opportunities, and threats" that emerge during an institution's C.E activities, leads to certain points of discussions. One of the most prominent caveats we would like to highlight is

the fluid boundary between the four categories. While analysing the surveys we found that the lines between 'strength, opportunity, weakness, and threat' would often be blurred; what could be considered a strength for one participant was presented as a weakness for another and so on. It was interesting to note such dichotomies that underlined the need for flexibility in academic and non-academic activities, depending on contextual factors like nature of organization, nature of programmes, participating stakeholders, socio-political setting and so on.

An oft-sighted commendable observation was the enabling support of the institution and/or governing/administrative bodies. Support in terms of funding, infrastructure, logistics, or just incentives and recognition, were seen as enabling factors. On the contrary, it was also interpreted as weakness where the said stakeholders did NOT fill out this enabling role. We also gathered some distrust between academia and governing structures. In the responses from our various data collection methods, government intervention, or lack thereof, restricted an institution's activities. In the surveys, administrative and governmental bodies featured the least as "stakeholders" or active enablers for an institution's C.E efforts. Some respondents pointed out that this distrust could be fatal for successful C.E activities. During the FGD, the extent of governmental interference was brought to contention as some feel that regulations and mandates provide a basic groundwork for any institution. HEIs being wary of regulations could derail benefits of schemes and programs laid in place to help promote agendas like "women empowerment", "education of girl child" ("Beti Bachao, Beti Padhao" Scheme), habitable surroundings ("Swachh Bharat Abhiyan"), development for all/ rural development ("Unnat Bharat Abhiyan"), etc. Some respondents, in the surveys and the FGD, cited such governmental schemes and said that these could become a springboard for extrapolating unique engagement opportunities and activities.

Where an opportunity presents in the form of HEIs being places where social entrepreneurship flourishes, disciplinary barriers are broken, and space is created for HEI and communities to collaborate, a threat looms in the form of inadequate funding and support to actually realize these lofty aspirations. Another opportunity to be grabbed to further the reach of HEIs in communities, is the acceptability these institutional spaces have within our society. In India, HEIs are generally perceived by the public to be "temples" of great intellectual inquiry and there is potential to reinforce or even introduce principles of environmental sustainability, gender, and social equity, climate crisis, etc. Antithetical to this is the issue of disillusionment among the community and its members, and how conscientious it is on the part of researchers and institutions to carry out their activities, gather data, and leave. The interviewees talked of distrust among community members as they have seen surveyors for government schemes, NGO/CSO workers, researchers and students come and go after collecting information from them while the communities are left behind in the same predicaments as before.

From most of the responses, support of the institution is deemed a primary strength. The institutions play an enabling role in nurturing an engaged outlook towards the community. However, we see a uniform trend of little to no support given to the faculty members and staff in terms of engaging with community centred projects. The predominant theme that emerges across the surveys is the absence of incentives for the teachers regarding C.E. and that could stem from the largely popular perception of C.E. activities as being part of a HEIs core function. Students, however, are often incentivized in the form of academic credit and/or formal acknowledgement of their work in the form of internships, which in turn helps them get primed for a competitive job market. At GITAM School of Gandhian studies, when students were incentivized biodiversity conservation programs like the Olive Ridley Turtle Nesting Program came to

fruition. The enabling prowess of the institution and other administrative players like the local government, municipality, CSOs, etc., can be largely regarded as the biggest strengths in promoting C.E activities. Enabling can be monetary help, credits, infrastructure, and something as insignificant as providing a space for any endeavour which brings an institution closer to the community in a beneficial way.

The Covid-19 pandemic was considered the biggest threat and a hindrance for the foreseeable future, to the programs already in place and future activities that had potential to create linkages between institutions and stakeholders. During this time, what emerged as a major theme, which could be classified as strength of a higher educational institution or a potential opportunity ripe for harnessing was "resilience of the researcher". We collected responses some of which divulged instance of how students, faculty, or HEI as an entity rose to this crisis to continue their efforts to engage with the communities and to beget change, even if small, in order to help the communities. For instance, IIM- Ahmedabad created a whole network to identify those beneficiaries who will slip between the gaps of government assistance schemes for the poor. The entire process was well documented and is available on their website. Creativity and will of any HEI is displayed when we see innovative methods of establishing contact despite the circumstances. Use of developing technology in the form of affordable mobiles and mobile internet to achieve C.E. agendas showcase not just the perseverance of an entity to continue their work but also presents with an opportune way of connecting during times like the present.

From the responses we were also able to map the UN Sustainable Development Goals that were directly or indirectly addressed via the practices of the HEIs (these are however based on only individual responses from participating institutions and do not represent entire CE profile of HEIs mentioned here). From the visual map below, we can see a higher concentration around the goals 3, 4, 10, and 11, which are "Good Health and Well Being", "Quality Education", "Reduced Inequalities", and "Sustainable Cities and Communities", respectively.

The Figure 4 was collated from the responses to our questionnaires, and interview and FGD sessions, it represents the areas of sustainability being addressed via the individual efforts of the respondents. It was felt that there is a need to rile up attention on SDG 5 (Gender & Equality), SDG 10 (Reduced Inequality), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action). The respondents cited these specifically keeping in mind the past year's pandemic devastation which led to a "daily wage workers' mass migration" bringing to light societal inequalities, and the consecutively intensifying cyclones around coastal India. It was acknowledged that SDGs being interconnected, action on one goal means simultaneous effect on others but these few goals need urgent attention.

The role of governing authorities often emerged in the responses and also during the focus group discussion. It was either lack of support from the local/union government, non-pliability to academic suggestions, or excellent support, which helped in achieving big C.E. goals. In the surveys collected, the enabling role of the authorities was touted as one of the strengths of an institution's foray into C.E. The governmental/administrating bodies of any country have huge stakes in the success of their HEIs for which they roll out regulations and mandates.
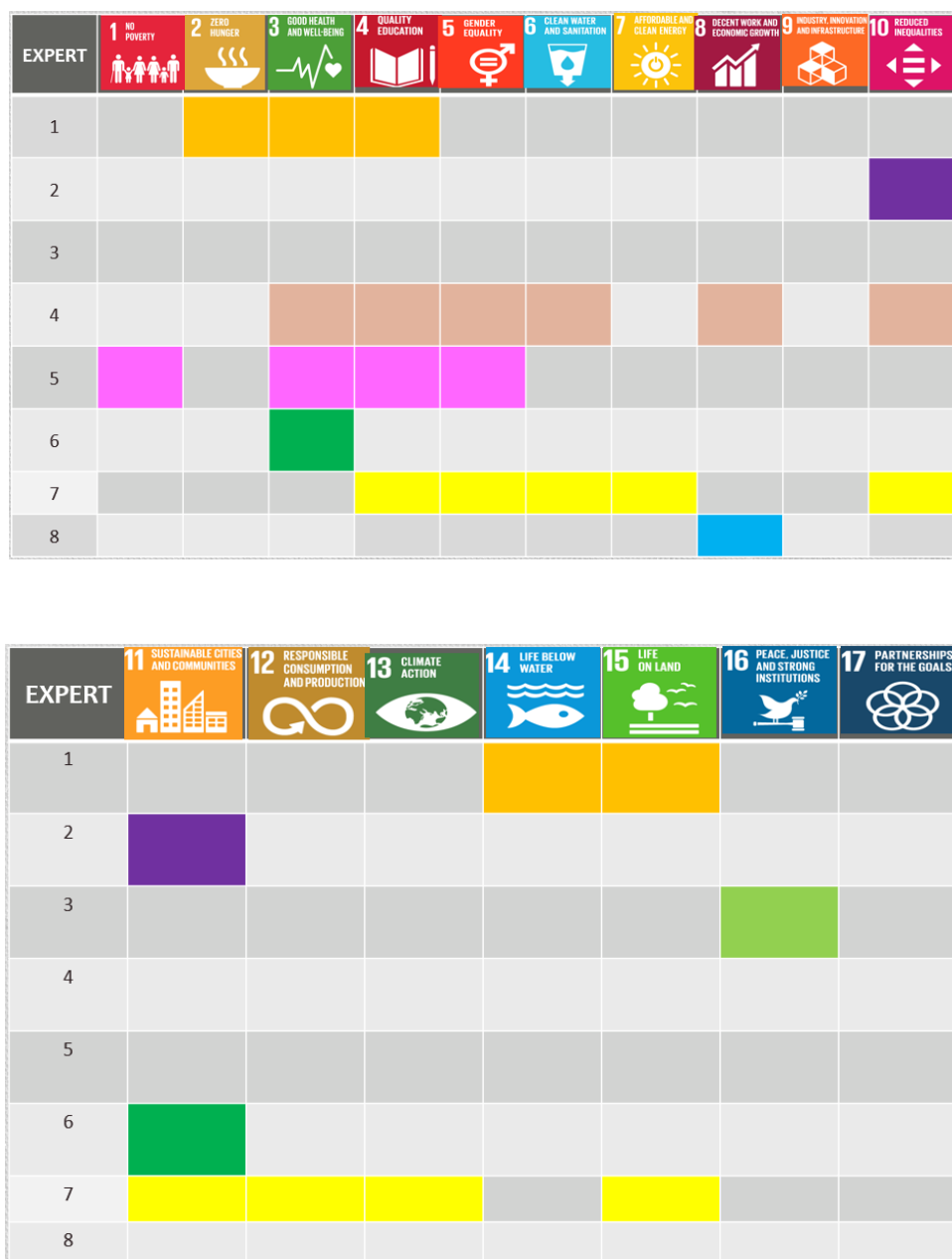
EXPERT	1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES
1										
2										
3										
4										
5										
6										
7										
8										

EXPERT	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS
1							
2							
3							
4							
5							
6							
7							
8							

Figure 2 Visual Represenation of SDG Concentration

Conclusion

In the face of rapidly globalizing world, HEIs have seen a significant role in deconstructing the complex socio-economic, ecological and political challenges; and, in facilitating changes through community empowerment or through more remedial approaches. This study aimed at understanding various ways of community engagement, while also understanding the enablers, the processes, experiences and the emerging models. This report is the result of work over a period of five months which involved focussed review of literature on community engagement by HEIs, along with analysis of responses from experts, faculty, researchers, and students. Through individual survey questionnaire forms, focus group discussions, and semi-structured interviews, this report has tried to add to the discourse of community engagement in Indian HEIs, and their position in aiding and potentially achieving the UN Sustainable Development Goals.

Through this endeavour, we could delineate a broad definition of community engagement in the Indian context as gathered from interactions with the respondents. Our 16 participants, from 10 institutions, encompassed major geographical regions i.e., North, East, South, and West India, representing different categories of institutions– public, private, and autonomous. Of these 16, four of the respondents were affiliated with a public institution, 11 represented private HEIs, and one was a faculty at an autonomous institution.
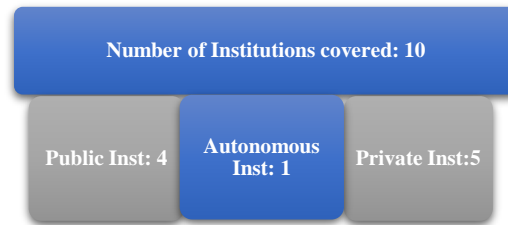
Number of Institutions covered: 10		
Public Inst: 4	Autonomous Inst: 1	Private Inst:5

Figure 3 Overview Of Participating Institutions.

Despite the brutal second-wave of the Covid-19 pandemic in India, we were able to gather information using a mostly qualitative approach by innovating our research dynamically as we went. The pre-designed survey questionnaire was distributed to over 60 contacts via email and phone calls, however, the process was not smooth or easy. Due to the chaos of the pandemic, which seemed to be affecting everyone indiscriminately, respondents were hard to reach and often dealing with losses themselves. In the end we could gather responses to the survey from 14 individuals, which we then analysed using the "SWOT" framework decided by the ProSPER.Net members. Following this, a focus group discussion was organized with ten expert faculty members from which we gathered nuanced insights into various aspects of community, engagement and community engagement. Another unique aspect of this study is the case study on TERI-SAS, showcasing some of the best practices of the institution that highlight sustained and deep engagement with communities. These practices help in furthering the SDG agenda (of which India is a signatory) directly and/or indirectly.

By highlighting the various ways Indian HEIs perceive C.E., this study hopes to bring forth new models of C.E., building upon the existing models. With definitions of community, engagement, and C.E. under continuous construction, the way to classify an institution's activities must also be updated. Thus, this study has attempted to further this discussion through the following three models of C.E.– **embedded engagement model, reciprocal engagement model, and action engagement model**. These models were proposed after observing some emerging trends in the way C.E. is comprehended by the participants and the general trends of their affiliating institutions.

On the subject of the UN SDGs, a mapping was attempted from the collected individual survey responses, interviews, and FGD. Though these responses do not represent the Indian government's policy commitments towards SDGs or the represented institutions' complete engagement profile, it is possible to extrapolate institutional bend and individual sensibilities regarding various sustainable practices. From the survey responses, and as direct questions in the FGD and interviews, we mapped out SDGs fulfilled directly/indirectly via an institution's C.E. activities or an individual's personal project/research work. We also tried to map faculty member's perception on the need for prioritized attention to various SDGs. It must be said that these remain personal views but it will do good to acknowledge that HEIs, and by extension, the faculty, occupy a unique position of influence in the society. Fulfilment of the UN SDGs must

be a spearheaded by India's higher educational institutions as they can help disperse knowledge to various stakeholders and also build processes.

Acknowledgement

References

Bender, C J Gerda. (2008). Exploring conceptual models of community engagement at higher education institutions in South Africa. Perspectives in Education. Vol 26(1).

Community Engagement: Case Presentations. (2006) NAAC.

David W. Stewart & Prem Shamdasani (2017) Online Focus Groups, Journal of Advertising, 46:1, 48-60, DOI: 10.1080/00913367.2016.1252288

El-Jardali., et al. (2018). Changing roles of universities in the era of SDGs: rising up to the global challenge through institutionalising partnerships with governments and communities. Health Research Policy and Systems. 16:38

Franco, I.B., Derbyshire E. (2020). Governing Education for Sustainable Development: Towards Inclusive and Equitable Quality Education. *Actioning the Global Goals for Local Impact.* Franco, I.B. et al. Science for Sustainable Societies.

Jacob, James W., Sutin, Stewart E., et al (2015). Community Engagement in Higher Education: International and Local Perspective.

MHRD Annexure https://www.education.gov.in/sites/upload_files/mhrd/files/ebook/ebook_files/annexures/Annexure-2.pdf

Mishra, L. (2016). Focus Group Discussion in Qualitative Research. TechnoLearn. Vol6, No.1.

Plummer, R., Witkowski, S., Smits, A., & Dale, G. (2020). Assessing the performance of higher education institution (HEI)- community partnerships. http://hdl.handle.net/10464/15012

Singh, W., Tandon, R. (2015). Introduction to Case Studies. In B. Hall, R. Tandon & C. Tremblay (Eds.). Strengthening Community University Research Partnerships: Global Perspectives. Victoria/New Delhi: UVic/PRIA.

Tandon, R. & Singh, W. (2015). *Transforming Higher Education Through Community Engagement.* University World News. https://www.universityworldnews.com/post.php?story=20150217102602953

<div align="center">

Chapter 3

Indonesia

</div>

Prof. Ir. Irfan Dwidya Prijambada, M.Eng., Ph.D.
Nanung Agus Fitriyanto, S.Pt., M.Sc., Ph.D.
Zuliyati Rohmah, S.Si., M.Si., Ph.D.
Azri Faisal Nabhan, S.S., M.M.
Ratri Bilqis Auwibi, S.I.P.
Universitas Gadjah Mada, Indonesia

Executive Summary

Higher education institutions play an essential role in supporting the Sustainable Development Goals (SDGs) implementation in actual practices at the local level through education, research, and community services. The **Development of A Framework for the Local Implementation of the SDGs – Phase II: Survey on Community Engagement in Higher Education for Sustainable Development** is a project investigating how universities can support local authorities and communities for their SDGs implementation. It aims to increase understanding of higher education institutions' practices in collaboration with local communities in education and research for sustainability and enhance interest and engagement among higher education institutions in collaboration with local communities for SDG implementation. Universitas Gadjah Mada (UGM), as one of the oldest higher education institutions (HEI) in Indonesia, is responsible for promoting local community engagement in addressing SDGs. It is well known as *Kampus Kerakyatan*, a university with an orientation to working for, with, and in the community for the nation's good. Through the Directorate of Community Services (DOCS), UGM tries to facilitate lecturers and professors to fulfill one of their Tri Dharma obligations, which is performing community service. UGM as HEI has to ensure that the community services done by its professors are in line with government and UGM policy in addressing SDGs and has an impact on communities and their environment. Thus, it is important to run a SWOT analysis for this community service project. The SWOT analysis was expected to reveal the positive forces that might work together and the potential problems that need to be recognized and possibly addressed in the community engagement activities performed. It will benefit from developing a fuller awareness of the community service activity that helps with strategic planning and decision-making in the future. As UGM is responsible for bridging the national government programs related to SDGs implementation to the communities, several ways have been taken by UGM to increase the understanding about SDGs in the community and to ensure the transfer of knowledge of SDGs, such as 1) UGM has put in its policy as HEI to actively work on SDGs, either in the campus or in communities; 2) UGM has established SDGs Center as part of DOCS which keenly pursue and join networking that promotes SDGs and ESD, and 3) UGM has encouraged its professors and staffs to do community service activities by making funding available to support them through grants. Unfortunately, the COVID-19 outbreak has hampered progress toward the SDGs on a national and international level. The unusual scenario caused by COVID-19 in early 2020 affects the SDGs commitment. However, with the spirit of SDGs that no one will be left behind, UGM has actively set up activities to combat COVID-19 pandemics' effect through its community service programs supported by the DOCS grant. The grant supports

the professor in UGM to promote SDGs, disseminate their research to communities, and actively address the pandemic effect. All of the community service programs had an impact on the local community groups. In accordance with SDGs goals, several goals were being addressed in these programs, with goal #3 (Good Health and Well-Being) dominating, as the community services programs year 2020 were rerouted to tackle the initial blows of the pandemic. The pandemic has been ongoing for more than a year now. There is an impending threat to the community service program that there will be community fatigue and economic struggle. This fatigue surely will make the community less welcome to any community service activities. Moreover, the budget cut is an inevitable result of the economic slowdown in Indonesia. However, UGM and DOCS will not stop doing community services to alleviate the community burden due to the pandemic and make different approaches to do community service. UGM, through DOCS and its professors, are working together to tackle the multi-effects of the pandemic. The DOCS community service activities may not 100% solve the problem in the community nor achieve glorious goals in SDGs. However, it is expected that the cascade effects of DOCS community service activities will make a difference and contribution towards SDGs implementation.

Introduction

Higher education institutions play an essential role in supporting the Sustainable Development Goals (SDGs) implementation in actual practices at the local level through education, research, and community services. The development of a framework for the local implementation of the SDGs – Phase II is the follow-through project from Phase I that was launched in 2018. The main objective of this project is to investigate how universities can support local authorities and communities for their SDGs implementation. The intended results from this study are to increase understanding of higher education institutions' practices in their collaboration with local communities in education and research for sustainability and enhance interest and engagement among higher education institutions in collaboration with local communities for SDG implementation. It is also to explore and re-imagine the role of higher education in supporting the implementation of the SDGs by examining the past and current practices of those working in higher education institutions to collaborate and engage with local communities for sustainable development.

Furthermore, in Phase II, the idea is to explore collaboration models between higher education institutions and communities in local SDGs implementation. Thus, a survey is conducted to collect information about local community work assisted and performed by lecturers/professors from higher education institutions. It aims to analyze the obstacles, challenges, and impacts from the performed community services activities.

Universitas Gadjah Mada, Directorate of Community Service, and RCE Yogyakarta

Universitas Gadjah Mada (UGM) had the opportunity to be part of The Development of a framework for the local implementation of the SDGs – Phase II with the other universities from Thailand, Japan, the Philippines, and India. UGM is a university for academicians from various regions in Indonesia with their distinctive culture and local languages. It is considered one of the oldest universities in Indonesia. UGM has the vision to be an excellent and innovative World Class University, imbued with the nation's cultural values based on Pancasila as the state ideology and dedicated to the nation's interest and humanity. UGM has the mission to carry out education, research, and community service and preserve and develop excellent and valuable

knowledge for society. The academic activities of Universitas Gadjah Mada are expressed in the form of the cornerstones of Tri Dharma higher educational pillars consisting of Education and Teaching, Research, and Community Service. UGM has a Master Plan in Community Service, containing policy and education and community service activities as part of the implementation.

The main office in UGM that focused on community engagement is named the Directorate of Community Services (DOCS). DOCS is an office in charge of community service activities under the UGM management. Community service is one of the parts of Tri Dharma (Three Pillars in Higher Education in Indonesia) that is obligatory for all researchers or professors in university to disseminate their knowledge in the community. There are various competitive funding to support the community services activities, either from faculty, university, or even national level. DOCS is one of the institutions in UGM that provides such grants. Also, DOCS is responsible for serving and developing the local community, especially in SMEs and partnerships. DOCS is also committed to establishing international cooperation with other educational institutions concerned with community engagement, such as Erasmus+, UNESCO, ProSPER.Net, International ESD Forum, and Global RCE. RCE Yogyakarta, as one of the Global RCE members, is also under the responsibility of DOCS.

RCE Yogyakarta, based at Universitas Gadjah Mada, is one of 174 RCEs worldwide and is a member of RCE Global, managed by the United Nations University-Institute of Advances Science (UNU-IAS) Japan. It is a network of individuals, organizations, and institutions working in formal, informal, or non-formal education to provide Education for Sustainable Development to local and regional communities, particularly in Yogyakarta and neighboring areas. RCE Yogyakarta was established to deliver formal and informal Education for Sustainable Development education. It also provides information, awareness, learning, action, and community mobilization that drives the nation towards life and more sustainable future development and contributes to ESD collaboration and networking. RCE Yogyakarta's vision is to be a center that actively participates in preventing global disasters. In line with the Yogyakarta Palace's goal, Hamemayu Hayuning Bawono, RCE Yogyakarta's mission is to create and implement diverse community-based concepts and technologies that support sustainable development.

Indonesia's Commitment to Sustainable Development Goals

The world has committed to adopting the 2030 Agenda for Sustainable Development, including 17 Sustainable Development Goals (SDGs) agreed in September 2015 by United Nations (UN) Member States. SDGs carry five basic principles: People; Planet, Prosperity, Peace, and Partnership, often referred to as the 5P principle. These principles cover all the goals and indicators of the SDGs that cannot be separated, always connected to, and integrated to achieve a better quality of life.

The SDGs have the high objective of guiding the planet's sustainable development, addressing its economic, social, and environmental components in a balanced manner to propel societies toward a more sustainable and equitable future. Sustainable development is a national goal in Indonesia, balancing economic growth, social inclusion, and environmental protection. It has become part of the contribution to the Global Action Plan of the 2030 Agenda. Indonesia is committed to successfully implementing a Presidential Decree as the legal basis for SDGs implementation in the country. Indonesia's Presidential Regulation No. 59/2017 concerning the implementation of SDGs in Indonesia has mandated the Ministry of National Development

Planning of the Republic of Indonesia to provide the Roadmap of SDGs in Indonesia. An all-inclusive National Coordination Team is also formed, with all stakeholders represented and led directly by the President. Through the Ministry of National Development Planning of the Republic of Indonesia/the National Development Planning Agency (Ministry of National Development Planning/BAPPENAS), efforts to achieve the SDGs target are a national development priority.

Nevertheless, as experienced by other countries globally, the current COVID-19 pandemic has made fulfilling the SDGs achievement even more challenging, and Indonesia is no exception. However, to guarantee a sustainable and resilient recovery, Indonesia has implemented systemic reforms in four essential areas: social security, national health, disaster resilience, industry recovery, tourism, and green economy investment.

SDGs and COVID-19 Pandemic

The COVID-19 outbreak has hampered progress toward the SDGs on a national and international level. The unusual scenario caused by COVID-19 in early 2020 affects the SDGs commitment and weakens the general approach to advisability by delaying attaining the 17 goals and altering the development line. Although statistics for a comprehensive picture are not yet available, the pandemic affects every element of society, from public health to economic and social stability to the environment.

Global phenomena central to the SDGs have been drastically changed, bringing people's attention to new realities and ways of living that never have been imagined before. Lockdown policies have a significant impact on mobility and migration, with considerable human and economic consequences. The pandemic causes a wide-scale economic catastrophe with a disproportionate impact on developing countries, causing many people to fall into poverty for the first time in three decades. The economic ramifications are significant and pervasive, impacting all sectors of the economy, including money flows, company operations, employment, and jobs. Education is forcibly digitized during the first lockdown, affecting over 1.2 billion learners in over 170 nations that are 72% of all learners (Cohut, 2021). In short, the pandemic is causing global pressure by providing grounds such as shutting borders and restricting the movement of people and products. On the other hand, it needs worldwide collaboration to combat the pandemic, which is fundamentally global. This pandemic's impact will be long-lasting, affecting all aspects of human life and delaying all developmental initiatives, including aspiring and aspirational SDGs.

The pandemic in Indonesia is also reaching its worst state. The daily positive cases in July 2021 have reached the highest record since the pandemic began. Each region's readiness to formulate and implement the most appropriate regional plans is required to control the rise in cases properly. Consequently, any surges may be repressed and handled quickly, reducing the load on facilities, health systems, and professionals. The government believes that by working together, this surge can be managed correctly. All sides must be unified and assist one another in developing appropriate strategies, including higher education.

As educational institutions, higher education takes responsibility for tackling the challenges emerged by the COVID-19 pandemic. All disciplines, such as medical, nutritional science, psychology, agriculture, public health, biology, engineering, statistics, computer science, have been designing tests and analyzing data to understand better the pandemic through

research and community service activities. By doing so, it is expected that the world could be one step closer to finding a solution to the pandemic as it has undeniably been hampering progress toward the SDGs. However, this crisis may be leveraged to reinforce the global commitment to the 2030 Agenda.

Higher Education Institutions Role in SDGs Implementation

Achieving the SDGs requires a synergy of planning policies at the national, provincial, and district/city levels. One of those responsible for achieving the SDGs at the national and regional levels is higher education institutions. UGM, as a pioneer of universities in Indonesia, is committed to supporting the achievement of SDGs. As a democratic university, UGM pays a substantial interest to explore, collect, develop, and disseminate science and technology, which directly benefits the progress of the Indonesian nation and the welfare of its people for the achievement of the SDGs. As a university, UGM strives to help educate the nation's life and create community welfare through its community engagement activities, especially during the current pandemic.

Community service is defined as any action that strives to assist the community and the use of knowledge and technology gained through higher education to address community problems and improve the welfare of the country and state. Currently, universities must utilize science and technology to advance the community's welfare and educate the nation's life through community service activities. In terms of institutions and management, universities that engage in service activities must be able to meet the minimum criteria for the community service system outlined in the Regulation of the Minister of Research, Technology, and Higher Education of the Republic of Indonesia No. 44 of 2015 concerning National Standards for Higher Education.

Community Service Regulation for Higher Education Institutions in Indonesia

Conducting community service to accomplish the SDGs goals in a higher education institution necessitates engagement from various stakeholders. The actions of the SDGs in the community require various stakeholders, including governments, international organizations, and global agencies, all of which have a vital role. One of the laws and regulations in Indonesia that is used as the basis for community service implementation is Article 60 of Law Number 14 of 2005. It states that professors or lecturers are required to carry out the Tridharma activities of higher education, including education, research, and community service, while carrying out professional obligations. Article 20 paragraph (2) of Law Number 20 of 2003 concerning the National Education System states that universities are obliged to organize and develop Research and Community Service and education for the progress of the nation and state. Law Number 12 of **2012** also requires universities to carry out the Tri Dharma of Higher Education activities, namely organizing Education, Research, and Community Service.

Several essential aspects that must be considered in community service management are the resources owned, good process management, implementation aspects, assessment of community service activities, the outputs produced, and the revenue generated from community service activities. These aspects can also be termed indicators of the performance of a community service management institution in being able to see how well the implementation of national standards for community service at the institution that manages it, in this case, is a higher education institution.

The Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 49 of 2014 contains the National Standard for Higher Education (SN DIKTI). The regulation then strengthened with the following Regulation of the Minister of Research, Technology and Higher Education Number 44 of 2015. The National Standard of Higher Education is a standard unit that includes the National Education Standard, the National Research Standard, and the National Standard for Community Service.

All stakeholders must continue to direct higher education institutions to meet the National Higher Education Standards (SN DIKTI), especially in implementing the dharma of Community Service. On the other hand, each university is expected to be able to manage Community Service activities that meet the eight standards set by the government and contained in the 2018 Guidelines for Community Service Performance Assessment in Higher Education, as follows:

1. The standard of the results of community service is the minimum criteria for the results of community service activities in applying, practicing, and civilizing the science and technology obtained at universities to advance public welfare and educate the nation's life as a whole.
2. The standard for community service content is the minimum criteria regarding the depth and breadth of material covered in community service.
3. The standard of community service activities' process means the minimum criteria for community service activities, including planning, implementing, and reporting community service activities.
4. The standard of community service assessment is the minimum criterion regarding the process and results of community service assessment.
5. The standard of implementing community service is the minimum criterion for the ability of the implementer to carry out community service.
6. The standard of community service facilities and infrastructure is a minimum criterion of the facilities and infrastructure needed to support the community service process to fulfill community service results.
7. Community service management standards are the minimum criteria for planning, implementing, controlling, monitoring, evaluating, and reporting community service activities.

The objectives of community service in higher education are: (1) To carry out community service following Permenristekdikti No. 44 of 2015 concerning National Standards for Higher Education; (2) Develop a model of community empowerment; (3) Increase the capacity of community service; (4) Provide solutions based on academic studies of the needs, challenges, or problems faced by the community, either directly or indirectly; (5) Carry out activities that can empower people at all levels, economically, socially and culturally; (6) Transferring technology, science, and art to the community for the development of human dignity with gender equity and social inclusion and the preservation of natural resources.

Following the Standards in the Community Service is expected to be a driving force for higher education institutions to be able to: (1) Realizing the excellence of Community Service programs in universities; (2) Improving the competitiveness of universities in the field of Community Service; (3) Increase the number of lecturers' participation in carrying out

Community Service, and (4) Increase the capacity of community service management in higher education.

Community Service in Universitas Gadjah Mada

As one of the higher education institutions in Indonesia, UGM is responsible for supporting and empowering the Indonesian community. Through the Directorate of Community Services (DOCS), UGM tries to facilitate lecturers and professors to fulfill one of their Tri Dharma obligations, which is performing community service. DOCS provides a competitive grant for the lecturers to support their community service activities. The DOCS grant is divided into three schemes: (1) Village Empowerment; (2) Appropriate Technology Design; and (3) Education for Sustainable Development.

Village Empowerment

The Community Service Grant Program for Village Empowerment is one of the community service programs developed by the Directorate of Community Service, Universitas Gadjah Mada. This program promotes community service activities in the form of community empowerment by Universitas Gadjah Mada academics. As one of the largest higher education institutions in the country, UGM has a lot of human resources to contribute to village development that can provide direct benefits to the community and are meant to promote community independence and welfare.

The DOCS Village Empowerment program is designed to (1) assist in the resolution of community problems that are broad, multi-sectoral; (2) directing rural communities towards a more prosperous life; (3) creating a dynamic society; (4) assisting and improving the socio-economic conditions of the resident; and (5) facilitating citizens' access to information and knowledge.

The Village Empowerment Program is implemented in a synergistic cooperation network amongst various stakeholders and is oriented towards community independence. The target of this program is a community in general, such as community groups or institutions located in rural areas. It strives to empower the community in achieving its independence and welfare by optimizing its potential, allowing them to fully utilize and optimize existing resources' potential.

The expected output from Village Empowerment Program is as follow:

1.   The ability of a community to alleviate economic, social, cultural, health, and environmental problems in their village through community initiatives and creativity.

2.   The utilization of local potential in terms of natural resources and human resources to support community independence and welfare. The output can be measured from various parts such as (1) products (prototypes/tools/goods/software); (2) economic aspects (increased economic status, increased production capacity, increased sales turnover); (3) social aspects (lower number of sufferers of psychiatric disorders sufferers or other community diseases); (4) cultural aspects (emergence of local cultural development groups, increased activities related to cultural preservation); (5) health aspects (improvement of children-under-five nutritional status, decreased mortality number), and (6) environmental aspects (carbon emission reduction);

3.   The establishment of the Independent Prosperous Village model;

4. Scholar publication national or international level, posters, or documentary videos;
5. Executive summary;
6. Administrative outputs (activity report and financial report);
7. International Property Rights;
8. Patent;
9. Other science and technology outputs.

Criteria of Assessment

The table below will describe the criteria of assessment from the proposed activity for Village Development.

Table 14 Assessment Indicator for Village Development Program Proposal

		Weight	Score	Total (weight x score)
Situation and problems analysis of the target village	The potential resources and existing conditions of the village	15		
	The urgency of the village problem			
Programs and solutions offered	The method feasibility	40		
	The problem's compatibility with the program and the solution to be implemented			
	The program suitability with human resource/personnel competencies			
Program sustainability	The availability of activity roadmaps and financing sources	25		
	Community support			
	The collaboration with program support partners (private/government)			
	Cost			
	The supporting facilities and infrastructure			

Output targets that support the achievement of Independent Prosperous Villages	The program is capable of resolving the community's social issues	20
	The program is capable of nurturing the community initiative and creativity	
	The program is capable of maximizing existing local potential, both natural and human resources	
	The program can promote community self-sufficiency	
TOTAL		100

The score criteria are from 1 to 7 with the following information:

1: Failing
2: Bad
3: Poor
4: Fair
5: Adequate
6: Good
7: Excellent

After the total value is known, then DOCS decides if the proposed Village Development program by the UGM lecturer/professor is accepted or rejected.

Appropriate Technology Design

Appropriate Technology Design is a form of research results application and development into community service activities by higher education institutions. The development of Community Service Programs Based on Utilization of Research Results and Application of Appropriate Technology prioritizes science, technology, arts, and culture, which are directly and relatively easier to apply to solve problems or develop the real sector.

The application of Appropriate Technology embodies UGM's concern for the problems faced by the community. The Community Service Program Activities Based on the Utilization of Research Results and Application of Appropriate Technology is aimed at local problems, improving performance and independence of rural and urban community groups. The service and implementation teams worked together with the targeted group to solve program subjects' key and strategic challenges.

The proposed activities are expected to be aimed at local problems and be directed at handling local problems that support the independence and performance of the target group. It is hoped that this program will boost performance, community independence, economic growth, civilization enhancement, and community welfare. Programs and collaborations should be institutionalized so that program outcomes can be sustainable.

The target groups in the Community Service Program Development Program Based on the Utilization of Research Results and Application of Appropriate Technology are community groups (e.g., farmer groups, fishermen, community youth groups, environmentalists), educators (teacher unions, Islamic boarding schools, street children groups, orphanages), community service units (Integrated Healthcare Center, Public Health Center, library), government institutions (sub-district officials, district officials, police), and the business community (home industry, artisans, cooperatives, micro small and medium enterprises).

The expected output from Appropriate Technology Design is as follow:

1. Application of products/research results in society: tools/goods/software/prototypes;
2. Application Appropriate Technology Design methods;
3. Scholar publication national or international level, posters, or documentary videos;
4. Executive summary;
5. Administrative outputs (activity report and financial report);
6. International Property Rights;
7. Patent;
8. Other science and technology outputs.

Criteria of Assessment

The table below will describe the criteria of assessment from the proposed activity for Appropriate Technology Design.

Table 15 Assessment Indicator for Appropriate Technology Design Proposal

		Weight	Score	Total (weight x score)
Situation and problems analysis of the target partner	The potential resources and existing conditions of the partner	20		
	The urgency of the village problem			
Programs and solutions offered	The method feasibility	35		
	The problem's compatibility with the program and the solution to be implemented			
	The program suitability with human			

	resource/personnel competencies		
Program sustainabilit y	The availability of activity roadmaps and financing sources	25	
	The readiness and community support		
	The collaboration with program support partners (private/government)		
	Cost		
	The supporting facilities and infrastructure		
Output targets	tools/goods/software/prot otypes of Appropriate Technology Design	20	
	TOTAL	100	

The score criteria are from 1 to 5 with the following information:
- 1: Bad
- 2: Poor
- 3: Fair
- 4: Good
- 5: Excellent

Education for Sustainable Development (ESD)

Higher education is a center of information and learning for students and the community. It plays an important role in addressing various social problems, such as natural disasters, climate change, changes in disease transmission patterns, prolonged droughts, widespread floods, and other problems caused by human activity. It is necessary to change human mindsets and behaviors to halt destructive activity and grow awareness, capacity, and willingness to repair unsustainable conditions. Education for Sustainable Development is one of the learning approaches that may be used to solve such challenges. It can be done through formal, informal, or non-formal education to provide knowledge, awareness, and capacities and enhance behavior toward sustainability.

The ESD program strives to shift the focus of education and learning so that everyone has the same opportunity to acquire knowledge, skills, values, attitudes, and behaviors that can strengthen them in contributing to sustainable development. In this regard, lecturers as scientists and professional educators have the main task of transforming, developing, and disseminating science, technology, arts, and culture based on ESD through education, research, and community service. As a result, UGM, as a pioneer in the ESD implementation in Indonesia, needs to disseminate the concept among the campus community and the wider community. Thus, the ESD program of DOCS in the community is expected to facilitate and accelerate its implementation.

There are three categories of ESD programs of the DOCS grant:

- ESD Implementation that involves partners from primary and secondary education;
- ESD Implementation that involves courses/learning system/curriculum in higher education;
- ESD implementation involves campus communities (lecturers, students, or education staff) or broader communities such as schools, villages, target groups, local governments, or other communities.

The expected outputs of this program are as follow:

1. The emergence of awareness, responsibility, and changes in community behavior that lead to sustainability;
2. Capacity building for adaptation and mitigation of environmental damage/destruction;
3. Able to mobilize the community, government, and business sector to carry out repair and rescue in a sustainable manner;
4. ESD-based program model that involves community empowerment;
5. The making of an ESD implementation module or guide (books, websites, leaflets, booklets, videos, posters);
6. Scholar publication national or international level, posters, or documentary videos;
7. Executive summary;
8. Administrative outputs (activity report and financial report);
9. International Property Rights;
10. Other science and technology outputs.

Criteria of Assessment

The table below will describe the criteria of assessment from the proposed activity for Education for Sustainable Development.

Table 16 Assessment Indicator for Education for Sustainable Development Program proposal

		Weight	Score	Total (weight x score)
Education for Sustainable Development Concept	Linkage of the concept/work plan with the issue of Education for Global Sustainable Development and the achievement of SDGs	10		
	The Balance the three pillars of Education for Sustainable Development (economic,	10		

	socio-cultural, and environmental) in the work plan	
	The process of developing the concept of Education for Sustainable Development (both within UGM and with partners)	5
Program benefits	The meaning and impact (national and international) of the implemented concept/work plan for Education for Sustainable Development and the resulting outputs	20
Education for Sustainable Development Implementation in the community	The implementation of the program in the *tri dharma* of higher education	20
	Involvement of the academic community	10
	Quality assurance and program sustainability	10
Partnerships / Collaborations	The involvement of national or international partners	15
	TOTAL	100

The score criteria are from 1 to 5 with the following information:
1: Bad
2: Poor
3: Fair
4: Good
5: Excellent

DOCS Community Service Grant Regulations

Despite the fact that the DOCS grant is intended for UGM lecturers, several qualifications must be fulfilled to apply. The requirements for lecturers/professors who want to apply for the DOCS grant are as follows:

1) The proposed program is multidisciplinary, interdisciplinary, or transdisciplinary, which is a cross-unit collaboration program and is coordinated with members from different units (UGM Faculty/UGM Study Center), and preferably involves collaboration with partners such as NGOs, schools, sectors private or government;
2) The chief executive is a lecturer with a master's degree or higher;
3) The team members are lecturers from at least two different clusters and not students;
4) The activity is prioritized to overcome problems in the frontier, outermost, and least developed regions that often referred to as 3T *(terdepan, terluar, tertinggal)*, and also prioritized for Central Java and Yogyakarta province, which becomes the location for the UGM Student-Community-Service (SCS) and the location of Village Development;
5) The proposal contains the concept and work plan for the implementation of community-based ESD program;
6) The work plan must contain a collaborative program with the community that is sustainable (multiyear collaboration);
7) The target group is the campus communities (lecturers, students, or education staff) or broader communities such as schools, villages, target groups, local governments, or other communities;
8) The proposer must explain the system/mechanism of quality assurance, program development, collaboration, and program sustainability.

Methodology

This study used questionnaires and interviews to collect the data from the respondents. As community service is an obligatory activity, all researchers or professors in the university will have community service activities. Thus, the people who fulfilled the survey questionnaire were the professors or lecturers of Universitas Gadjah Mada, who conducted community service in 2020. The themes of 2020 community services were focused on three themes: *Education for Sustainable Development Implementation, Appropriate Technology*, and *Community Empowerment.* Initially, the survey was designed for all the DOCS grantees who received funding in 2020. Furthermore, the survey was part of the evaluation and considered whether the grant could be continued or not in 2021. The survey link was distributed to 70 DOCS grantees using Google Form as Yogyakarta, Indonesia, was then under partial lockdown due to the COVID-19 pandemic, so 75% of office activities were restricted. The survey was conducted from January 25th until February 13th, 2021. It aims to follow up on the 2020 projects, which wrap-up at the end of October with the final seminar in November 2020. However, until the due date, only 41 people responded and returned the questionnaire.

The Technique of Data Collection

Due to the COVID-19 pandemic, it was challenging to conduct a face-to-face survey. Therefore, the questionnaire was sent via google form to professors in Universitas Gadjah Mada who were doing community services activities, especially those who won grants from the Directorate of Community Services, Universitas Gadjah Mada. This survey was designed to

collect information on the practices of educators and researchers in higher education institutions to work with local communities. The returns have been analyzed and consolidated as a data report. The data from the survey was collected using questionnaires provided and developed by the ProSPER.Net team of the project in A4 paper format. The information link was then distributed by emailing the professors personally and sending a reminder via *WhatsApp*. The question and the answers given by the respondents were kept in English to avoid any misunderstanding. Besides the questionnaire, direct interviews were also conducted to get comprehensive answers based on their community service activities. Then, the data obtained from the survey was descriptively analyzed using qualitative methodology.

The Technique of Data Analysis

SWOT Analysis was chosen to describe the findings. SWOT Analysis is a 4-box strategy analysis and strategy development model derived from **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats. The answers to each question were analyzed and coded whether it is part of Strength (S), Weakness (W), Opportunity (O), or Threat (T). Some of the answers showed complex nuances grouped into either S, W, O, T. If this is the case, then the answers can be put in all the boxes with a proper explanation behind the decision.

A SWOT-Analysis evaluates the internal strengths and weaknesses and the external opportunities and threats in an organization's environment. The internal analysis identifies resources, capabilities, core competencies, and competitive advantages inherent to the activities performed, while the external analysis identifies opportunities and threats by looking at the general environment. SWOT analysis aims to use an organization's internal and external environments to formulate its strategy accordingly. In the context of this survey, the SWOT is defined as below:

1) Strength: Internal factors that support the community service activity in addressing SDGs at the local level while the activity was performed, such as university policy, funding availability, facilities, human resource capability, and committed stakeholders.
2) Weakness: Internal aspects that limit the community service activity in addressing SDGs at the local level while the activity was performed, such as unsustainability of the program, the project-based activity mindset, and community dependency. It relates to the things that the professors would improve if they have to do the project again.
3) Opportunity: External resources that can be utilized to strengthen the project in the future. It relates to the things the professors would do differently for the next project in the future.
4) Threat: External factors impair and even cease the sustainability of community service activity in addressing SDGs at the local level.

The SWOT analysis in this survey will benefit from developing a fuller awareness of the community service activity that helps with strategic planning and decision-making in the future. For more details, the analysis is used to:

- **Explore possibilities for new efforts or solutions to problems** in the community service activity in addressing SDGs at the local level;

- **Make decisions** by identifying the possible opportunities that happen during the community engagement performance;
- **Determine the possible changes** by referring to the strengths and weaknesses that have been identified;
- **Adjust and refine plans** in the mid-term activity.

SWOT ANALYSIS

Figure 4 SWOT Diagram

Using the SWOT analysis was expected to reveal the positive forces that might work together and the potential problems that need to be recognized and possibly addressed in any community engagement activities performed.

Findings and Analysis

Respondents' Profile

All the survey respondents were UGM professors, as the community engagement activities performed belonged to each individual. There were 41 respondents in total (Table 4), of which 22 (53.66%) were males, and the rest, 19 respondents (46.34%), were females. As shown in Table 4, the ratio number between the male professors and females is equal.

Furthermore, from 41 participants who answered the survey, most of them were dominated by the respondents from age 50-60 years old were observed 11 (26.83%), followed by ten respondents who aged 40-50 years old (24.49%), 10 of those aged 30-40 years old (24.49%), and then seven respondents who aged more than 60 years old (17.07%). Furthermore, the least came from 3 people aged 20-30 years old (7.32%). The found data is interesting, as the

youngest age group were the least to do the community service activities. Indeed, there is a different working priority between the junior and the senior lectures in Universitas Gadjah Mada.

Table 17 The profile of UGM professors who fulfilled the survey questionnaire

		Frequency	Percent
Gender	Male	22	53.66
	Female	19	46.34
	Total	**41**	**100.00**
Age	20-30	3	7.32
	30-40	10	24.49
	40-50	10	24.49
	50-60	11	26.83
	>60	7	17.07
	Total	**41**	**100.00**
Functional position	Lecturer	7	17.95
	Assistant Professor	19	48.72
	Associate Professor	12	30.77
	Professor	1	2.56
	Total	**41**	**100.00**
Cluster Background	Agro	18	43.90
	Science	7	17.07
	Technical	2	4.88
	Medical	2	4.88
	Humanities	1	2.44
	Vocational School	8	19.51
	Graduate School	3	7.32
	Total	**41**	**100.00**

Most of the respondents who conducted the community service activities in 2020 based on the tenure and position level were observed assistant professors (19 respondents, 48.72%), followed by 12 people associate professors (30.77%), and then seven lecturers (17.95%), and one professor (2.56%).

The last row of the table showed the cluster background of professors in Universitas Gadjah Mada who conducted community service in 2020. Professors from the Agriculture cluster dominated the community service activities. There were 18 respondents (43.90%) from the Agriculture cluster and eight from Vocational School (19.51%). Furthermore, seven respondents were from the Cluster of Science (17.07%), four people from Graduate School Cluster (7.32%), two respondents each from the Medical (4.88%) and Engineering cluster (4.88%), and the last was one person from Humanities cluster (2.44%).

Community Services Funding Availability
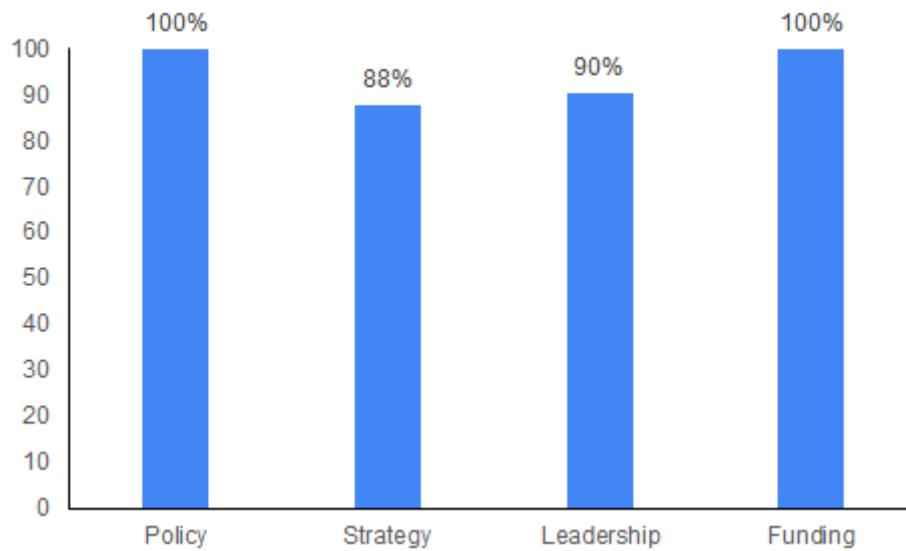
Figure 5 Type of support given by the University for Community Service Activitie.
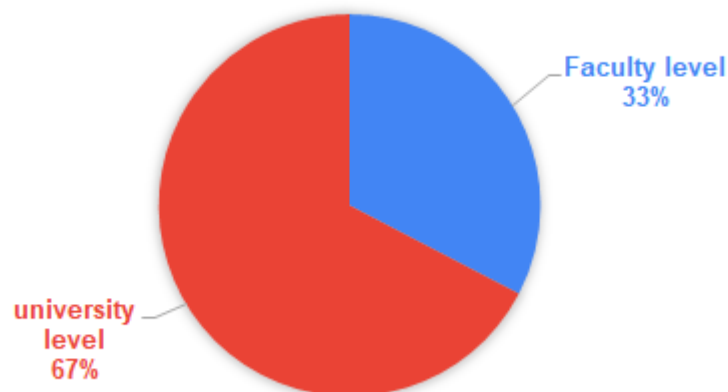
Figure 6 Funding availability for community service activities

Based on the interviewee's answer, they suggested that UGM has given adequate support for community service activities regarding policy, strategy, leadership, funding availability (Figure 2). Most of the funding was offered as a grant at the university level. In addition, some of the faculty in UGM offer a grant for community service activities (Figure 3). Ninety percent of the respondents said that the institution had provided its staff and students with the support of incentives for community engagement. At the same time, 10% showed that they do not have any information about these kinds of support or incentives.

Community Service Supported by DOCS UGM

Table 18 Community Service activities supported by DOCS grant in 2020

		Frequency (total of the response)	Percent
Place where the community services carried out	City	4	9.76
	Village	26	63.41
	School	2	4.88
	Healthcare Facilities	4	9.76
	Farm	3	7.32
	Barn	1	2.44
	Waste Bank	1	2.44
	Total	**41**	**100.00**
Local communities whom the professors worked with	Villagers	11	23.40
	Village-Owned Enterprise	1	2.12
	Home Industries	4	8.51
	School	1	2.13
	Military Academy	1	2.13
	Community Group	16	34.04
	Health Workers	5	10.64
	Farmers	7	14.89
	Youth Organization	1	2.13
	Total	**50**	**100.00**
Main partners of the community service carried out	Villagers	1	1.69
	Small Medium Enterprises	6	10.17
	Community group	11	18.64
	Farmers	5	8.47
	University	6	10.17
	NGO	1	1.69
	Village Official	10	16.95
	Institutional Office	11	18.64
	Healthcare Facilities	4	6.78
	School	2	3.39
	Government	2	3.39
	Total	**59**	**100.00**
Stakeholders' involvement	Families	7	3.17
	Single parents	4	1.81
	Children	7	3.17
	Adolescent	6	2.71
	Youth	15	6.79
	Elderly	8	3.62
	Farmer Association	19	8.60

Media	18	8.14
Business	10	4.52
Community Leader	21	9.50
NGOs	8	3.62
Religious leader	8	3.62
Parliament Members	5	2.26
Students	19	8.60
Teachers	16	7.24
Schools	16	7.24
Local government	34	15.38
Total	**221**	**100.00**

Based on the community service location (Table 5), almost all the activities were conducted at villages with 26 villages in total (63.41%). In contrast, only four professors conducted community service activities in the city (9.76%). The rest of the locations were two schools (4.88%), four healthcare facilities (9.76%), three farms (7.32%), 1 barn (2.44%), and one waste bank (2.44/%). Meanwhile, for the local communities professors worked with, the main partners of the community service carried out, and the stakeholder's involvement are multiple responses where one professor is allowed to check several answers/items that apply to their community service activities.

Most professors worked with more than one of the local community types while performing their community service activities. Most of the local communities they worked with were dominated by community groups (34.04%), with 16 community groups from different activities such as a cattle farmer group, a community waste bank, a rice farmer group, a forest community, and a river activist community. The villagers were the second most local community type UGM professors engaged in since 11 community service activities involved villagers (23.40%). Furthermore, seven community service activities involved farmers (14.89%), five activities involved health workers (10.64%), four activities involved home industries (8.51%), and the rest were activities involved 1 Village-Owned Enterprises (2.12%), one school (2.13%), one military academy (2.13%), and one youth organization (2.13%).

Most of the professors also had more than just one main partner in doing their community service work. The main partners of the professors in devoting themselves to serving the community were almost similar to the local communities they worked. Most of the professors have partnered with official institutions from the village district office and other institutional offices. Ten professors partnered up with the village district official to run the program that has been conceived (16.95%). Thus, 11 professors partnered with the community groups, such as an outbound team, a veterinarian union, a cattle farmer group, a women farmer association, a community waste bank, a rice farmer group, a forest community, and a river activist community (18.64%). Some of them, which was also 11 of them (18.64%), partnered with the institutional office such as Public Health Centers *(Puskesmas)*, environmental tourism centers, health officials in the district level, Secondary Cooperatives for Prosperous Citizens' Business Facilities, Office of International Affairs in university, Department of Agricultural in district level, Indonesian Midwives Association, Livestock, and Fisheries Department in district level, Environment Sustainability Support Association. Furthermore, 6 UGM professors teamed up with Small Medium Enterprises (10.17%), six professors collaborated with the university (10.17%), five

professors worked with farmers (8.47%), four professors cooperated with healthcare facilities (6.78%), two professors teamed up with school (3.39%), two professors collaborated with the government (3.39%). A professor made villagers themselves as his main partner in his community service activity (1.69%).

Furthermore, various stakeholders have participated in UGM professors' community engagement activities, as seen in the last row of Table 5. At least one professor dealt with 2 to 5 stakeholders while performing their community service work. It reveals that 34 professors (15.38%) have involved local government in their community service activities. Furthermore, 16 professors (7.24%) involved schools and teachers, 19 professors (7.24%) involved students, and five professors involved parliament members (2.26%). Eight professors involved religious leaders (3.62%). Eight professors involved NGOs (3.62%). Twenty-one professors involved community leaders (9.50%). Ten professors involved business-related parties (4.52%). Eighteen professors involved media in their activities (8.14). Nineteen professors involved farmer associations (8.60%). Eight professors involved the elderly (3.62%). Fifteen professors who involved youth (6.79%). Six professors involved adolescents (2.71%). Seven professors involved children (3.17%). Four professors involved single parents (1.81%). Last is seven professors who involved families (3.17%).

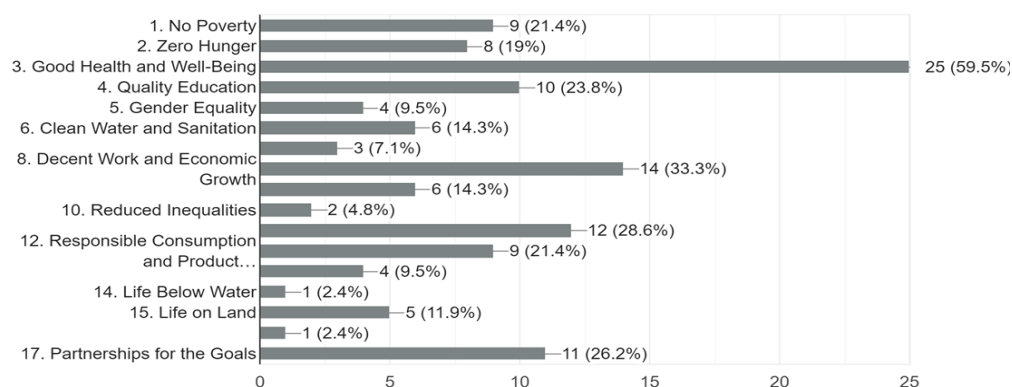**SDGs Addressed of the UGM Community Service Performed**

Figure 7 The SDGs addressed from the performed community services by UGM professors in 2020

The data we gathered shows that most community services in 2020 tackled Health issues related to SDG #3. Almost 60% of the activities promote Good Health and Well Being, of which 100% were undertaken in COVID-19 related issues. The second most targeted SDGs was goal 8, *Decent Work and Economic Growth,* with 14 of 42 professors (33%) addressing it. After goal number 8, goal number 11, *Sustainable Cities and Communities,* with 12 people (29%) addressing it. Meanwhile, the least addressed goals were goal 14, *Life Below Water*, and goal 16, *Peace Justice and Strong Institutions,* with only one person (2.4%) addressed each goal (Figure 4). The title of program activities is as follow:

As shown from the data above, most of the professors put COVID-19 on their work titles as it became their main reason why they do the community service in the first place. Combating the COVID-19 pandemic is currently at the top of the worldwide priority list as the number of cases has constantly been rising that the curve is refusing to flatten. The data suggests that, due

to the transmissibility of SARS-CoV-2 and insufficient effective response, a more significant number of cases and deaths are predicted in the future. It is deemed important to create a form of community empowerment practice in response to the many challenges in our community during this current situation. Also, according to the Minister of Finance's circular letter Number SE6/MK.02/2020, all ministries and institutions need to do budget reallocation and activities refocusing their programs from that day forward. Institutions such as higher education are expected to have such an acceleration program in their research and community service activity that focuses on tackling the COVID-19 pandemic with an overall strategy.

COVID-19 Related Community Services Program

- The Utilization of **BUKU ASIP** and Guidelines for Maternal in The COVID-19 Pandemic at Puskesmas Depok II
- Optimizing The Implementation Of Physical Distancing And Empowering The Creativity Of Student At SMKN 1 Sewon During The Pandemic Period Of COVID-19
- Improvement of Biosecurity in Livestock Groups in Kecamatan Ngaglik, Sleman
- Occupational Health Guidance During COVID-19 Pandemic for Farmers
- Ecohealth Village: Healthy Village Devoid from COVID-19 with Education-Based for Sustainable Development in Padukuhan Mrican, Caturtunggal Village, Depok, Sleman
- Advocating Foreign Students of Universitas Gadjah Mada during the Pandemic Era.
- Development of the Maternal and Child Health Assistance System Based on Web and Android Integration in Situations COVID-19 Pandemic at the Private Midwifery Services
- Development of Automatic Hand washing Technology - Aswagama as a Supporting Facility for a Clean and Healthy Lifestyle in Several Public Health Service Facilities in Efforts to Prevent the Spread of COVID-19 in Yogyakarta
- Crowdsourcing data is used to determine the spread of COVID-19 in Indonesia
- Movement Cares for the Environment to Prevent Spreading COVID-19 Second Wave in SMK Negeri 2 Temanggung
- The Use of Digital Media for Higher Education Outreach in the time of COVID-19: The Case of "Ruang Tumbuh."
- Online training of smoking cessation counseling for UGM staffs in order to reduce the number of smokers as a vulnerable group in the covid 19 pandemic period
- New Era of Home Industry Empowerment in Tuksono, Sentolo, Kulonprogo During and After COVID-19 Pandemic to Improve the Health and Productivity of Micro Business Players
- KKN-PPM UGM (compulsory subject for bachelor students)
- Education Campaign Through Suryo Gemati Waste Bank as Intermediary in Preventing the Spread of Coronavirus
- The bloated management using the prop-mouth method as an effective solution for farmers during the COVID-19 Pandemic
- Development and Manufacturing of Siaga COVID-19 Car's Cabin

Community Service Programs Dissemination

Below are several links of information related to their program and in combatant against false information of COVID-19:

Link of Programs Dissemination

- https://www.youtube.com/watch?v=7gZ71ySqhhc&t=2s
- https://wartajakarta.com/cegah-terinfeksi-COVID-19-pada-ibu-hamil-menyusui-ugm-bagikan-buku-panduan-pencegahan/
- https://pewarta-indonesia.com/2020/09/ugm-bagikan-buku-panduan-saat-COVID-19-untuk-ibu-hamil-dan-menyusui/
- http://lintasbisnis.com/index.php/2020/09/02/cegah-penularan-COVID-19-pkm-ugm-terbitkan-buku-panduan-pedoman-ibu-hamil-menyusui/
- https://bisnisexpo.com/2020/09/02/cegah-terinfeksi-COVID-19-pada-ibu-hamil-menyusui-ugm-bagikan-buku-panduan-pencegahan/
- http://bisnismetro.id/cegah-terinfeksi-COVID-19-pada-ibu-hamil-menyusui-ugm-bagikan-buku-panduan-pencegahan/"
- https://www.youtube.com/watch?v=4LDLDQvyuyo
- https://www.suaramerdeka.com/regional/muria/235317-catat-guru-besar-ugm-rekomendasikan-tanaman-lokal-tangkal-COVID-19
- https://akuupdate.com/2020/07/20/tangkal-COVID-19-guru-besar-ugm-rekomendasikan-tanaman-lokal/
- https://r2brembang.com/2020/07/20/berkhasiat-cegah-corona-guru-besar-ugm-ajak-warga-konsumsi-daun-ini/
- https://rembangberita.com/pascasarjana-ugm-ajak-warga-kadiwono-berdayakan-tanaman-kelor-yang-diklaim-dapat-mencegah-COVID-19/
- https://www.kanigoro.com/berita/guru-besar-ugm-rekomendasikan-tanaman-lokal-tangkal-COVID-19/
- https://r2brembang.com/2020/07/24/beri-sarana-cuci-tangan-pedal-kaki-ugm-tularkan-kreativitas-kepada-warga/
- https://www.rmoljateng.com/read/2020/07/25/28946/UGM-Tularkan-Teknologi-Sederhana-Cuci-Tangan-
- https://www.cbfmrembang.com/2020/07/tempat-cuci-tangan-anti-COVID-19-karya.html
- https://rembangberita.com/tempat-cuci-tangan-anti-COVID-19-karya-pascasarjana-ugm/
- https://akuupdate.com/2020/07/31/ugm-kukuhkan-kadiwono-sebagai-desa-eco-cyber/
- https://www.kompasiana.com/slimbongan/5f22c3b5097f3640772b8e23/ugm-kukuhkan-desa-eco-cyber-village-di-desa-kadiwono-kecamatan-bulu-kabupaten-rembang
- http://koran.humas.ugm.ac.id/files/43063/KR%202020-07-27%20hal%208%20lok.jpg
- https://tannas.pasca.ugm.ac.id/2020/10/25/ugm-kukuhkan-desa-eco-cyber-di-kadiwono-rembang/
- https://www.youtube.com/watch?v=9Ui13E5igEw&feature=youtu.be
- https://youtu.be/SIS8aWeMxjM

- https://akuupdate.com/2020/07/30/ugm-beri-materi-pembelajaran-daring-ke-sekolah/
- https://www.kanigoro.com/berita/ugm-beri-materi-pembelajaran-daring-ke-
- https://jateng.antaranews.com/berita/328042/prodi-ketahanan-nasional-pascasarjana-ugm-lakukan-pkm-di-temanggung
- http://hebat.temanggungkab.go.id/news/2022893
- https://magelangekspres.com/2020/08/10/smk-negeri-2-temanggung-menuju-eco-school/
- https://tannas.pasca.ugm.ac.id/2020/10/24/ugm-beri-materi-pembelajaran-daring-ke-sekolah-2/
- https://youtu.be/BKCV-CNkXGk
- https://youtu.be/9u4xsTcOwWs
- https://radarjogja.jawapos.com/2020/07/27/ugm-berdayakan-masyarakat-lewat-bank-smpah/
- https://www.krjogja.com/berita-lokal/diy/yogyakarta/mewujudkan-tahun-2021-rumah-tangga-bebas-sampah/
- https://youtu.be/I9yh-ZuwH4w
- https://www.krjogja.com/pendidikan/berita/program-pengabdian-kepada-masyarakat-ttg-ugm-berdayakan-kreativitas-siswa-smk-n-1-sewon-selama-pandemi-COVID-19/
- https://youtu.be/xfIc1sHkYw4 https://biologi.ugm.ac.id/2020/08/05/sosialisasi-program-hibah-teknologi-tepat-guna-gama-ayam-2020-dan-pelatihan-pembuatan-pakan-ayam-di-desa-kedungpoh-gunungkidul-daerah-istimewa-yogyakarta/
- https://youtu.be/TOEv0inJ2mw
- https://jogja.tribunnews.com/2020/05/21/fakultas-peternakan-ugm-bantu-pemenuhan-pakan-ternak-untuk-kusir-andong
- https://www.krjogja.com/pendidikan/kampus/ugm-buat-pelet-kuda-andong-hemat-di-masa-pandemi-covid/
- http://www.bernas.id/amp/74008-darurat-pakan-komunitas-kusir-andong-yogyakarta-terdampak-COVID-19-disumbang-pelet-hijauan.html"
- https://www.youtube.com/watch?v=4uFBFiG4nqM
- https://www.youtube.com/watch?v=uXb7zRQXSc8&list=PLI0IHXOgnrHqZB_gxz35U8x-vxgDlBnxL&index=3
- https://ugm.ac.id/id/berita/19829-tanggap-bencana-COVID-19-berbasis-esd
- https://jogjapolitan.harianjogja.com/read/2020/10/27/511/1053706/ugm-bantu-warga-selopamioro-budi-daya-sayur-dan-ikan
- http://sv.ugm.ac.id/2020/09/29/diversifikasi-produk-perikanan-sebagai-upaya-peningkatan-pendapatan-masyarakat-desa-maguwoharjo-pada-masa-pandemi-COVID-19/

Impact Stories of the Community Service Performed

From the survey, it is known that the community services done by professors in UGM impacted the communities as expected. The box below shows the impacts of the programs listed by professors who answer the survey questions.

Impact Story of Each Community Service Program Performed

- Local communities have additional sanitation facilities.

- After receiving and reading the provided book (BUKU ASIP), the target mothers felt supported and prepared to breastfeed, especially in pandemic conditions.

- The coffee production process of the target group became environmentally friendly, and small industries are now able to produce new products in liquid smoke from the roasting process. This product is still in the development stage and has not been commercialized yet. The pilot project has encouraged other coffee processing industries to capture liquid smoke from the roasting process.

- The target community was able to cultivate stingless bees using wooden boxes on their own.

- There was innovation and creativity in the target BUMDes (A Village-Owned Enterprise) management during the COVID-19 pandemic, such as product marketing and community involvement.

- The target community became more aware of online marketing.

- The target school could develop initiatives from school residents to manage waste from the school area into handicraft products with economic value, the school residents became more aware of the long-term use of plastic and cared more to the environment in preventing the spread of COVID-19 second wave.

- This program's impact includes the realization of an educational campaign related to preventing the spread of the Coronavirus, creating a clean environment to prevent the spread of the Coronavirus, and creating an environmentally sound young generation to prevent the spread of the Coronavirus.

- The target school could pioneer entrepreneurial activities by optimizing physical distancing and still empowering student creativity during the pandemic.

- The mobile unit could ease the target community in conducting or taking rapid and PCR swab testing samples.

- The target farmer group was able to encourage the community to develop Gama Ayam (a particular breed of chicken)

- The program has brought back the dairy farmers' enthusiasm; the contest winner (part of the program) realized that they had high-quality dairy cows and was inspired to organize another contest on the next occasion.

- The increased skills in cultivation technology of the target farmer, the realization of the target farmer of the importance of protecting the environment, and the increased income of the farmers.

- The target farmers became more aware of the application of biosecurity that they have run

their vehicles in and out of cages through the disinfectant pool.

- The improved skill and processing facility of the target SMSE unit; and the increased snake-fruit demand in the local fruit farmers during the program was performed.

- The target community stayed updated with the latest information; they also have improved their food-producing mechanism and have learned how to market it.

- The program has helped the target community to get an alternative income during the early pandemic stage.

- The added value of cassava products of the target group, the increased income of SMEs, and the increase of production quantity and quality.

- The target community was more aware of environmental hygiene, the increased knowledge about COVID pandemic, viticulture method, and Dengue Hemorrhagic Fever.

- The target community is now able to build their village and the program performed was to support the sustainability of the activity.

- The target group has tried to ask their friends and family to stop smoking.

- The target women farmer associations were able to perform online marketing during the pandemic.

- The wider community could quickly find out about the spread of COVID-19 in the surrounding area.

- The target group realized that their *gula semut* (a kind of sugar) is a premium product to be maintained.

- The target community now has a cleaner environment with the given wastewater treatment system.

- The target farmer realized that the cultivation technique habits needed to be improved and wanted to improve.

- The improved cattle's quality in each household of the target community.

- The target midwives could efficiently operate the provided system and were willing to continue using the system.

- The improved skills of the target farmer to survive the pandemic.

- The target community was well-informed about how to deal with the COVID-19 pandemic situation.

- The target community was introduced with household farming for fish aquaculture and vegetable cultivation; they were also introduced to pitcher irrigation to support farming during the dry season. The impact of this program was that the community could produce their food during the COVD-19 pandemic.

> - The target community became more aware of economic innovation and the increase of the agricultural sector.
>
> - The increase of the community cultivation diversity of the target group.
>
> - The increased knowledge of the target group of the driftwood value.
>
> - The establishment of a meatball processing micro business in the target women's group during the COVID-19 pandemic.
>
> - The program has developed an automatic hand washing technology as a supporting facility for a clean and healthy lifestyle in several target public health service facilities to prevent the spread of COVID-19 in Yogyakarta Province.

A Brief Glance of the SWOT-Analysis of UGM Professors Community Service Activities

The findings from the survey above have been tried to be mapped into Strength, Weakness, Opportunity, and Threat. The SWOT analysis was expected to reveal the positive forces that might work together and the potential problems that need to be recognized and possibly addressed in the community engagement activities performed. Also, the SWOT analysis in this survey will benefit from developing a fuller awareness of the community service activity that helps with strategic planning and decision-making in the future.

Table 19 The SWOT-Analysis of UGM Professors Community Service Activities

STRENGTHS	WEAKNESSES
1. The policy, strategy, facility, assistance, and fund support from the university	1. The limited communication and interaction as most of it was performed online due to the pandemic situation
2. The human resource under the coordination of DOCS that support and facilitate the community service activities and administration	2. Only a few of the impact stories that were published on the scholarly publication
3. The community services activities performed have addressed all the SDGs, with SDG #3 (Good Health and Well-Being) dominating	3. Some professors thought that their community service methods were not exciting and seemed monotonous (not evolving)
4. The diversity of the local community whom professors worked with (see Table 5)	4. Some professors were not ready with the sudden policy change of the community service activities due to the pandemic
5. The locations of the community activities were dominated by places that require the most assistance and	5. Some programs did not answer the needs and the problems of the local community when the pandemic started striking

support, so it matches the program's target. (see Table 5)

6. The diversity of the professors' main partners and stakeholders (see Table 5)

7. The main objectives of the activities were to improve the work quality of the target community, to provide knowledge and insight for the targeted community, to enhance the awareness of the environment, and to support the community economy during the COVID-19 pandemic, which has addressed SDG #1, #3, #4, #8, #11, #15 (See Figure 4)

8. The familiarity and the close-knit relationship between the professors and the communities where they conducted the community service

9. Most of the professors involved in the community service were seasoned experts, thus seen as more believable by our hierarchical community. Most of the communities are more than welcome to UGM professors and willing to be involved in the program

10. Most community service activities are accessible on social media, websites, YouTube, and scholarly publications. to raise a more comprehensive awareness (see the Impact Stories in Chapter C)

11. Most of the community service activities performed have an impact on the local communities (see the Dissemination Link in Chapter C)

6. Some programs were not focused on activities area and did not have a practical impact on the community

7. It took time and patience to get the acceptance and the trust of the local community and to carry out the transitional activity of what the professors bring to the community

8. The current university reporting model is not activity-output-based, and some professors think it is quite complicated

9. The carried-out control was still focused on how the grant (fund) was spent and not how the programs were applied during the community services performance as the fund flow mechanism still seemed inefficient

OPPORTUNITY	THREAT
1. Local media involvement in the future to promote community service works. The use of social media and modern enterprise video communications nowadays give a better opportunity in promoting community services to	1. In the age of social media freedom, information can be easily distributed in a fast-paced. However, the receiver end of the information (people) does not have prior knowledge or the ability to filter this information, thus creating widespread disinformation.

gain support from as many as possible stakeholders 2. The broader impact of community service activities can be reached with the expansion of targeted communities that are not only in Yogyakarta Province but also outside the Yogyakarta area, such as the whole Java region, even nationally. 3. University could cooperate with alumnae and put it in the DOCS grant regulations as good networking will make the community service programs more successful 4. University could develop training, extension, and mentoring models for the professors to provide one integrated community service model 5. The government could function as a supervisory and guiding agent, allowing existing implemented programs to continue indefinitely 6. The government could provide a map of developed home industries or villages records to reduce repetitive programs in the exact location and to even out the implementation in the place or groups that never experienced it before	2. The majority of people tend to believe in inflamed hoaxes rather than what experts say in front of them. This could create an unacceptance and a distrust of the community to the professors that could prevent the program from going according to plan 3. The possibility of sudden discontinuity or unsolved problems in the target community due to the limit of time and funds 4. There will be community fatigue from the pandemic and economic struggle since it has been ongoing for more than a year. This fatigue surely will make the community less welcome to any community service activities 5. UGM will always support community service. However, due to the world's current economic suffering from the pandemic, there could be a budget cut from the government, which will affect the community service programs grant.

The table above shows that the community service activities performed had more strengths than weaknesses and more opportunities than threats. The data shows many professors confirmed that points in the Strengths are the factors that have supported their works in the local community while the activity was performed. The Strengths here have contributed to the success of the work, including in addressing the SDGs. However, we also found that some weaknesses were factors that hampered and limited the community services while performing activities. These factors also hinder the achievement of program objectives in the target community.

Furthermore, the Opportunities points show some factors that professors believe could be created, do, or used to strengthen the community service programs in the future. Meanwhile, the points in Threats are factors that could impair and even cease the sustainability of the community service programs, both current and future. The SWOT analysis helped UGM as a higher education institution evaluate what could be maintained and improved for community engagement models in current unusual situations these days. For instance, as a pioneer of national universities, UGM provides support in funds, network cooperation, policy, and publications

through journals and conferences for its community service programs to bring the Tri Dharma mission into success. There is an incentive for staff and students from the grant budget as speakers, facilitators, and the daily cost of performing the community services. The kind of support given by UGM is deemed sufficient for running community service programs.

However, some downsides were reported by grantees of DOCS where some of the professors believed that the current university grant reporting model is not activity-output-based and is quite complicated. Also, they believed that the carried-out control or evaluation is still focused on how the grant (fund) was spent instead of how the programs were applied and how the program's impact on the local community could be measured. DOCS has taken this as an evaluation input and has addressed the problem by changing some administration routes and making it more straightforward. However, the reporting of government funds should follow strict regulation, and there was not much DOCS can do regarding that matter. Moreover, the study about how UGM community service activities will be further discussed in the Discussion section.

Discussion

UGM Community Service Activities in Addressing SDGs During COVID-19 Pandemic

Universities are the primary institutions for knowledge transmission. They play a critical role in achieving the SDGs. Academia has had to develop innovative educational methods that combine the development of citizens with human consciousness and learning communities since its inception. As educational institutions, universities play an important role in the growth and development of society, contributing to people's well-being.

Through leadership, research, teaching, learning, and campus operations, higher education institutions play a crucial role in assisting society in achieving the SDGs. Several SDGs specifically acknowledge education and research, and universities directly tackle these primary goals. SDG 4 is dedicated to quality education and is one of the 17 Sustainable Development Goals. On the other hand, universities may make a far broader contribution to the SDGs by supporting the progress of all targets and fulfilling the SDG framework itself by adopting new behaviors, influencing decision-making, and speeding change.

As a higher education institution, UGM is responsible for bridging the national government programs related to SDGs implementation to the communities. Several ways have been taken by UGM to increase the understanding about SDGs in the community and to ensure the transfer of knowledge of SDGs, such as 1) UGM has put in its policy as HEI to actively work on SDGs, either in the campus or in communities; 2) UGM has established SGDs Center as part of DOCS which keenly pursue and join networking that promotes SDGs and ESD such as Regional Centers of Expertise on Education for Sustainable Development (RCE) and the Promotion of Sustainability in Postgraduate Education and Research Network (ProSPER.Net), and 3) UGM has encouraged its professors and staffs to do community services activities by making funding available to support them through grants.

During this COVID-19 pandemic outbreak, HEI has become imperative to hone their activities, bridging the knowledge, policy, and practices between HEI and communities as suggested by Mochizuki and Fadeeva (2008). This pandemic crisis impacted people's health and other parts of life such as socio-economic, education, and environment. The impact of the

pandemic on Indonesia's socio-economic status is alarming. Even Though the government has introduced a massive fiscal stimulus package through the National Economic Recovery (PEN) program (ADB, 2021; Kemenkeu, 2021), the threat to vulnerable society members (women and children) has become apparent (UNICEF, 2021). As of now, one in ten people in Indonesia by today (2021) are living below the national poverty line. Even if most households (85.3%) have received at least one form of social assistance from the government (UNICEF, 2021), it is not enough since the pandemic and its impact is still unfolding.

As one of the HEI in Indonesia, UGM, well known as Kampus Kerakyatan, has an orientation to work for, with, and in the community for the nation's good. With the SDGs spirit that no one will be left behind (UN, 2021; Kementerian PPN, 2021), UGM has actively set up activities to combat the effect of pandemics; one of them is by providing community services grants. The grant supports the professor in UGM to promote SDGs, disseminate their research to communities, and actively address the pandemic effect. The proposed activities by the professor show that UGM's professors understand fully the extent of the pandemic on health, socio-economic, education, and environment (see the box the title of activities chapter C). The activities also targeted all the members of communities (see Table 5.), which was particularly important for the pandemic effect alleviation and SDGs promotion that all the community members are working together toward the goals.

UGM Commitment in Supporting Local Communities and Addressing SDGs through Community Service

UGM as HEI has to ensure that the community services done by its professors are in line with government and UGM policy and have a meaningful impact on communities and their environment. Thus, it was important to run a SWOT analysis for this community services project. Four categories are being analyzed in this report: delivery of the project, impact, community involvement, and support from the university. These categories were chosen to portray the involvement of Professor and HEI in community service and promotion of SDGs goals during the COVID-19 pandemic.

From an inquiry/survey carried out to UGM's professors who have conducted the community services in 2020, it can be concluded that most of the professors will do their community service into communities where they have established close relationships. Thus, the activities have the advantage that the operational flow of the program in the community could be done more flawlessly. The communities tended to give positive feedback to the program even if the communications mainly were done by online communication due to the lockdown. Social media and the internet have proved to play an important role in communicating the SDGs in the program. Realizing this opportunity, several programs worked on it, such as: "Social Media Platforms as Effective Tools for Recruiting Participants of Physical Activity Intervention among University Students during The COVID-19 Pandemic" and "Online Training of Smoking Cessation Counseling for UGM Staffs in Order to Reduce the Number of Smokers as A Vulnerable Group in the COVID-19 Pandemic Period". However, since the lockdown and the perforation of news through social media into communities was faster than anticipated, it was quite an impossible race to win against hoaxed news about COVID-19. However, these threats did not dampen the spirit of the professors to disseminate their program in the community.

From the impact stories that have been listed (see box impact stories), it is known that the community services that have been done have an impact on the communities. In accordance with SDGs goals (UN, 2021), there were several goals addressed in these programs (Figure 4.), with goal #3 dominating. However, it was not a coincidence as the community services programs in the year 2020 were rerouted to tackle the initial blows of the pandemic. Before the virus reached Indonesia, most of the proposed community service programs were the extension of the previous program from 2019. There is nothing wrong with continuing what has been a commitment from the previous year. However, as experienced by other countries globally, Indonesia has also shifted its priorities to help the community survive the pandemic through competent parties, including the HEI with its community service programs.

The overview of the most relevant SDGs addressed in the local community by UGM professors during the pandemic is depicted in Figure 4. The data shows that most community service activities were performed to address SDG #3, Good Health and Well Being. It reflects that the local communities still need priority to reach a better life and get adequate health facilities. Before the COVID-19 pandemic, progress had been made in improving the health of millions of people throughout the world. However, the pandemic makes it challenging as it has severely taxed the healthcare system. The need for a high-quality, well-functioning healthcare system is ongoing, rather than seasonal or short-term. It is because any problem in accessing the quality health facilities service is not only harmful to human health, but it may also result in life loss and significant economic damages. Thus, by doing community service, the UGM professors tried to be there for the community, assist them, and empower them to survive life with the pandemic.

The sudden change of the Indonesian government policy has obliged HEI to assist and empower the community during the pandemic. However, it did not make the professors run out of plans to create community empowerment practices to respond to challenges during this current situation (see the COVID-19 Related Community Services Program box**)**. Although all the UGM community service programs were only focused in Yogyakarta and Central Java Province due to the limitations created by the pandemic, the impact of the programs could still be felt by the community. While it was not a broad and significant impact, the community could still benefit from health, education, and economics. There were many local communities in Yogyakarta that still relied on their daily income to survive. The lockdown policy issued by the government was certainly had a significant impact on the community to carry on. Thus, no matter how small the community service program carried out by the UGM professors, such as introducing online marketing and conducting training for food packaging, it was hoped that it could benefit the community in coping with problems caused by the pandemic. UGM also provided support such as face masks, hand sanitizers, and portable hand washing stations as the starter pack for the community in living the life within the pandemic. However, the most important thing was how to equip the community with skills to help them get through the pandemic and sustain with no more assistance eventually. This was part of UGM's commitment as HEI to remain consistent in addressing SDGs, in this case, were goal #3 and goal #8, through community service.

Nonetheless, there was an underlying problem regarding the program's impact. After the community service programs finished, there was a possibility that they would stop and no longer be continued. For example, the program and its impact will diminish over time when a community service program is discontinued or the problem is not solved due to the limit of funds and time. If this is not taken seriously, this certainly would be a challenge in achieving the 2030 agenda. Moreover, UGM also has an opportunity to expand the impact of community service

activities to cover more SDGs. The broader impact could be reached with the expansion of targeted communities that are not only in Yogyakarta and Central Java Province but in the broader area such as the whole Java region. For now, UGM could still reach a broader community by spreading the idea of the community service programs through the internet, from simple social media to a scholarly publication, notwithstanding the fact that the apparent impact could not be measured in the end (see box Link of Programs Dissemination and Figure 5.).

Nevertheless, in terms of involvement, UGM's professors were more than willing to do community service as it was part of their mission to pledge their knowledge for the good of the community. In the DOCS community service program, the local communities involved were diverse from farmers, home industries, schools, health workers, youth organizations, and the local village apparatus (Figure 5.). Most of the communities were also more than welcome to UGM's professors and willing to participate in the program. However, there were some minor drawbacks: some of the communities were not entirely familiar with the methods and habits brought by the university. So it took time and patience in carrying out the transitional activity to encourage their involvement.
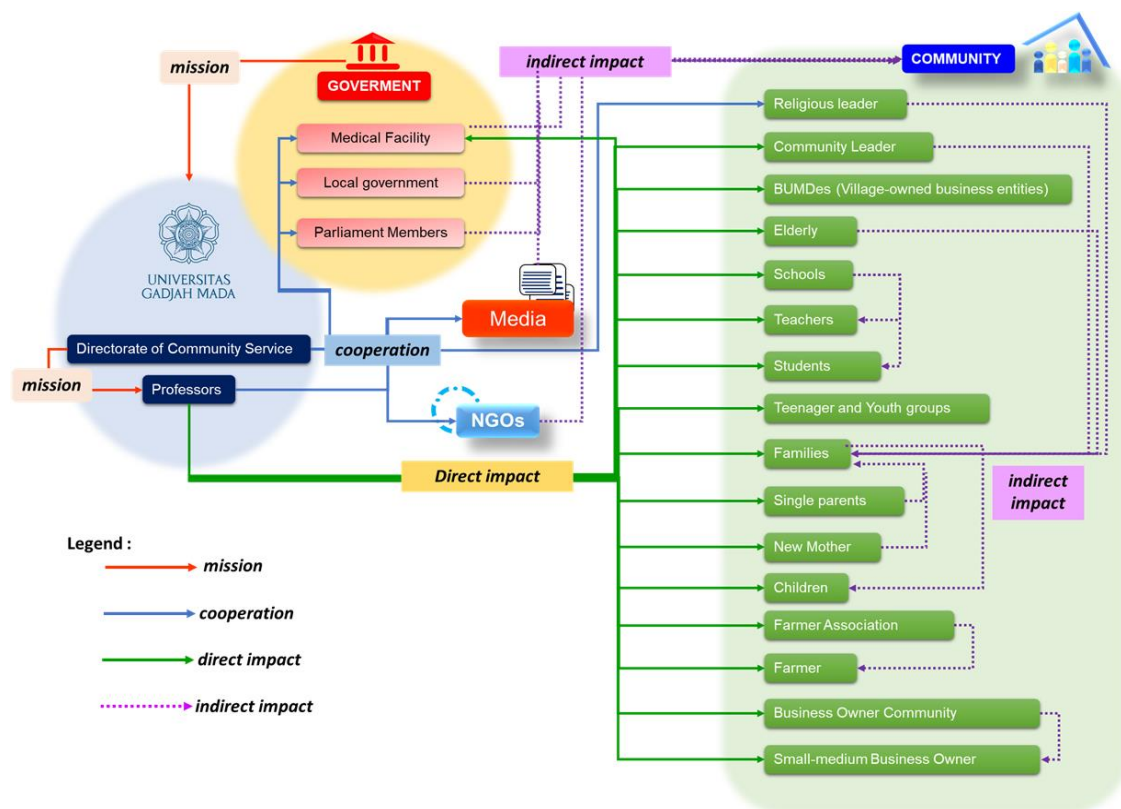
Figure 8 Universitas Gadjah Mada Community Service Program Model

The vision of UGM is to be an excellent and innovative world-class university, imbued with the nation's cultural values based on Pancasila as the state ideology and dedicated to the nation's interest and humanity (UGM, 2018). In line with the vision, the UGM's mission is to carry out education, research, and community service and preserve and develop excellent and valuable knowledge for society (UGM, 2018). Thus one of UGM's central undertakings is community services.

The model of community service in UGM that can be seen in Figure 5 is the model that was designed in response to the community service performed in 2020. There are two routes of impact based on this model: direct impact and indirect ones. All of the community service programs directly impacted the local community group since it has been implemented to the group of stakeholders directly. However, upon analyzing the impact, it can be portrayed that there was also an indirect impact of the program. These indirect impacts were also depicted in the dissemination steps of the programs (see Box-Link of Programs Dissemination).

Some of the direct impacts of the community services program were the provision of goods, services, information, and technology from UGM's Professors to the community (See Box Impact Stories). Meanwhile, the indirect impact has more extensive routes. The mothers who had been given encouragement to do breastfeeding correctly and carefully during this pandemic were one of the indirect impacts (SDGs 3). Furthermore, another indirect impact was on families' economies involved in post-harvest technology transfer by UGM's Professors (SDGs 1, 5, 8). Moreover, the Media also covers most community services (Figure 6; see Box-Link of Programs Dissemination), which will spread the information even more comprehensively in the community.

DOCS and UGM's professors were fully aware that they cannot make changes in the community by working alone. Thus, they built robust cooperation with the government, media, NGOs, and religious and village leaders (Figure 5). Cooperation was needed to strengthen community services' impact on the community and widen the information spread in the community. UGM as HEI realized that these partnerships were needed to achieve the goals of sustainable development and solve the problem in the community (SDGs 17).

Figure 9 Samples of media coverage of Universitas Gadjah Mada's current Community Service Program

The COVID-19 pandemic has been ongoing for more than a year now. There is an impending threat to the community service program. Right now, we can see that there is community fatigue from the pandemic and economic struggle. This fatigue surely will make the community less welcome to any community service activities. Moreover, the budget cut is an inevitable result of the economic slowdown in Indonesia. Thus the funds for our community service grants are not as much as the previous year in 2020. However, UGM DOCS will not stop

doing community services to alleviate the community burden due to the COVID-19 pandemic and make different approaches to do community service (Figure 6).

DOCS and UGM's professors work hand in hand to strengthen the community's disaster resilience, especially against the COVID-19 pandemic. Some approaches that had been done during the peak of the pandemic in Yogyakarta-Indonesia this July 2021 are providing bed and APD (*Alat Pelindung Diri*/PPE-personal protective equipment) to some Isolation shelters around Yogyakarta. Through its DERU (Disaster Response Unit), DOCS also distributes an Oxygen tank and coffin for COVID-19 victims' burial. UGM has also been functioning its researchers' house, guess house, and university hotel as a COVID-19 shelter for positive confirmed patients. UGM has been helping to succeed the vaccination process in Indonesia for its students and the community in Yogyakarta. The vaccination has been carried out in a *drive-thru* system to prevent the crowd from the waiting line. This is to reduce the hospitals' overload in accommodating patients. Suppose the professors and the staff have been working against COVID-19. In that case, the UGM students are now taking Students Community Service (SCS) or *Kuliah Kerja Nyata* (KKN) as the required course under the coordination of DOCS are also doing something for it. They have been directed to assist the confirmed positive patients with mild symptoms where they are performing the SCS as their main community service activity. Commonly, students are asked to create a program plan for the community that will be executed in two months. However, in the current station, UGM has to sort its priority: pulling all its resources and Strength in combating the COVID-19 pandemic.

Conclusion

Higher education institutions play a significant role in facilitating the Sustainable Development Goals (SDGs) in actual practices at the local level through education, research, and community service. Through the Directorate of Community Services (DOCS), Universitas Gadjah Mada, as one of the HEI in Indonesia, has fully supported community service activities. These activities align with the vision, mission, and goal of UGM and the obligatory Tri Dharma Perguruan Tinggi (Three Pillars in Higher Education in Indonesia). Through its policy, resource, facility, funding, research, technology innovation, and problem-solving ability, UGM has committed to supporting community service and addressing SDGs implementation. This study shows that UGM has implemented the community engagement practices following the Indonesian government regulations about SDGs accomplishment priority, as HEI is one of the most responsible stakeholders in SDGs achievement at the national, regional, and local levels.

During the COVID-19 pandemic in 2020, UGM, through its professors, did community service activities to tackle the emerging challenges faced by local communities. Through its community service policy which requires a multidisciplinary approach from the professors (cross-unit collaboration program and is coordinated with professors from different faculties such as medical, nutritional science, psychology, agriculture, public health, biology, engineering, statistics, computer science.), designed programs to help empower the community in surviving the pandemic situation.

The pandemic crisis has impacted people's health and other parts of life such as socio-economic, education, and environment, while in Indonesia, the socio-economic status was alarming. In Yogyakarta, many of the local communities still relied on their daily income to survive. The government's lockdown policy created a significant impact on the community in a difficult way to imagine. One of the UGM community service program objectives was to support

the local community economy as it was the most affected area. With stakeholders from various elements, such as college students, teachers, farmers, homemakers, government officials, villagers, and healthcare staff, UGM worked toward SDGs implementation for a better life for its local community with all limitations caused by the pandemic.

With the spirit of *no one left behind*, UGM, through DOCS and its professors, are working together to do community services with the government, health facilities, parliament members, industry, community leaders, media, and NGOs to tackle the multi-effects of the pandemic. The DOCS community service activities may not 100% solve the problem in the community nor achieve glorious goals in SDGs. However, it is expected that the cascade effects of DOCS community service activities will make a difference and contribution towards SDGs implementation in this current situation.

References

Cohut, Maria (2021). Global Impact of the COVID-19 Pandemic: 1 Year On. Available at: https://www.medicalnewstoday.com/articles/global-impact-of-the-covid-19-pandemic-1-year-on (Accessed: July 2021)

IMF (2021). Policy Responses to COVID-19. Available at: https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#I (Accessed: July 10th, 2021).

Kementerian Keuangan Republik Indonesia (2020). Ini Realisasi PEN Hingga 25 November 2020. Available at: https://www.kemenkeu.go.id/publikasi/berita/ini-realisasi-pen-hingga-25- november-2020/ (Accessed: July 10th, 2021)

Kementerian PPN/Bappenas (2021). Tentang SDGs. Available at: http://sdgs.bappenas.go.id/tentang/ (Accessed: July 10th, 2021)

KEMLU RI (2021). Indonesia's Commitment to Sustainable Development. Available at https://indonesia4unsc.kemlu.go.id/index.php/our-priorities/indonesia-s-commitment-to-sustainable-development (Accessed: July 10th 2021)

Mochizuki, Y. & Fadeeva, Z. (2008), Regional Centres of Expertise on Education for Sustainable Development (RCEs): An overview. In the International Journal of Sustainability in Higher Education. 9. 369-381. 10.1108/14676370810905490.

Panduan Hibah DPKM 2020 https://pengabdian.ugm.ac.id/2021/02/22/program-pengabdian-kepada-masyarakat-2021/ (Accessed: 10 July 2021)

Ristek Dikti. 2018. Panduan Penilaian Kinerja Pengabdian kepada Masyarakat di Perguruan Tinggi. Available at https://simlitabmas.ristekbrin.go.id/unduh_berkas/Panduan%20Penilaian%20Kinerja%20Pengabdian%20kepada%20Masyarakat%20di%20Perguruan%20Tinggi.pdf) (Accessed: 10 July 2021)

UGM, 2018. Universitas Gadjah Mada Vision and Mission. Available at: https://ugm.ac.id/en/about-us/1321-vision.and.mission (Accessed: July 29th, 2021)

UN Sustainable Development Group (2021).Universal Values Principle Two: Leave No One Behind. Available at: https://unsdg.un.org/2030-agenda/universal-values/leave-no-one-behind (Accessed: July 10th, 2021)

UNICEF, UNDP, Prospera, and SMERU (2021). Analysis of the Social and Economic Impacts of COVID-19 on Households and Strategic Policy Recommendations for Indonesia, Jakarta.

United Nation. 2021. Indonesia Voluntary National Review 2021. Available at https://sustainabledevelopment.un.org/memberstates/indonesia (Accessed: July 10th, 2021)

United Nations. 2020. COVID-19 halting EU's progress towards achieving the SDGs. Available at: https://unric.org/en/COVID-19-halting-eus-progress-towards-achieving-the-sdgs/ (Accessed: July 10th, 2021)

United Nations. 2015. Transforming our world: the 2030 Agenda for Sustainable Development. A/RES/70/1. Available at: https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E. (Accessed: July 10th, 2021)

<div align="center">

Chapter 4
Japan

</div>

Dr. Tarek Katramiz

Keio University

Introduction - Context of the survey

Keio University, founded in 1858, has a long history of leadership and research in Japan. The Shonan Fujisawa Campus was founded in 1990 with the express purpose of engaging in innovative research attuned to the problems faced in the modern world and has a unique education environment. This campus is defined by three faculties – the Faculty of Policy Management, Faculty of Environment and Information Studies, and Faculty of Nursing and Medical Care – and two graduate schools – the Graduate School of Media and Governance, and the Graduate School of Health Management. As a research-oriented campus, students can join leading-edge research projects as early as their second year of undergraduate studies and are encouraged to engage in fieldwork and with local communities as well as traditional coursework to gain experience with developing solutions for the real world. Courses are offered in both English and in Japanese. Focused study in climate change and sustainability are primarily offered through the Environmental Innovators program, a graduate school for both master's and doctoral candidates. The project-based program is focused on finding innovative solutions to social, technical, and environmental problems that emerge as result of climate change.

The xSDG Laboratory at Keio Research Institute at SFC in the Graduate School of Media and Governance, works with different stakeholders to promote and advance the achievement of the Sustainable Development Goals (SDGs) and the United Nations' 2030 agenda. The xSDG Laboratory aims to address and realize diverse social problem solving through the angle of the SDGs, and to do so conduct research in a much broader solution-based research methods that go beyond academic research, to make and cumulate the best practices of the SDGs. Since achieving the SDGs require action by local governments, the xSDG Laboratory has so far partnered with different stakeholders from local governments and the private sector. Such stakeholders include Kanagawa Prefecture, Shizuoka Prefecture, Toyoka City, Shimokawa Town, and others.

This survey aimed at researchers who are working on sustainability issues from various perspectives while engaging with multiple stakeholders including the private sector, local governments, civil society groups, media organizations, among others. The researchers are based at Keio University and were chosen for their active and innovative engagement with different

stakeholders while conducting their research. They were also able to engage with stakeholders at the local level despite the ongoing Covid-19 pandemic. The survey was conducted between February and April 2021.

The main limitations in conducting the survey were directly related to the ongoing Covid-19 Pandemic. We have reached out to many researchers who either declined or could not complete the survey due to the inability to conduct fieldwork or engage with local communities since the beginning of the pandemic and during multiple states of emergency in Japan. Indeed, researchers from a wide range of disciplines depend heavily on data collection out in the field for their research. Not being able to carry out such fieldwork has had a negative effect on making progress. Moreover, social distancing and other Covid-19 measures have made field-based data collection and engagement with local communities practically impossible, especially for researchers whose research is connected with other regions or countries. Even researchers whose research is done closer to their university have been unable to conduct fieldwork during period of lockdowns.

Nevertheless, some researchers at Keio University, including those who responded to the survey, have found innovative and creative ways to advance their research while engaging with local businesses and local communities. Since the start of the pandemic, researchers have been using online survey tools or doing content analyses or ethnographies using existing online platforms as research materials. Moreover, some researchers have conducted discussions and organized workshops with different stakeholders using online platforms such as Zoom and Microsoft Team.

Methodology

Since we targeted individual researchers and lecturers, the survey made use of the questionnaire designated for individuals. The questionnaire consists of four parts and combined open-ended questions and multiple-choice questions with predefined answers offering respondents the possibility to choose several options. The survey was distributed to the participants via emails following an explanation about the survey, its aim, and the overall project. Participants had several follow-up questions that were exchanged and answered via email as well.

Five researchers agreed to complete the survey. Details about the participants is summarized in the table (Table 20) below.

Table 20 Information on the person completing the form and her/his institution

	Gender	Age Group	Position	Affiliation
1	Female	20s	Researcher	Faculty of Environmental Information
2	Female	20s	Researcher	Faculty of Policy Management
3	Male	20s	Researcher	Faculty of Environmental Information
4	Male	30s	Assistant Professor (Lecturer)	Graduate School of Media and Governance
5	Male	30s	Assistant Professor (Lecturer)	Graduate School of Media and Governance
6	Female	30s	Assistant Professor (Lecturer)	Graduate School of Media and Governance

Analysis of survey data including findings

The survey participants have provided inputs regarding their engagement with local communities during their research. Several factors and elements are analysed using the SWOT framework below.

Table 21 SWOT Analysis

Strengths	Weaknesses
Provision of funding from the university and other organizations (e.g., ministries, private sector) that help facilitate research activities.	Different priorities among stakeholders often hinder goals/target alignment at the local level. Short-term funding.
Existing networks and networking capacity between the university as a research institute and diverse stakeholders, including local governments, NGOs/NPOs, and companies.	Lack of data disclosure (especially companies) when engaging with sustainability issues at the local level.
Ability to work with researchers and experts from various disciplines and backgrounds; this is especially important for addressing complex sustainability issues at the local level.	Lack of diversity.

High level of awareness among local stakeholders of opportunities and challenges related to SDGs	
Opportunities	**Threats**
Developing a higher-education curriculum on SDG implementation.	Funding cuts.
Ability to build up on past experiences and existing networks to explore new projects/activities in the future.	Prioritization of numerical performance over qualitative results when doing SDGs action at the local level.
Collaboration to develop resources that support university-community engagement.	Bureaucratic measures that could strain resources.

Discussion

The SWOT analysis highlighted above, based on the survey gathered in individual form provides a baseline to understand the many elements in what influence universities' local community engagement towards developing solutions to implement the SDGs at the local level. Such elements can be seen as engaging with a range of issues related to multi-stakeholder partnerships, funding, local awareness, capacity building, to name a few.

In Japan, each local area offers a differing range of challenges which shapes the engagement priorities of researchers. Therefore, work is directed more towards how these important decisions are made, and how the university and local stakeholders work together for this purpose. This study allows us to initiate these discussions, asking what is happening now, and who is involved in these activities, and what can be done for further improvement.

The localization of the SDGs throughout Japan is necessary for realizing a society in which "no one is left behind". For that purpose, active efforts by local governments along with stakeholders working in the area are indispensable to achieve the mainstreaming of the SDGs at the local level. Similarly, universities have also a significant role to play in sharing knowledge and helping find innovative solutions for complex issues at the local level. Currently, the regions in Japan are facing issues such as population decline, shrinking regional economies, severe

natural disasters due to global warming. Efforts of local governments to achieve the SDGs will contribute to solving these regional issues.

Since the SDGs are complex and highly interdependent, their achievement requires an integrated approach and the involvement of various stakeholders. In this sense, universities have a central role to play in opening up space and creating/building on existing knowledge to help achieve the goals and targets at the local level. To conduct an integrated research, researchers need to go beyond the boundaries of individuals fields and collaborate with other researchers. Moreover, universities can act as a bridge for bringing different stakeholders and facilitate communication that would results in innovative solutions for complex issues at the local level.

Funding plays an important role in enhancing the role of higher education in supporting the implementation of the SDGs at the local level. Lack of funding could hinder research activities that contribute to community engagement and action at the local level. It is therefore necessary for government institutions, planning departments, and businesses to provide funding opportunities that are aligned with local plans and design polices to help facilitate research activities and positively contribute to the implementation of the SDGS at the local level.

Diversity is another important element that can enhance the role of universities in the implementation of the SDGs at the local level. Engaging with local actors should not be limited to local officials or businesses representatives but also should include an array of different voices especially from younger generation (for example, school students) who have flexible thinking and different outlook towards the future. These voices can be a major force in achieving the SDGs at the local level.

SDGs based Curriculum

The survey has revealed insights about using the SDGs as a communication tool either in class or in workshops and symposiums with local stakeholders. Participants can 1) learn about the SDGs while thinking about the current issues facing their regions and areas; 2) analyze the relevant SDG targets from the perspective of an integrated approach based on the local context; 3) decide on actions towards the 2030 goals; 4) implement action.

All respondents have mentioned *backcasting* as one important approach based on the SDGs. When engaging with local communities, this approach helps establish targets based on a

mental image of the ideal local area in 2030. Current local issues and challenges can be looked at while backcasting from what is desired in the future to the present conditions.

Conclusion

Researchers play a crucial role in responding to community needs and can further enhance their academic impact at local level through community engagement. Engagement refers to the range of ways in which researchers interact with local communities in mutually beneficial ways, either as part of teaching and research or as part of other projects and joint initiatives. Community engagement is possible when the research institution has a community engagement policy. Through the provision of funding from the university and other organizations, researchers can engage with local communities through research projects and academic practice activities.

The study highlighted above provides a basic understanding of the many elements in what influence universities' local community engagement towards developing solutions to implement the SDGs at the local level. Such elements can be seen as engaging with a range of issues related to multi-stakeholder partnerships, funding, local awareness, and capacity building. Funding, for example, plays an important role in enhancing the role of higher education in supporting the implementation of the SDGs at the local level. Moreover, the participation of different stakeholders is associated with a range of positive effects in community engagement and development, notably better assessment of needs and capacities, and improvements in implementation and sustainability.

Finally, researchers who are working directly with local communities have an opportunity to develop a curriculum on SDG implementation that reflect the local contexts. Such curriculums will help in cultivating human resources who are aware of the challenges associated with sustainability and capable of thinking about such issues in an integrated manner. Drawing these curriculums can involve experts in various fields.

Chapter 5
Malaysia

Community Engagement and Sustainable Development Goals (SDGs) in the Institution of Higher Learning: Case Study by Universiti Sains Malaysia

Dr. Normaliza Abdul Manaf
Dr. Zainun Mustafa
Professor Dr. Munirah Ghazali
Associate Professor Dr. Rabiatul-adaiyah Ahmad
Dr. Nooraida Yakob
Universiti Sains Malaysia, Malaysia

Executive Summary

Community engagement is the social responsibility of higher education. This research aimed to explore and reimagine the role of Institutions of Higher Learning (IHL) in supporting the implementation of the Sustainable Development Goals (SDGs) at the local level by examining the past and current practices of those working in IHL to collaborate and engage with local communities for sustainable development. The context of the study is established by learning the existing policies, funding structures and organizational leadership in supporting the community engagement project at the national level. Thirty three community project coordinators were purposefully sampled and interviewed, emphasising the internal and external factors that affect the project. The project's criteria are labelled using the SDGs as the categorizing determinant to be tailored with the project's purpose. The study also discovered how the pandemic has impacted the projects, as the obstacles posed by this health crisis are unprecedented. The inter-cases and intra-cases of the project were individually studies to find the emerging themes. The findings show that projects complex and dynamics, as well as stakeholder roles, are systematically connected. The framework for the local implementation of the SDGs through the community engagement project was constructed from several visual charts. In general, IHL's community projects are well welcomed by a diverse group of stakeholders, and each has a unique purpose with distinct challenges to be overcome. The findings reveal that majority of community projects coordinated by university staff are linked to multiple SDGs. As a result, the project coordinators worked creatively to design the project to take advantage of other university agendas such as teaching/learning and researching. The study also discovered that the available policy, funding, and leadership provide both: standardization and feasibility, which served as a solid foundation for designing an impactful project. The projects have benefited from tangible (funding, facilities, students, and staff, policy and intangible factors (leadership, expertise, reputation). Overall, university-community engagement contributed to all SDGs, and these projects are strengthening the SDG 17 implementation locally. With the sustainable strategic partnership, the promotion of SDGs can be diverged and implemented among the stakeholders with the local community.

Introduction

The present survey is conducted under the project "Development of a framework for the local implementation of the SDGs – Phase II." The project aims to explore and reimagine the role of Institutions of Higher Learning (IHL) in supporting the implementation of the Sustainable Development Goals (SDGs) at the local level by examining the past and current practices of those working in IHL to collaborate and engage with local communities for sustainable development. As a first step, this survey was designed to collect information on the practices of educators and IHL to work with local communities.

Universiti Sains Malaysia

Universiti Sains Malaysia was established as the second university in the country in 1969. Universiti Sains Malaysia (USM) was first known as Universiti Pulau Pinang. USM offers courses ranging from Natural Sciences, Applied Sciences, Medical and Health Sciences, Pharmaceutical Sciences to Building Science and Technology, Social Sciences, Humanities, and Education. These are available at undergraduate and postgraduate levels to approximately 30,000 students at its 17 Academic Schools on the main campus in the island of Penang; 6 Schools at the Engineering Campus in Nibong Tebal (approximately 50km from the main campus); and three at the Health Campus in Kubang Kerian, Kelantan (approximately 300km from the main campus). USM also has 17 dedicated research centres for various specialisations, including archaeology, medicine and dentistry, molecular medicine, science and technology, Islamic development and management studies, and policy research and international studies. Since the beginning, USM has adopted the School system rather than the traditional Faculty system to ensure that its students are multi-disciplined from their exposure to other areas of study by other Schools. It also encourages students to be active in extra-curricular activities given the myriad of clubs and societies available.

USM has been awarded the Accelerated Program for Excellence (APEX) status, supports community engagement through various leadership, policies, and advocated institutions. Aligned with USM vision, "Transforming Higher Education for a Sustainable Tomorrow" and the tagline "We Lead", the academics and researchers at the USM have taken the lead in community engagement programmes through co-curricular and extra-curricular activities (Akib et al., 2017; Kechik et al., 2019) by offering innovations, applications, research findings, and professional expertise with a better insight and understanding the communities. Among all five Research University (RU) in Malaysia, USM research and innovation activities acquired the highest funding from international organisations and corporations and monies generated internally, which manifested the networking with external institutions (Amran et al., 2014). Specifically, USM has established a Division of Industry and Community Network (DCIN USM) at the Deputy Vice-Chancellor (Research and Innovation) office, in facilitating community engagement and industrial relations. This division acts as a one-stop reference centre for the university representatives to liaise with the community and industry partners. DCIN USM also provides a platform for the staff and students, as well as various community engagement practitioners, to collaborates in meaningful and impactful community engagement projects with the goal of empowering the community at large.

Since 2005, USM hosted a Regional Centre of Expertise on Education for Sustainable Development, Penang (RCE Penang), which United Nations University-Institute of Advanced

Studies (UNU-IAS) Tokyo acknowledged was one of seven foundation RCEs at that time. This network of existing formal, non-formal and informal education organisations mobilized to deliver education for sustainable development (ESD) to local and regional communities. The RCE Penang is a network of RCEs worldwide aspiring to achieve the UN Decade of Education for Sustainable Development (DESD) goals by translating its global objectives into the context of the local communities. RCE Penang collaborates with key stakeholders to bring about change for sustainability at the community level. The network includes partners from the voluntary, public, education, and business sectors, who work together to develop and implement innovative ESD projects and programmes in Penang. A group of researchers affiliated with USM under the auspicious of RCE Penang teamed up with collaborators from several countries undertook this study. RCE Penang is also garnering strategic networking with the key stakeholders to bring about change for sustainability at the community level.

USM began to embrace education for sustainable development (ESD) and the "University as a Living Lab" approach since the year 2000 through the concept of Kampus Sejahtera (Healthy Campus) and University in a Garden. USM aims at promoting sustainability among the community within and outside the campus through education and research activities. In order to achieve the APEX vision, USM has established a centre that would be able to assist USM to achieve mainstream sustainability across all levels within the USM community. The Centre for Global Sustainability Studies (CGSS) has been established to act as a conduit to help USM mainstream sustainability within the university. CGSS is designed to work with all relevant sections of the university, regional and international sustainability organisations, national and regional governments, the private sector, civil society groups and NGOs to promote sustainable development, paying attention to the disempowered bottom billion.

'USM conceptualised the University in a Garden' in 2001 is designed to depict the close affinity between the role and function of the University as an institution of higher learning and nature as part of the global ecological setting. The flora, fauna, aquatic elements, and other natural creations are dynamically linked in exploring knowledge into the nature of existence. The concept is an invitation to value, preserve, and nurture the campus ambient as part of creating and sustaining an intellectually conducive setting to kindle the spirit and practice of symbiotic co-existence. It is about touching the hearts and minds of each campus citizenry in the appreciation of the natural surroundings as a source of inspiration as bequeathed to us by the Creator. USM has indeed created an exemplary and enviable new metaphor of a garden university. This is considering a harmonious blend of various vista in the search for answers to illuminate further the questions of - who we are, how we attained insights, and how we should fashion our future survival.

The role of Institutions of Higher Learning (IHL) in supporting the implementation of the Sustainable Development Goals (SDGs)

The 17 Sustainable Development Goals (SDGs) was established by UN member states in 2015 address a wide range of concerns linked to socioeconomic, environmental, and technological development, and they apply to all countries around the world, not only those

classified as "developing" or "emerging." However, the role of IHL remains a gap in the implementation of SDG was missing from the United Nations' Sustainable Development Goals Report compared to primary and secondary education enrolment and adult literacy (United Nation, 2020).

Even though the SDGs indicator does not capitalize the IHL role in championing SDG 4 (The Quality Education), the IHL plays as the critical ecosystem for the development of the community globally. As the IHL began as a teaching and learning institution, later growing to encompass the role of knowledge generation (research) and, most recently, the so-called third mission (engagement) (Compagnucci & Spigarelli, 2020). As a result, IHL has been doing its three basic functions of curriculum and instruction, research and innovation, industry and community relation long before the United Nations adopted the Sustainable Development Goals. Conversely, SDGs may be mentioned in government documents as benchmarks; SDGs are not usually overtly used to shape IHL policy and practice (Caeiro et al., 2020; Chankseliani & McCowan, 2021). The policy review by Wan and Abdullah (2021) found the missing link between the extensive national policy in addressing SDGs by pointing out the fact that The Malaysia Education Blueprint (Higher Education) 2015–2025 was launched (April 2015) before the SDGs were adopted in the same year (September 2015). Wan and Abdullah (2021) further emphasised the 'fashionable' trends for IHL to associate their initiatives to SDG 4 (Quality Education) especially target 4.7 without serious effort on adaptation and adjustment in the SDGs indicator to better posits the ranking of the IHL.

A significant question for further exploration concerns to the extent in delving strength, weakness, opportunity, and the threat that influences university activities, particularly in community engagement practices to drive the SDGs implementation further. Another important signposting resonates with the ongoing COVID-19 pandemic, which has resulted in a global human and socioeconomic crisis (Sachs et al., 2021), possibly impose a major limit toward the implementation of the SDGs in IHL as well.

Operationalization SDGs in IHL – Policy, Funding and Leadership

The Malaysian policy related to community engagement

Eventhough the policy and strategic initiatives to address SDGs remain a gap, several policies dedicated to community engagement have been open to mutually benefitted collaboration and partnership. The Prime Minister Office supports Sustainable Development Goal 2030, and the goal is then perpetuated in Shared Prosperity Vision 2030 (*Agenda Pembangunan Lestari 2030 and Wawasan Kemakmuran Bersama 2030*) (Prime Minister Office, 2021). Following the mentioned vision, the National Science, Technology and Innovation Policy 2013-2020 (*Dasar Sains, Teknologi dan Inovasi Negara 2013 – 2020*) represents the Ministry of Science, Technology and Innovation (MOSTI) aspiration towards a scientifically developed nation and socio-economic transformation. That is, the role of science, technology, and innovation in supporting the government's transformation programme, the knowledge-based economy, a pretext to make Malaysia a high-income, competitive, and sustainable, developed

nation is highlighted in this policy (Ministry of Science Technology and Innovation, 2021). Furthermore, along with MOSTI's proactive policy, the Malaysian Intellectual Property Corporation advanced the Intellectual Property Commercialization Policy for Research and Development 2019 *(Dasar Pengkomersialan Harta Intelek untuk Penyelidikan & Pembangunan 2019)* to strengthen collaborative networks between universities, industry, and the community at large in order to promote activities, knowledge creation, and technological advancement (Malaysian Science and Technology Information Centre, 2021). The National Community Policy 2018-2025 (*Dasar Komuniti Negara 2018 – 2025*) dictated that the Ministry of Housing and Local Governance aims to encourage community projects in housing areas through partnership to achieve and create a sustainable community and generation.

As the policymaker, the Malaysian of Higher Education (MOHE) has put forward The University Strategic Enhancement Plan for Industry/Community Collaboration that was launched in 2010 showcases a serious attempt to promote community engagement practise among all MOHE institutions through structured policy and research grants allocations (Salleh & Omar, 2013). MOHE also presented a visionary plan to revolutionise education known as the Malaysia Education Development Plan 2015 – 2025- Higher Education (*Pelan Pembangunan Pendidikan Malaysia 2015 – 2025-Pendidikan Tinggi*). Particularly addressing the need to reconsolidating the interaction between IHLs, industry, and the community, the plan deepens the university's role as a leader for societal transformation (Ministry of Higher Education, 2021). Furthermore, this plan emphasised the opportunity for the university to collaborate with other ministries, agencies and other relevant stakeholders to devise solutions and applications to improve the community's quality of life. MOHE has also introduced the Knowledge Transfer Program (Chung, 2018) and Public-Private Research Network (PPRN) (Ministry of Education, 2021a), which acknowledged a repertoire of activities to support symbiotic collaborations between universities, industries and communities. In 2019, The University for Society Policy was introduced to reimagine community engagement as the social responsibility based on Quadruple Helix Engagement Model (Kechik et al., 2019). The IHLs are commencing high-impact educational practices such as Service/Community Based Learning (SBL). Service Learning Malaysia (SULAM) is another national-level transformative and agile initiative that combines curriculum with community service, requiring students to interact with the community to solve local problems using the skills and knowledge they acquire in the lecture hall (Ministry of Education, 2021b).

Synced with the policies that encourage the IHL to be open towards partnership and coalition with other Malaysian agencies, the MOHE also encourages the internalisation of IHL. The internalisation of IHL was initiated for a quite long time, which has later permeated many dimensions of international engagement such as in economy, geopolitics, education and culture. For instance, the Malaysian Technical Cooperation Program (MTCP) was initiated in 1980, is an example of Malaysia's commitment to share experience in human capital capacity building and establishing bilateral connections through tertiary education with 144 developing countries to date (Matrade, 2021). Specifically, in IHL, an early attempt to internationalize IHL at large arguably is the establishment of the International Islamic University of Malaysia (IIUM) with international co-sponsorship of the Malaysian government and Organisation of the Islamic Cooperation (OIC)(Wan & Abdullah, 2021). The internalization of IHL also reveal that some

level of networking among the partners has been taking place; however, the extent of the internalization towards community engagement remains unknown. The internalisation is above and beyond enhancing networks and interaction with developed countries and taking place with fellow developing and least developing countries. Wan and Sirat (2018) also listed several partnerships as what they refer as 'South-South cooperation and interaction'. The cooperation and interaction are classified into four level, namely 1) government-to-government, 2) institution-to-institution, 3) international organization-to-government using IHL as intermediaries, and 4) significant role of IHL in regional networks programs.

The policies from different ministries that welcomes IHL partnership indicated the dynamics and plasticity of the community engagement project to be promoted and adopted in the various context of its operation. The progressive activities in community engagement projects in Malaysia reflected that the policies as a strong driving force for IHL, however the policy outside of IHL have limited mention on the SDGs. The universities areare also legislating for community consultation in local projects and the growing role of public relations professionals in co-creating the vision of social equality (Wahab, 2014). Not confined to national level dynamisms, the IHL is also encouraged to team-up with international organization to form partnership and synergistic collaboration towards targeted community and agendas. All these factors possibly have provided a favourable ecosystem to enable community engagement project across a broad spectrum of stakeholder and academic disciplines and settings from local to national and international levels, in compliance with the listed policy.

Funding and financial support in IHL towards community engagement

The Malaysian government has also provided special monetary support to IHL to stimulate research and innovation. Amran et al. (2014) found that the public IHL in Malaysia receives funding from three main resources; government funds, student's fees and funds from other sources, with the most considerable funding is from the government. According to Ahmad et al. (2013), the provision of funds to Malaysia's public universities is determined by the achievement of the key performance indicators and the universities' progressive autonomy to enhance their performance. Therefore, each IHL received a different amount of funding. The grant resources are varied, nevertheless, the application of the government funding for research activities, in general, is at MyGRANTS. Among the services provided through MyGRANTS are as follows (MOHE, 2021):

    i. Fundamental Research Grant Scheme (FRGS)
   ii. Exploratory Research Grant Scheme (ERGS)
  iii. Prototype Development Research Grant Scheme (PRGS)
   iv. Long Term Research Grant Scheme (LRGS)
    v. *Geran Sanjungan Penyelidikan* (Research Compliment Grants) KPM (GSP-KPM)
   vi. Research Acculturation Collaborative Effort (RACE)
  vii. Malaysia Laboratories for Academia-Business Collaboration (MyLAB)

Specifically, all the above grants possibly focus upon community engagement, however, the number of partnerships and collaborators is different. For instance, TRGS and LRGS prerequisite partnerships among different IHL to allow positive interaction and communication

for intended projects; however, the FRGS grant might have limited inter-IHL interaction focus on fundamental research. Therefore, the national funding ecosystem have also initiated active collaboration for project planning and implementation. Beside the above main list of grants, more than 50   government grants are also channelled through MOHE as can acess in the link by MOSTI. https://mastic.mosti.gov.my/statistic-category/research-and-development-grants.

Besides the main funding allocation, MOHE provides strategic direction, such as encouraging public universities to collaborate in the commercialization of university research by encouraging collaboration between research universities and corporate enterprises since 1998 (Yahaya & Abdullah, 2004). Worth to the point that, the amount of funds provided by the government for IHL is decreasing over the year (Amran et al., 2014). As a result, the university's additional income came from consulting, contract research, commercialization, and expert services. For example, due to commercialising R&D, USM was able to produce RM1.5 million in revenue, allowing them to entice more public players to invest in their project in 2011 (Ahmad et al., 2013). Hence, IHL devices strategy to diversify their income streams by leveraging their core competencies in teaching and research as a source of alternative funding through entrepreneurial activities. Besides the internal grant, IHL also forms the strategic collaboration with international organisations as part of the internalization agenda; gain the external influx of funding and form bilateral ties with foreign-based organisations.

Leverage on community engagement project leadership at IHL

Following the New Economic Model establishment in 2007, the Malaysian government designate five universities to establish an institution or division advocating the community engagement projects seriously (Subramaniam, 2013). The community engagement projects' divisions from these five universities are Universiti Kebangsaan Malaysia (UKM)'s Industry and Community Partnerships (*Hal Ehwal Jaringan Industri dan Masyarakat UKM*), Universiti Malaya (UM)'s UM Cares (*Pusat Komuniti dan Kelestarian UM*), Universiti Sains Malaysia (USM)'s Industry and Division of Industry & Community Network (*Bahagian Jaringan Industri dan Masyarakat USM*), Universiti Putra Malaysia (UPM)'s University Community Transformation Centre (UCTC) (*Pusat Transformasi Komuniti Universiti* UPM), and Universiti Teknologi Mara (UiTM)'s University Industry Linkage Centre (UiLC) and Industry, Community and Alumni Network (CAN) (*Pejabat Jaringan Industri, Komuniti dan Alumni ICAN, UiTM*). These community engagement institution offers leaderships to further championing the community services in representative universities. However, the project engagement in IHL is also for knowledge transfer, knowledge sharing, knowledge exchange or knowledge creation (Kechik et al., 2019). The other public and private IHL in Malaysia followed this strategic approach in re-orient their community engagement projects via dedicated institutions.

Not limited to the project driven by the dedicated institution in the respective IHL, the projects could be initiated by students' bodies, faculty members, individual academics or leaders in the university. As part of extra-curricular activities, student's project to serve the community through association, unit uniforms or clubs. The projects are usually overseen by IHL staff as an advisor or executive officers. As for the academics, the project could be embedded as an

assignment to meet the curriculum needs or service training. In certain cases, the university leader brings in projects that require expertise from the university. In other instances, the university also provides facilities to better serve the community. To sum, the diverse approach shows that the IHL leadership promotes the projects through policy, funding, staff and facilities.

Methodology

Instrumentation and administration

A total of 89 questionnaires were e-mailed to coordinators or staff members who oversee community engagement projects in the respective institution. However, only 33 respondents from ten public institutes of higher learning responded to the survey (Table 2). A focus group discussion and interview sessions were held remotely to acquire narratives and individual stories based on Strength-Weakness-Opportunity-Threat (SWOT) framework if the respondents find challenges to answer the open-ended questionnaires (Table 6).

Both questionnaires were sent via email, and all respondents filled the individual form as they confidently discuss their project rather than discuss on behalf of the institution. Then, if deemed necessary, a follow-up interview was conducted remotely to facilitate the respondents with the questionnaire. Thus, both methods of data collection are SWOT-focused. The interview focuses on the concurrent and retrospectives individual narratives of the projects. Another critical point is the language of data collection- which is in the Malay/English language. The data is then reviewed and mapped in English for peer-reviewing. Flexibility to answer the questionnaire and converse during an interview in either English or Malays in the Malaysian context as the community-engagement might occur in diverse contexts. The narratives of the situational issue of the projects are better perceived during the interview compared to the questionnaire. The respondents refer to their project as 'successful' as they face the challenges and adapt/adopt whereabouts. Respondents reflected that their project meets their targeted goal as in the proposal-either the project progressed as proposed, deferred in the timeline or adjusted according to the current situations.

Sampling procedure

The respondents were selected through purposeful sampling from repository data and snowballed. Thirty-three respondents were reached via email and data collection was held from March 2021-June 2021.

Research operation during COVID-19

The survey was emailed during the rise of the pandemic and nationwide lock-down. Amidst the pandemic, the researcher receives inadequate responses. Notwithstanding problems, researchers consider the circulars of considering social-distancing measures and work-from-home procedure of the local institution, and therefore the researchers set the remote interview to facilitate the data collection. Beside securing the session remotely, interviewing people during a global pandemic needs to consider the myriads way the new norm might variously affecting everyone in the health and mental wellbeing, which might imply the validity of the research. Therefore, the data collection must be conducted with empathy and consideration; as such, the

respondents' narratives on the snapshot of how the pandemic has affected the project might provide a much fuller picture.

Procedure of data analysis

The procedure of data analysis was adapted from Vaismoradi, et al., (2016) to systematically capture the emerging themes from this study. There are four phases of themes development includes initialisation, construction, rectification and finalisation.

Findings and Discussion

Demographic Data

The respondents of the study are affiliated with ten IHL as below (Table 22). The demographic data only a snapshot of this research without representing the institution. An important note from the demographic data is all the respondents are affiliated with public IHL.

Table 22 Institutions of IHL

List of Universities
University Sains Malaysia
International Islamic University Malaysia
Universiti Malaysia Sarawak
Universiti Kebangsaan Malaysia
Universiti Malaya
Universiti Putra Malaysia
University institut Teknologi MARA
Universiti Kebangsaan Malaysia
Universiti Sains Islam Malaysia
Institut Pendidikan Guru Malaysia

The project general description is shown in Table 23.

Table 23 Project Description

Project code	Project general description
PQ001	Start-up reforestation activities at underdeveloped mangrove area and develop an Education for Sustainable (ESD) program in conjunction with reforestation of mangroves with the local community.
PQ002	Program that provides a collaboration opportunity for students in to share and exchange ideas on sustainability related to the specific themes to the extent of copyrighting their idea.
PQ003	Awareness and sensitization of the Sustainable Development Goal component in the teacher education curriculum via in-service and professional development training.
PQ004	Skills, knowledge, financial and management support to enable indigenous community to participate in the economic activities through income

generation. The knowledge transfers include the development of processing house located in the villages and series of in-house training for capacity-building.

PQ005   Development of 3D printing lab for vocational schools at the rural area. The projects include capacity-building support for the teacher and hands-on training for low academic achieving students.

PQ006   Introducing river as the living lab to the urban and suburban community. Provides outdoor learning session with local community and refugee.

PQ007   Free online tuition for the students who are fall under poverty-line at the city and provided gadget as learning tools.

PQ008   Program targeted to empower People With Disabilities through vocational training, rehabilitation etc.

PQ009   Series of community program with several villages in an island to engage the local community in systematic waste management approaches.

PQ010   Farm production (technology and machinery) scale-up project for the farmers at the rural villages.

PQ011   Exposure to the Science, Technology, Engineering and Mathematics (STEM) problem-based education to the indigenous community.

PQ012   Knowledge brokerage regarding the *Maqasid Syariah* in the perspectives of 17 Sustainable Development and the awareness to have more science stream students.

PQ013   Awareness about the sustainable use of urban river and riverbank ecosystem through onsite and virtual activities.

PQ014   Programs which goal to raise awareness and build capacity about customary sustainable uses of biodiversity, the protection of traditional knowledge, and related legal frameworks such as access and benefit sharing thereby enabling these communities to better articulate their needs and working in a proactive manner with external stakeholders.

PQ015   Appreciation program for educator during the pandemic with students-talents based activities and sports.

PQ016   The apps development for several IHL campuses. The projects specifically spread the awareness of zero waste community via best-practice shared by multiple stakeholders, bringing-in the industry (recycle companies), NGO and students body.

PQ017   The knowledge co-creation in water catchment wisdom of indigenous community in term of spiritual, water resources management, maintaining the

environmental quality, food security, human and animal health, education, and other vital economic and social activities for local level decision-making in appreciating the spatial value of the water catchment.

PQ018	Terrestrial Education TV channel to increase the access to quality education for students nationwide.
PQ019	The agriculture projects targeted to provide opportunity to ex-drug addicts to generate income.
PQ020	Project for dissemination of basic literacy in non-native speaker community.
PQ021	Learning ecosystem and technology assisted teaching platform for open community. This project is largely co-funded from several agency and sectors to step ahead in future technology for classrooms.
PQ022	Volunteerism projects of providing food and medical assistance to the urban homeless.
PQ023	Project to facilitate the visually impaired students to learn mathematics through mobile applications.
PQ024	Teaching of Malay students' non-native speakers abroad through multiple IHL collaboration and students exchange.
PQ025	Develop platform for data analytics for employability as deemed necessary by industry. The project specifically dedicated to decreased unemployment.
PQ026	Programs to foster the spirit of patriotism and volunteerism as well as the promotion of youth empowerment.
PQ027	Project to support the development of mental patient medical data to diagnose and support development of the patients in a systematically.
PQ028	Awareness program on temperature rise on mental health and proceeded with practical ICT solutions.
PQ029	Campaign to disseminate information on the importance of chemical safety management in the home.
PQ030	Non-smoking campaigns throughout the states to encourage the smoke-free area in tourist attractions and open area through training to leaders of social bodies.
PQ031	Inter-institutional collaboration in harmonizing the practices in community projects.

PQ032	Certification of general worker to be more skill full with their jobs through systematics modules without any charges.
PQ033	Community projects at suburban area to teach step-by-step of composting, recycling and sustainable livelihood.

The demographic profile of the respondents is shown in the Table 24.

Table 24 The demographic profiles

		Frequency	Percent
Gender	9	27.3	9
	24	72.7	24
	33	100.0	33
Age	30-39	10	30.3
	40-49	14	42.4
	50-59	8	24.2
	60-69	1	3.0
	Total	33	100.0
Position	Senior Lecturer	19	57.6
	Research Assistant	9	27.3
	Student	2	6.1
	Staff	3	9.1
	Total	33	100.0
Research area	Education	15	45.5
	Food Sensory and Processing	1	3.0
	Computer Science	6	18.2
	Development and Management	2	6.1
	Engineering	2	6.1
	Conservation	1	3.0
	Disaster Management	1	3.0
	Social Sciences	3	9.1
	Toxicology/Community Health	2	6.1
	Total	33	100.0

In most community engagement projects, the respondent's details might not explicitly reflect the nature of the projects. The respondent serves as one of the representatives of the project human capital, which frequently involved experts from different demographic profiles to tap into the need of the project itself. Therefore, the finding of this study may reflect a small fragment of the community projects undertook in IHL. In this study, all community projects are 1) all of them are fully or partially funded by the government, 2) have some level of IHL involvement either primarily or supporting the project, 3) adhere to the exsiting national policy either before or during the pandemic and 4) continue their project and do not withdraw the project. Therefore, the project details were summarised as the Table 25.

Table 25 Community projects

		Frequency	Percent
Role in the project	Coordinator/Manager	16	48.5
	Researcher	14	42.4
	Staff	2	6.1
	Consultant	1	3.0
	Total	33	100.0
Project type	Curriculum and research	4	12.1
	Curriculum	3	9.1
	Research	14	42.4
	Extra-curricular/Service	12	36.4
	Total	33	100.0
Location	Nature/Non-Residential	3	9.1
	School	6	18.2
	Indigenous/Rural village	5	15.2
	Urban	4	12.1
	Campus	3	9.1
	Suburban	5	15.2
	Virtual	7	21.2
	Total	33	100.0
Targeted community	Rural/Indigenous	10	30.3
	Student	5	15.2
	Disabled	3	9.1
	Urban	6	18.2
	Open	3	9.1
	Educator	2	6.1
	Drug Addict/Mental Health	2	6.1
	Unemployed Youth	1	3.0
	Total	33	100.0
Main partner	No partnership	3	9.1
	IHL-IHL	5	15.2
	IHL-NGO	6	18.2
	IHL-Government	12	36.4
	IHL-NGO-CSR	1	6.1
	IHL-NGO-GA	4	12.1
	IHL-IHL-CSR-NGO-GA	1	3.0
	Total	33	100.0

- No Partnership: The project is between the IHL directly to the community

- IHL: The project includes two or more IHL strategically partnered for the project. The partnership might form with national or international IHL.

- NGO: Project includes the partnership between IHL with the non-government organisations (international or national)

- GA: Government Agency refers to the partnership is between the IHL with government (ministry, local government, government agency)

- CSR: Corporate Service Responsibility includes private agency, corporate, socio-prenuer and industry.

From the interview, the community projects are either as part of curriculum and/or research and/or extra-curricular. For the curriculum embedded community engagement, the students are mobilised to the identified location and community as part of project-based assignments of certain courses or service-related tasks. The community are also engaged in a certain research-based project which the output of the project directly benefitted the targeted community. As such, the community needs are analyses according to the research methodology, and the experts proposes the solution. The research-embedded community projects are funded and reported according to the funding agency requirement. The projects are either coordinated by a single researcher towards one targeted community or includes multiple faculties/IHL depending on the grant received. As the academics in IHL are discipline-oriented, the coordinator is also lectures and researchers in the specific disciplines. In other instances, the community engagement projects are part of extra-curricular activities initiated at IHL-level. The registered students' body- such as leadership association, uniform units and club also assert to serve the community according to the advocacy they are into. As compared to curriculum and research embedded projects, the extra-curricular projects promote volunteerism.

Framework for the local implementation of the SDGs through community projects

The composite table of SWOT analysis from this study were developed through inter-cases and intra-cases analysis as shown in Table 6 below.

Table 26 Summary of SWOT analysis

STRENGTH	WEAKNESS
Grant opportunities	Financial mismanagement
- The IHL offer a variety of financing opportunities for community engagement projects. All of the projects studied received funding from a variety of sources, including institutional, national, and foreign. - The systematic grant reporting culture also enables project coordinators to systematically plan the expenditure of funds. Policy support - Community projects are greatly encouraged by IHL and national policies. As a result, community projects are conducted as	- The sum of funds received was determined by the scale of the project. The challenges of the pioneered project with a novice project coordinator also knots with lack of experience in fund management and procurement procedure. - Project coordinators claimed that additional funding is required to help the project evolve more effectively, particularly when a pandemic disrupts project planning. - Limited sustained projects due to short-term funding.

it is or infused in curriculum, extra-curriculum or research or combination.

- The project leaders also well-versed with the policy details which is shared though the official depository and website of IHL.

Pool of xperts

- The project coordinator matched their expertise to the requirements of the project. The multi-institutional project drew on their collective expertise to meet a broader range of community needs.

Facilities and infrastructure management

- IHL provides general facilities and infrastructures to utilized for project execution. The facilities include the large meeting rooms, transportation, laboratories and logistics. The infrastructure includes the communication tools, digital access and systems for queuing to use certain inventories.

- The autonomous queuing system and digital communication ease the communication and better reference to be shared among the team members though e-mailing.

Repertoire of students and staff

- Students and staff whom involved in the project are acknowledged for their performance and credited in their progress report/yearly evaluation.

Institutionalised eadership

- IHL has the dedicated institution to drive the societal transformation agenda. The projects deliverables delegated to group of experts from different institute/centre/school in the IHL for synergistic collaboration.

Mismatch of aspiration and available structures

- The policy are entails with project grant. The project coordinator shares about their experience of turned-down proposal of community engagement because it wasn't trendy or didn't fit the general themes.

The demand for more facilities and physical support

- The IHL is an active living space and the facilities and infrastructure are for all its community. The need for more facilities is required as the community projects always involved a huge of participants at one time.

- In the face of pandemic, the development of software, tissue culture, tools was paused since the lab are closed.

Bureaucratic procedure

- The project coordinator has to go through arduous bureaucratic procedures of a partner organization, which can result in miscommunication.

- The stratified procedure of certain organisation (the culture of private, ngo, government agency and IHL are different) also demotes the enthusiasm of the project's team member.

- Limited support to social science as compares to science area are also reported which possibly related to the availability of grant.

Working fatigue

- The communication of the project sometimes is out of the formal working hour. The synergic collaboration of different group of

- The communication and strategic planning across the multiple organisation spearheaded with the strong leadership of manager and leaders

Reputation, location and prior network

- The IHL reputation is well known among the public and community leaders. The IHL recognition, visibility, network of alumni and academic contribution had gained the trust of the fund donor and stakeholders and gained particiaptions

- The location of the IHL is in the main city throughout the nation. However, the campuses and center of excellence of IHL are widespread all over the countries which could be reached by public. Furthermore, the professional profile of project coordinator and teams is updated in the staff directories to be openly-accessed by the community, stakeholder and partners.

personnel become lethargic as the instruction are top down without acknowledging the personal time of the staff and students.

- The pandemic has cause more virtual interaction with blurry line in work-hour

- Micromanage several community projects.

Exclusive database

- Even though IHL use the research-driven data, however the actual and situational data is dynamics and contextual. The lack of actual evidence and the prospective individual of certain issue limits the reachability of the project to the targeted community.

Despite the fact that community engagement is highly commended in IHL, the necessity to highlight outcome-based evaluations such as quantitative data, scientific writing, public readership, and visibility has been identified as a hurdle for the project's coordinators.Specific training and professional development

- Limited highly specialized training in involving community project in term of risk, safety, insurance and barriers. Most project leaders exposed on the community project soft skills is by in-service mentoring process and practice sharing from team members as the project run.

- IHL prefers indexed publication of the scholarly product rather than third mission agenda.

OPPORTUNITY

External funding and policy

- The partnership of government and private sector are encouraged by

THREAT

Diverse culture and need

- The value-driven projects are sometimes does not match the urgent need of the community. Therefore,

shared national funding and policy on the society transformational agendas.

Database of the targeted community

- The private and government agency with specific advocacy has had the established interaction and communication with the community which bring in huge participation in the projects tailored with the demand of the community.

- The stakeholder with specific advocacy also has the database of the community they are serving.

Location nearby to the targeted community

- The community could benefit the public space to conduct the activities such as park, townhall, gazette natural area, indoor, outdoor and even interactive virtual platform.

Volunteers and person-in-charge

- Volunteers are great in assisting the project. The expenditure of the funding could be allocated for other aspects to increase the impact of the project.

- The person-in-charge mainly are the dedicated institutional or stakeholder's officer to ease in communication.

Community leaders and driver

- The community leaders in Malaysia are structured and governed by state leaders. The projects details could be brokered during the meetings with community leaders which scheduled regularly. This penetration point is politically driven. As the IHL tended to be neutral, most state are welcoming community projects from IHL.

the participation is low and the situation worsened as the pandemic hits.

- The diversity of the community reflected the specific need and the sensitivity of the community according to the race and ethnicity, religion, geographic location, socio-economic status and age.

Communication barrier of marginalized group

- The community of indigenous, refugee, mentally challenged and disabled have limited ability to converse in English and Malay which become a barrier to address their need. This group need a intermediator to facilitates communication with the stakeholder

- The communication barrier also formed among those community at the remote area with digital gap. As the pandemic hits, the requirement to abide the MCO, and most social activities went into virtual, these community are harder to reach. The digital gap also sometimes related to the socio-economical status.

- The community and stakeholder have limited knowledge on the way IHL conducts the projects includes all the formalities, data collection and staff mobility.

- News is not spread in public readership.

Diverse culture

- The community in Malaysia have diverse culture and identity. Therefore, the dimension of the projects are various tackled upon different aspect of community wellbeing and elevate their quality of life.

Virtual ecosystem

- The communication and knowledge dissemination through the social media and mobile social network gained the interest of targeted community. The behavior of the social media with use of 'like', 'shares', 'tagging' brought the projects into the community organically.

From the composite table, the IHL bring along the tangible and intangible factors that promote or demote the community engagement project. For instance, the grant opportunity (in the strength column) and financial management (in the weakness) are loosely termed as funding factors. Therefore, even though the available policy, funding, and leadership provide both: standardization and feasibility, which served as a solid foundation for designing an impactful project. The projects have benefited from both tangible (funding, facilities, students, and staff, policy and intangible factors (leadership, expertise, reputation). This composite table were then reanalyse in term of stakeholders role and participation to progressively develop the framework of local implementation of SDGs.

The community project frequently involved from single to the several stakeholders and partners. For example, the researcher and experts from multiple IHL deliver specific long-term projects which combined the different experts towards the success of the projects. In other cases, the partnership is formed with other authorities' or government bodies either from the ministry, local government, and government agencies mainly dedicated to specific community groups. Among the involved parties are the economic development bureau, disabled empowerment agency, hospitals and rehabilitation centres, federal government ministry and local government offices. In other cases, the projects also garner the industry partners' support by their corporate social responsibilities, business-owner or social-prenuer firms. However, there are projects particularly directed towards the community without any other partnership involved.

The IHL bring along with them the tangible and intangible factors in the community engagement projects, Meanwhile, the community identified either vicinity-depended (i.e., riverside, urban forest, camps), criteria-dependent (i.e., drug addict, disabled, student) or age-dependent (elders, children). Therefore, the targeted community are diverse but possess some

similar attribute to be targeted upon as knowledge transfer, knowledge sharing, knowledge exchange or knowledge creation with the IHL.

We found that the targeted community are much more welcoming to engage with the IHL when the project resonates with their culture, location and age identity. In most cases , the IHL forms a multiple partnership with other organisations or bodies to better project deliveries. The need for the partnership is emphasised when the project requires more fund, supporting policy, expertise, facilities, leadership or human resources. The main partnership formed includes the Government Agency (GA) (i.e., local government, ministry), other IHL (i.e., vocational institution, teacher institution, universities), Non-Government Organisation (NGO) (i.e., advocacy in environmental issue, reducing inequalities, empowers the disabled) and Others (Corporate Service Responsibility, Socio-prenuers). Specifically, the partnership with other IHL is profound in transdisciplinary approach constitutes several experts work on the different fraction to change the targeted community.
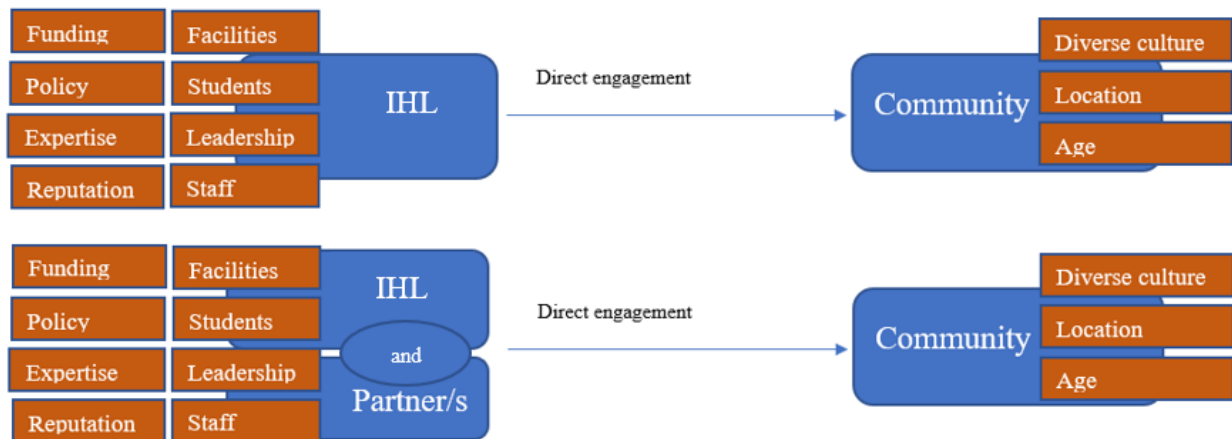

Figure 10 The direct engagement of IHL with community

Since most of the project involved direct engagement with the institutional staff, some communities are uniquely challenging. For instance, the project intended for the community of drug addicts, homeless, refugees, indigenous people with native dialect and mental health patients requires the partners to reach these risky groups effectively. The partners are the person or organisation with collective experience and expertise to deal with the targeted community. For instance, the local government places a translator to facilitate communication with the indigenous community or a psychiatrist expert in the mental health community. Amongst the partners includes the Government Agencies (i.e., police, rehabilitation centre counsellor, psychiatrist) or Non-Government Organisation (volunteer with expertise in sign language or expert in conservation at the rural site) or IHL situated at the vicinity of the targeted community (i.e., Universiti Malaysia Sabah (UMS) or Universiti Malaysia Sarawak (UNIMAS) to reach the indigenous community in Borneo). Besides the expertise, partners also have databases to reach the targeted community effectively.
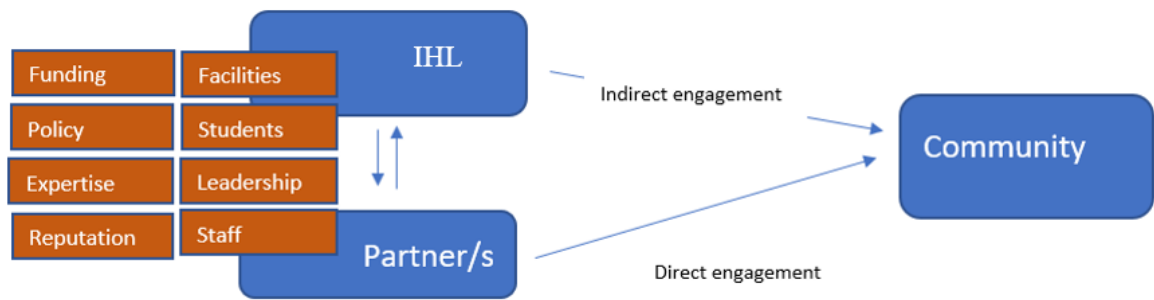
Figure 11 The indirect engagement of IHL with the targeted community

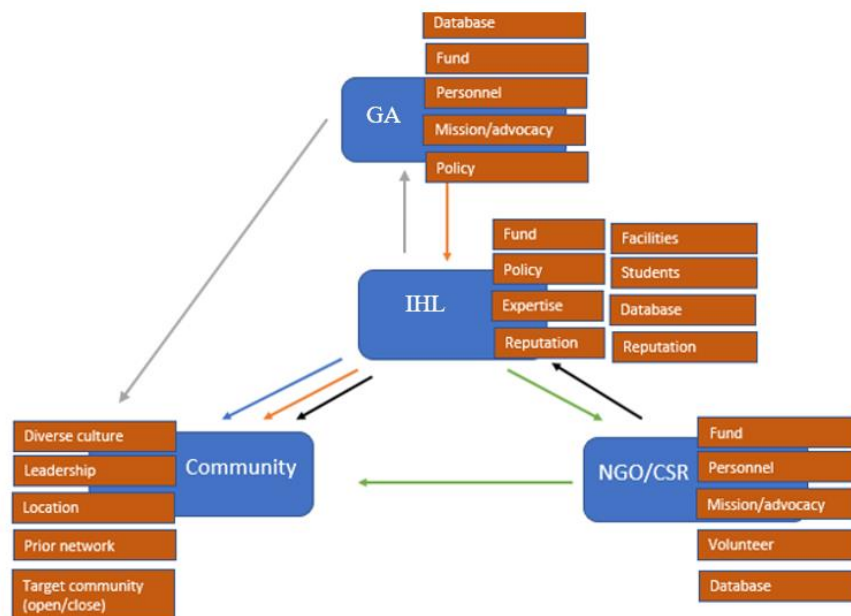Therefore, the overall idea was visualised as Figure 12.

Figure 12 The visualisation of the IHL community engagement project

- IHL: Institution of Higher Learning
- NGO: Non-Government Organisation
- GA: Government Agency
- CSR: Corporate Service Responsibility

Table 27 The purpose of community engagement project in this study based on Kechik et al (2019)'s typology of the establishment of purpose

Establishment of purpose	Indicator	Description	HLI offers
Demand driven	→	A need originating from community and/or government agency.	Instead of hiring business-oriented companies or mobilising the limited staff, the government agency channels their funding and partners with IHL. The partnership will take advantage of the visibility, reputation, and leadership of the IHL itself. Hence, the Government Agency channel their funds to the IHL to devise the targeted community (specifically identified) project. At the same time, in most cases, there will be a dedicated officer in charge in the collaborative network (from GA and IHL). In both cases, the IHL serves as the mediator to identify the expertise to complete the project. The project is top-down (leaders to staff).
			Therefore, the project has a certain degree of goal to be achieved (set by Government Agencies), and the GA staff will facilitate the project according to the agency mission/advocacy towards their local community. The selection of which IHL to collaborate depends on their reputation, expertise, staff, facilities, leaders and prior networking.
	→	The private sector (through CSR or social-prenuer) offer funding/proposal to the IHL to serve the community	The NGO and social-prenuer (with CSR fund) initiate the linkage to the IHL reach the nearest to the community (physically nearest IHL institution). The reputation of the IHL as an educational institution provides access to the NGO/socio-prenuer to reach with the community especially with unique difference (ie dialects in rural area of Borneo). In this role, the IHL serve as intermediator to facilitate the NGO/socio-prenuer projects with the targeted community. In both cases, IHL mobilise their expert-staff and students volunteers to support those projects in the community. IHL also further provide a platform for the NGO to share their knowledge with the faculty member in which they are interested in. The strength of IHL is the reputation of the NGO/socio-prenuer in identifying their strategic partners in community engagement projects.
Value driven is initiated by IHL	→	The IHL initiated the project directive	In some cases, the IHL has allocated budgets and funds to advocates in the community engagement. It started with application for the fund according to specific themes decided by the leaders/policy in IHL. The

| | to the targeted community | merit of the project will be screened, and once succeeded to receive the fund, the projects will be initiated by HIL staff/researcher. The project will reach the community (through communication, linkages, trust-building, mobilising staff, volunteers and facilities).

Therefore, the IHL serve as the initiator aligned with the existing policy, leaderships, facility, students' volunteers, expertise, researcher and project design is from the IHL. |
|---|---|---|
| → | The IHL initiated the project, require GA to reach the targeted community | Several projects targeted unique communities in which the IHL have limited expertise or challenges to reach those groups physically. In such cases, the IHL form a partnership with the GA with the specific expert. The most glaring challenge is to build mutual trust and overcome the bureaucracies and formalities. |
| → | The IHL initiated the project, require NGO to reach to the targeted community | The IHL has allocated budgets and funds to advocates community engagement. In some cases, the IHL collaborates with NGOs to reach the targeted community, as the NGO have prior networks and databases. Sometimes, the activity is research-embedded or course-embedded in which the researcher or students will involve in the project.

In this role, the IHL serves as the funder (whole/partial) to encourage effective engagement. In this case, the dialogue with the NGO will be conducted to find the gaps to be filled. |
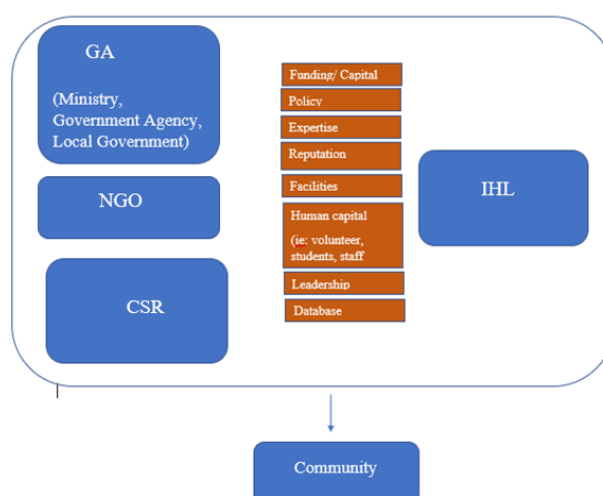

Figure 13 Value- demand driven Kechik et al (2019) is defined as a condition by which the need is initiated by IHL and Government Agency/ Industry simultaneously

In the value-demand establishment of purpose, the partners will provide all the required resources that could be utilized for the need of the project. This study also confirms the typology of purpose established in the community engagement project in IHL proposed by Kechik et al., (2019). To exemplifies the diverse partnership, the Table 8 below showcase the number of stakeholder partners in a single project. The number of directly involved communities stretched between one-focused community/stakeholder until reaching 18 multi stakeholders or community per project (Table 28 and 29).

Table 28 Number of stakeholders or community per project

	Number	Frequency
Stakeholder/ community involved	1	1
	2	2
	3	4
	4	7
	5	2
	6	4
	7	1
	8	3
	9	3
	10	2
	15	1
	18	1

The categories of community/stakeholder involvement were further categorised into 19 categories as shown in Table 29.

Table 29 Categories of stakeholder and/community

Stakeholder/ community involved	Frequency
Local government	20
School	15
Teacher	15
Student	16
Members of Parliament	12
Non-Government Organisation	13
Religious leader	7
Business/Corporate	11
Media	3
Worker Union	3
Farmer Association	2
Elderly	4
Youth	5
Adolescent	3
Children	5
Family	9
Parents-Teacher Association	3
IHL	11
Ministry/Government Agency	25

Table 30 Sustainable Development Goal and Community Projects

Project	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17
PQ001	No	No	No	Yes	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No	Yes
PQ002	No	No	No	Yes	No	No	Yes	No	No	No	No	No	No	No	Yes	No	Yes
PQ003	Yes	Yes	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	Yes
PQ004	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes
PQ005	No	No	No	Yes	No	No	No	Yes	No	Yes	No	No	No	No	No	No	Yes
PQ006	No	No	No	Yes	No	No	No	No	No	No	Yes	Yes	No	No	No	No	Yes
PQ007	No	No	No	Yes	No	Yes	No	No	No	No	No	Yes	No	No	No	No	Yes
PQ008	Yes	Yes	Yes	Yes	No	No	No	Yes	No	Yes	No	No	No	No	No	No	Yes
PQ009	No	No	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No	No	No	Yes
PQ010	Yes	Yes	Yes	No	No	No	No	No	No	No	Yes	No	No	No	No	No	Yes
PQ011	No	No	No	Yes	No	No	No	No	No	Yes	No	No	No	No	No	No	Yes
PQ012	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes
PQ013	No	No	Yes	No	No	Yes	No	No	No	No	Yes	Yes	No	No	Yes	No	Yes
PQ014	No	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	No	No	Yes	No	Yes
PQ015	No	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	Yes
PQ016	No	No	No	No	No	Yes	No	No	Yes	No	No	Yes	Yes	No	No	No	Yes
PQ017	No	No	No	Yes	No	Yes	No	No	No	No	No	No	Yes	No	No	No	Yes
PQ018	No	No	No	Yes	No	No	No	No	No	Yes	No	No	No	No	No	Yes	Yes
PQ019	Yes	Yes	Yes	No	No	No	No	No	No	Yes	No	No	No	No	No	No	Yes
PQ020	No	No	No	Yes	No	No	No	No	No	Yes	No	No	Yes	No	No	No	Yes
PQ021	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	Yes
PQ022	Yes	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	Yes
PQ023	No	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes
PQ024	No	No	No	Yes	Yes	No	No	Yes	No	No	No	No	No	No	No	Yes	Yes
PQ025	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No	No	No	No	Yes	Yes
PQ026	Yes	No	Yes	Yes	No	No	No	Yes	No	Yes	Yes	No	No	No	No	No	Yes
PQ027	No	No	Yes	No	No	No	No	No	Yes	No	No	No	No	No	No	No	Yes
PQ028	No	No	Yes	No	No	No	No	No	No	No	No	No	Yes	No	No	No	Yes
PQ029	No	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	Yes
PQ030	No	No	Yes	Yes	No	No	No	No	No	No	No	No	Yes	No	No	No	Yes
PQ031	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	Yes
PQ032	Yes	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	Yes
PQ033	No	No	No	Yes	No	Yes	No	No	Yes	No	No	Yes	Yes	No	No	No	Yes

The community engagement project is also characterised according to the SDG related as Table 10. In some cases, the project is promoting certain SDG without explicitly mentioned in

their documents. Therefore, the researcher facilitates the respondents to identify and match the 17 goals by referring to 169 targets. In this study, the existing community engagement projects featured one or more than one SDG.

The SDG aimed in the projects definitely promoted the SDGs and directly benifited the local communities. The finding showed the 33 projects covered all 17 SDGs and SDG4 Quality Education is frequently mentioned besides SDG 17 that related to partnership. Then, continued with SDG 2 Zero Hunger and SDG10 Reducing Inequalities. The improvements in primary and secondary education and high levels of educational attainment are linked to a variety of health, well-being, active citizenship, and employment indices, as it reflected as the potential impact in SDG 2 and SDG 10. As a result, it is strongly suggested that the SDG4 be a firm foundation towards other goals since SDG4 is perceived as interrelated with the other SDG's rather than as stand-alone goals. Being that in mind, the SDG 4 should be a top priority for policymakers, especially in IHL. Despite the fact that quality education could drive towards societal transformation, many of the targets may be simpler to achieve if strong and accessible education and training systems are put in place, leading to better knowledge-based infrastructures of IHL. USM's community engagement division is also actively involved in assisting the local community in creating sustainable businesses start-up of and the Community Innovation Centre (CIC). The Community Innovation Center (CIC) program is a government initiative in collaboration with the Northern Corridor Implementation Authority (NCIA) and USM to encourage collaborative partnerships based on collaborative foundations to enable stakeholders (government, academia, industry and local communities) jointly leveraged Collective Impact through the Quadruple Helix approach to form a truly credible and transformative nation of par excellence. Since these projects related to community engagement, this study captures the snapshot of partnership of IHL with stakeholders through community engagement, these projects contributes towards strengthening the SDG 17 implementation in local level. With the sustainable strategic partnership, the promotion of SDGs can be diverged and implemented among the stakeholders with the local community.

This study was fullfill the aimed of the project which to explore and reimagine the role of Institutions of Higher Learning (IHL) in supporting the implementation of the Sustainable Development Goals (SDGs) at the local level by examining the past and current practices of those working in IHL to collaborate and engage with local communities for sustainable development.

Conclusion

The community engagement policy in Malaysia is generally termed and could be adopted in various ways and IHL-community engagement framework is establish. In this study, all project leaders perceived that their project has impacted the community and expressed their interest in continuing their projects in the upcoming years- either with several improvements, continuing with the existing project execution, or major adaptation to the recent project. The pandemic also provided different contextual lenses in conducting the project engagement. The 33 projects showed covering all 17 SDGs which involved SDG17 - partnership with stakeholders in all projects followed by SDG4 Quality Education.

During pandemic COVID-19, in some cases, the project plans are proactively revised and adapted with many innovative approaches. For example, either mobilising staff and volunteers

in charge within the community vicinity for quite a time, using virtual communication approaches or if the engagement still conducted physically and ensure adherence to the COVID-19 prevention and control guidelines around physical distancing, wearing of masks and practising good respiratory and hand hygiene.

Several projects, however, is unexpectedly gain a positive impact due to the COVID-19. The new categories of community, location and interaction emerged during the pandemic- 1) category: virtual community in social media- WhatsApp, telegram, Facebook page and group etc. and 2) location: digital platform and 3) interaction: screen-based-text, audio and visual. Some of the projects were initially targeted for certain groups of community; however, have been open for virtual groups through social media and become easier and cheaper to access. The project leaders also found that, it is much easier to get the project approved if conducted online as the limited issue of breaching the procedure and guidelines related to COVID-19.

Since the pandemic has affected the community at large, several respondents mentioned the need to revise their project post-pandemic affect and highlighted the emergence of digital oriented project. The motivation on continuing the project is driven by resilience of the coordinator adapt the whereabouts to better serve community, the needs to complete their project to prospective career requirement and/or the intrinsic value of certain life experience that face by the coordinator.

All respondents took the initiative to engage with the community and realise the government's aspiration to transform IHL ivory tower through policies, strategy, funding, and leaderships. Overall, university-community engagement contributed and promoted to all SDGs, and these projects are strengthening the SDG 17 implementation locally.

Limitation of study and suggestion for future research

The SWOT analysis is a common strategic thinking tool utilised in project valuation and wonderfully captures single project dynamics. However, it is pretty challenging to valuate more than one projects simultaneously as certain aspects might 'fit' into different 'rubrics' according to the nature and dynamics of the projects. Researchers' preliminary inferences that COVID-19 as the challenges for community engagement turn out to be advantageous in certain circumstances of the project. In this study, researchers must acknowledge that in community engagement projects, there are no two alike. As researchers explored specific cases through in-depth interviews, researchers found several aspects revolves around individual projects not captured by SWOT per se.

Data collected for the ten IHL for several month is considered small therefore the generalisation of the data must be avoided. However, the finding of this study serve as a snapshot of the community engagement experiences. Secondly is the limitation being inadequate disclosures of project information and inconsistent use the SDGs indicators. Thus, the researcher recommends that a more detailed study be conducted in the future so that a more accurate finding could be generated from the similar extended study. There is the need to infuse the concept of SDGs in policies out side of IHL to gain mutual understanding and shared experience in relizing the goal. Future research should also consider other related factors that might affect the level of community engagement quantitatively to capture amount of fund and the total staff and students involved.

References

Ahmad, A. R., Farley, A., & Kim-Soon, N. (2013). Funding Reforms in Malaysian Public Universities: Transitions towards Competitive Funding. *Australian Journal of Basic and Applied Sciences*, *7*(10), 553–561. file:///C:/Users/Lenovo/Downloads/Funding_Reforms_in_Malaysian_Public_Univ (1).pdf

Akib, N. A. M., Sibly, S., Hassan, M. S., Noor, R. M., Koshy, K. C., & Ibrahim, K. (2017). *Increasing Student Participation and Engagement in Sustainability Projects in Universiti Sains Malaysia (USM) Through Kampus Sejahtera and WSU101: Sustainability Course for Undergraduates* (pp. 277–286). https://doi.org/10.1007/978-3-319-47889-0_20

Amran, F. H., Rahman, I. K. A., Salleh, K., Ahmad, S. N. S., & Haron, N. H. (2014). Funding Trends of Research Universities in Malaysia. *Procedia - Social and Behavioral Sciences*, *164*, 126–134. https://doi.org/10.1016/j.sbspro.2014.11.060

Caeiro, S., Sandoval Hamón, L. A., Martins, R., & Bayas Aldaz, C. E. (2020). Sustainability Assessment and Benchmarking in Higher Education Institutions—A Critical Reflection. *Sustainability*, *12*(2), 543. https://doi.org/10.3390/su12020543

Chankseliani, M., & McCowan, T. (2021). Higher education and the Sustainable Development Goals. *Higher Education*, *81*(1), 1–8. https://doi.org/10.1007/s10734-020-00652-w

Chung, E. (2018). Undergraduate-Community Engagement: Evidence from UiTM Sarawak. *Asian Journal of University Education*, *14*(1), 15–36.

Compagnucci, L., & Spigarelli, F. (2020). The Third Mission of the university: A systematic literature review on potentials and constraints. *Technological Forecasting and Social Change*, *161*, 120284. https://doi.org/10.1016/j.techfore.2020.120284

Kechik, S. Y. S., Arshad, Mohd A., Hamid, Noor K. A., & Mazlan, M. N. H. (2019). *The community engagement best practise toolkit*. Penerbit USM.

Malaysian Science and Technology Information Centre. (2021). *the Intellectual Property Commercialization Policy for Research and Development 2019*. https://mastic.mosti.gov.my/sti-policies/intellectual-property-commercialization-policy

Matrade. (2021). *Malaysian Technical Cooperation Programme (MTCP)*. https://www.matrade.gov.my/en/about-matrade/achievements/matrade-success-stories/malaysian-technical-cooperation-programme-mtcp

Ministry of Education. (2021a). *Garis panduan pelaksanaan Public Private Research Network diperingkat institusi-2019*. https://www.moe.gov.my/pekeliling/2607-garis-panduan-pelaksanaan-pprn-di-peringkat-institusi-2019/file

Ministry of Education. (2021b). *INISIATIF SULAM TERJEMAH KONSEP UNIVERSITI UNTUK MASYARAKAT*. https://www.moe.gov.my/en/menumedia/electronic-media/news-and-activities/sulam-2019

Ministry of Higher Education. (2021). *Malaysia Education Development Plan 2015 – 2025-Higher Education*. https://mohe.gov.my/pppm-pt

Ministry of Science Technology and Innovation. (2021). *Dasar Sains, Teknologi dan Inovasi Negara 2013 – 2020*. https://www.epu.gov.my/en/economic-developments/development-

    policies/development-policies

Prime Minister Office. (2021). *Prime Minister's Office]*.
    https://www.pmo.gov.my/2021/05/kenyataan-media-mengenai-majlis-tindakan-
    kemakmuran-bersama-mtkb/

Sachs, J., Kroll, C., Lafortune, G., Fuller, G., & Woelm, F. (2021). Sustainable Development
    Report 2021. In *Sustainable Development Report 2021*.
    https://doi.org/10.1017/9781009106559

Salleh, M. S., & Omar, M. Z. (2013). University-industry Collaboration Models in Malaysia.
    Procedia - Social and Behavioral Sciences, *102*, 654–664.
    https://doi.org/10.1016/j.sbspro.2013.10.784

Subramaniam, S. T. (2013). Pengubahsuaian Alat Pengukur REAP untuk Libatsama Universiti
    Komuniti Setempat (LUKS) dalam Mentransformasikan Wilayah Bandar. *Penyelidikan*,
    1451. 978-967-0334-81-3

Subramanian, S. T. (2015). *Pertemuan Bandar,Komuniti Dan Universiti Dalam Suatu Projek
    Advokasi Awam:Kajian Kes Projek Universiti Sains Malaysia Di Wilayah Bandar Pulau
    Pinang*. Universiti Sains Malaysia.

United Nation. (2020). *The Sustainable Development Goals Report 2020*.

Wahab, H. A. (2014). Pelaksanaan Penilaian Keperluan: Langkah Remedi Pembangunan
    Komuniti. In Z. Jamaluddin (Ed.), *Pembangunan Komuniti di Malaysia dan Indonesia*.
    UUM Press.

Wan, C. Da, & Abdullah, D. (2021). Internationalisation of Malaysian higher education:
    policies, practices and the SDGs. *International Journal of Comparative Education and
    Development*, *ahead-of-p*(ahead-of-print). https://doi.org/10.1108/IJCED-08-2020-0052

Yahaya, M., & Abdullah, I. H. (2004). Challenges of corporatisation and globalization:
    Educational reform in tertiary education. *HERDSA 2004 Conference, Transforming
    Knowledge into Wisdom: Holistic Approaches to Teaching and Learnin*, 1–8.

Chapter 6
Philippines

Prof. Dr. Nestor T. Castro
University of the Philippines Diliman, Philippines

This case study focuses on the University of the Philippines System (UP) which the Philippine government recognized as "The National University" to distinguish it from other higher education institutions. The UP System is actually composed of eight (8) autonomous constituent universities (CUs), with each university having its own Chancellor, organizational structure, and specific set of policies. Each CU operates several campuses, colleges, departments, and institutes. These eight CUs are:

1. University of the Philippines Baguio (UPM);
2. University of the Philippines Cebu (UPC);
3. University of the Philippines Diliman (UPD);
4. University of the Philippines Los Baños (UPLB);
5. University of the Philippines Manila (UPM);
6. University of the Philippines Mindanao (UPMin);
7. University of the Philippines Open University (UPOU); and
8. University of the Philippines Visayas (UPV).

With the exception of the UP Open University, the seven constituent universities have communities around them and in some cases communities inside the campus itself. For example, UP Diliman has three *barangays* (politico-administrative units of the state, namely: Barangay UP Campus, Barangay Krus na Ligas, and Barangay San Vicente. Most of the residents of these barangays are not connected with the university. Despite this, these communities are considered by the university as its stakeholders.

These constituent universities are strategically distributed in the country's major urban centers as well as in the three geographical regions of Luzon, Visayas, and Mindanao. Please refer to the map showing the location of these universities.

Figure 14 Map showing the location of the various Constituent Universities of the University of the Philippine System.

Methodology

This study was made using three distinct methods:

1. Documents/literature review;
2. Conduct of survey for institutions; and
3. Interview with key experts.

For the documents/literature review, university memos, policies, and guidelines were collected. Focus was given on documents that relate to the implementation of the Sustainable Development Goals.

The survey was given to five (5) institutions in four constituent universities, namely:

1. Office of the Vice Chancellor for Community Affairs (OVCCA) of UP Baguio;
2. Office of the Vice Chancellor for Community Affairs (OVCCA) of UP Diliman;
3. University Health Service (UHS) of UP Diliman;
4. Campus Planning and Development Office (CPDO) of UP Manila; and
5. Office of the Vice Chancellor Community Affairs (OVCCA) of UP Los Baños.

The interview with key experts was aimed at understanding the results of the survey.

Community/Stakeholder Engagement Programs

UP has many community/stakeholder engagement programs. Here are some of them:

Table 31 community/stakeholder engagement programs in University of the Philippines

Programs that are found in all Constituent Universities	Description	Sustainable Development Goal that is addressed
National Service Training Program (NSTP)	This is a national law of the Philippines which requires students to render community service. The common types of projects selected by students themselves are conducting tutorial session for community members and the building of houses for poor communities.	SDG4, SDG11
Padayon UP	Mobilization of the University's resources to respond promptly and efficiency to the needs of community members, such as disaster response and pandemic response.	SDG17
Ugnayan ng Pahinungod (Oblation Corps)	A volunteer program where teachers are sent to far-flung Philippine communities to teach and provide psychosocial emergency services.	SDG4, SDG3
Extension Load Credit	Faculty members who want to do community extension work are given load for their projects. The type of project depends on the proposal of the faculty member.	Depends on the nature of the project.
Covid-19 response projects		

Vaccination and taking care of Covid patients	Performed by UP Philippine General Hospital and the University Health Service	SDG3
Conversion of school buildings and dormitories to quarantine areas for community residents	An immediate response due to the lack of quarantine facilities.	SDG3
Production of sanitizers and RT-PCR testing kits by the Institute of Chemistry.	For distribution to communities.	SDG3
Identification of Delta variant cases at the UP Genome Center.	The UP Genome Center is the only one in the country that can identify Delta variant.	SDG3
Free psychosocial health counseling.	Online portal for health counseling.	SDG3
Other Programs		
Human mobility	Establishment of bike lanes	SDG7
Zero waste program of UP Baguio	Efficient waste management program	SDG6
Protection of tridacna gigas in the West Philippine sea	Program of the Marine Science Institute	SDG14
Extramural Program for Social Science Teachers	Summer outreach program of the College of Social Sciences and Philosophy	SDG4

SWOT Analysis

Based on the data gathered from the University of the Philippines System, here is an assessment of its strengths, weakness, opportunities, and threats (SWOT).

Table 32 SWOT Analysis – University of the Philippines

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
1. The University is strategically spread throughout the Philippine archipelago covering the major geographic regions.	1. There is no clearly designated university office that is in charge of planning, implementing, and monitoring sustainability programs and related concerns.	1. Many local government units are interested in undertaking joint projects with the University. 2. Members of NGOs and people's organizations enlist	1. There is the constant threat of budget cuts from the national government because of changing government priorities.

2. UP gets the biggest government budget share among the country's 114 state universities and colleges.	2. There is no university sustainability plan or roadmap in contributing to the attainment of the SDGs.	in university courses to further enhance their theories and approaches in undertaking community service.	2. Some University community-oriented service programs are being phased out or given less importance than before.
3. UP administers and operates the country's foremost and largest public hospital.	3. Extension work is given less weight compared to teaching and research.	3. Many of the graduates of the University go back to their respective communities and render services to these communities.	3. There is a growing tendency to centralize operations instead of allowing more autonomy and flexibility by Constituent Universities.
4. Faculty members providing extension work, including community service activities, are given Extension Load Credit.			
5. There are Community Affairs offices in most of these Constituent Universities.			

Conclusion

Most of the campuses of UP are quite unique because there are communities located within the university's properties. UP considers these communities as among its stakeholders.

During the pre-pandemic period, UP has undertaken community engagement programs through different modalities.

Since the onset of the pandemic, UP was able to initiate and continues to implement Covid-19 response activities and projects in cooperation with the national and local government units.

It will be noticed that most of the programs being initiated by UP address SDG3 and SDG4. While some programs address SDG6, SDG7, SDG14, SDG17. While other SDGs have not been covered in this Study, this is probably explained by the limited access of informants during the pandemic.

Chapter 7

Thailand

Asst. Prof. (research) Dr. Sayamol Charoenratana
Cholnapa Anukul
Orathai Gunatilaka
Thanchanok Varakornpattanakul
Chulalongkorn University, Thailand

HEIs Role for SDGs: Challenges for Next Steps

Introduction

Higher Education Institutions (HEI) in Thailand

Sustainability Development (SD) have been contributed by Higher Education Institutions (HEIs) since UN conference on Human Environment in 1972. SD has been increasingly promoted among HEIs, for example, redesign of curricula, declarations and charters and sustainable campus initiatives or green campus policies(Du, Su, and Liu 2013; Vaughter et al. 2016). The significantly increased of SD in HEI engagement was promoted though UN Decade of Education for Sustainable Development. Furthermore, HEI was connected to Sustainable Development Goals (SDGs) in many issues. The Sustainable Development Goals (SDGs) framework ensures social cohesion, economic prosperity and protection of the environment. So, education, research and innovation are essential in sustainable development, making universities key contributors to achieving the goals (European University Association n.d.). The role of the education system in sustainable development (SE) was discovered by the universal goal of providing inclusive and equitable education and lifelong learning opportunities for all people (SDG 4). However, 2030 targets and indicators in SDG4 is not only participation rate in different education levels and forms but also extent to which citizenship education and sustainable education at all levels (UN 2021). To achieve sustainable development, many universities in each country are responsible for committed educational models based on national circumstances. Moreover, the strong universities are an important part of civil society (Goal 16) and they are excellent promotors of global and local partnerships (Goal 17) too. So, HEI roles contribute many SDGs goals. (Elena, Fleacă, and Maiduc 2018)

There are 310 HEIs in Thailand, 56 in North, 57 in north-earthen, 110 in central, 23 in east, 20 in west and 44 in southern (Ministry of Higher Education, Science, Research and

Innovation, 2019). There are three main types of HEI, government university, private university and autonomous university. Almost of Thai universities were apply the SDGs in university policy and support the university members and student to develop their activities under SDGs Road Map.

The Times Higher Education World University Rankings measure global universities' success in delivering the United Nations' Sustainable Development Goals. The 2021 Impact Rankings is the third edition and the overall ranking includes 1,117 universities from 94 countries/regions. This performance indicators are grouped into five areas: Teaching (the learning environment); Research (volume, income and reputation); Citations (research influence); International outlook (staff, students and research); and Industry income (knowledge transfer). 26 university in Thailand were submitted in this year and Chulalongkorn University at joint 23rd place and King Mongkut's University of Technology Thonburi at joint 54th place (The Times Higher Education 2021).
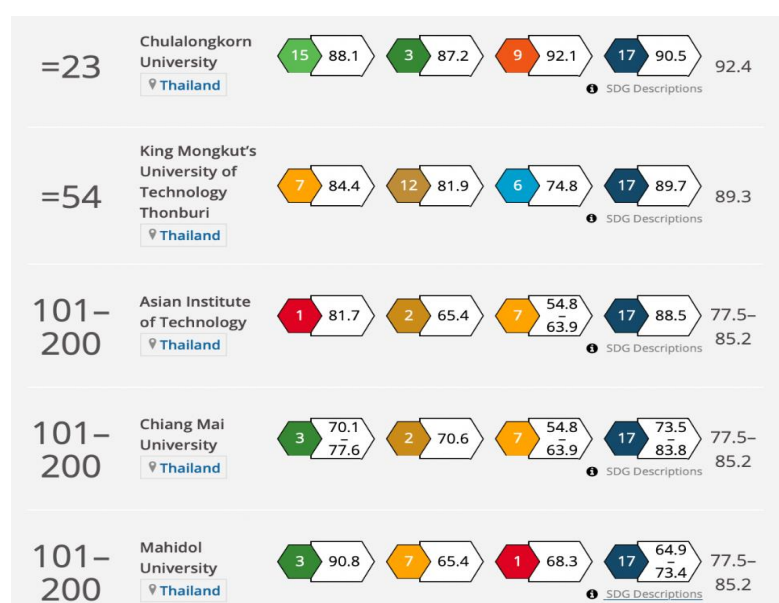

Figure 15 Thailand world ranking 2021

Source: https://www.sdgmove.com/2021/04/22/cu-kmutt-top-100-the-impact-rankings-2021/

Chulalongkorn university and SDGs

Chulalongkorn University is a comprehensive institution where the strategic direction would be pointed to build a 'Sustainable Development University' with full of innovation for society and whose faculties, staffs, students, and researchers are perceived as the 'intellectual

asset' of Thailand. To implement the strategy of sustainable development university, it is significant to survey the strengths in the institution which are listed as follows:

1. Chulalongkorn University is a comprehensive and interdisciplinary research and educational sector.

2. The university comprises of world-class faculties, students, and alumni.

3. The university has been engaging with world-class partners, including international institutions, public and private sectors, as well as civil society.

4. The university is in downtown Bangkok where it would be adjusted virtually due to the influence of digital lifestyle. Currently, the university has expanded the campus into the country networks

The President of Chulalongkorn University set the 2024 Important Goals as the elements to direct to the sustainable development university with innovation for society, including Future Leaders (SDGs 4, 8, and 17), Impactful Research & Innovation (SDGs 9 &17), and Sustainability (SDGs 11 & 17), along with the top points in SDGs 3, 12, and 15 completed in 2030.

In retrospect, Chulalongkorn University initiated many innovations and projects for society, such as Via Bus Application, Chula ARI, Art4C, Chula Art Town, CU Innovation Landscape, COVID-19 test and robotic cares (named as Ninja and Pinto), Baiya, and Welcome Back Care Kit, Chula Zero Waste, etc.

However, University apply SDGs in Bachelor degree, Master degree, Ph.D. program and Livelong studies. The university provides number of cross-cutting and integrated knowledge as well as related skills for students through various courses and programs that address the challenges of the SDGs, which can be seen through an effort of the university in offering different range of General Education courses in which there are more than 60 subjects/courses that are SDGs -related for all students across university. These courses can be classified according to the SDGs' target by which they are addressing as the examples divided by the degrees following:

1. Bachelor degree;
   - 0201230 Man and Peace
   - 0201231 Urban Community Studies
   - 0201232 Multidisciplinary Study for Rural Development
   - 0295102 Agro-Wastes to Money
   - 2311132 New Technologies in Materials Science
   - 2746104 Kham Phor Sorn (Rama IX King's Sustainability Philosophy)
   - 2750178 Life Long Learning
   - 4000101 Agricultural Product Development for Consumers
   - 4000203 Introduction to Sufficiency Economy
   - 4000204 Introduction to Agro Food Chain

2. Graduate school;
2.1 Master degree;
2.1.1 Master of Science (M.Sc.) these are some example programs which related.
- Hazardous Substance and Environmental Management (International Program)
- Risk and Disaster Program
- Technopreneurship and Innovation Management

2.1.2 Master of Arts (M.A.) these are some example programs which related.
- Human and Social Development
- English as an International Language (International Program)
- Environment, Development and Sustainability (International Program)
- Southeast Asian Studies (International Program)
- MA in Music Therapy Chulalongkorn University

2.2 Doctoral degree;
2.2.1 Doctor of Philosophy (Ph.D.) these are some example programs which related.
- Environmental Science
- Hazardous Substance and Environmental Management (International Program)
- Logistics and Supply Chain Management (International Program)
- International Program in Hazardous Substance and Environmental Management

2.2.2 Doctor of Philosophy (Ph.D.) these are some example program which related.
- English as an International Language (International Program)
- Environment, Development and Sustainability (International Program)

Moreover, Chula engagement is a long-term project since 2005 that the university has operated through a community area near the university under a social service mission. University transitioning phase from service and volunteer work to work with local partners as a long-term partnership was setting up and become a community contributor under the four principles:

Figure 16 the four principles for community contributor

Source: *(Association for University Social Engagement Thailand: EnT*

The operation of the university began with the establishment of a learning network centre in Nan Province since 2005, focusing on academic services to the society, community, and when the development of the One Functional-unit One Community (OFOC) project (2008-2016) In the first phase, 2008-2013, also confirmed the work in the field of academic service with the community, in the name of Baan Nee Me Suk Phase 1-2, to encourage university to build relationships with communities around the university area by supporting health promotion activities and strengthening the community as a university mission. Moreover, university support faculties/institutes and the college of Chulalongkorn to running some program with community next to their area. There is a community area that can be used as a teaching area or conduct long-term research together with the integration of the concept of community development at the same time by focusing on community areas located around or close to Chulalongkorn University such as Nan, Saraburi (under the Saraburi Strong Community Project), Nakhon Pathom, Koh Sichang and the 5S area. Around Chulalongkorn University are Samyan, Suan Luang, Siam Square, Silom and Lumphini Park.

Figure 17 Sustainable Development policy Timeline of Chulalongkorn university

The next step, after 2016, CU Social Engagement was developed to encourage university. It is a concept that university is accessible to everyone in society. Aiming to create Thai society towards a knowledge & innovation society, allowing the university to be a proactive leader in guiding and answering questions to the society.
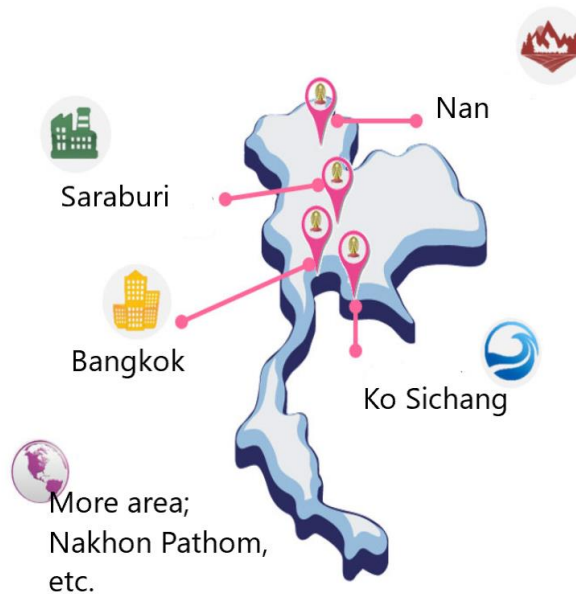
Figure 18 CU Social Engagement area.

Source: apply from www.cts.chula.ac.th/work/cu-social-engagement/cuse-area/

Operations in the area of responsibility and response to Thai society (USR: University Social Responsibility), the university has the idea and implemented such activities both outside and inside the university through the implementation of a project called "CU Social Engagement".

To implement the SDGs in the university for supporting the institutional direction to be the sustainable development university with innovation for society, it is recommended that all faculties and staffs should "start doing now," setting the goal, planning, implementing, and continually evaluating; they are required to be adaptive, accept any changes, learn from any failure, manage the time efficiently. Moreover, it is significant to offer the research and innovation screening guidelines, including OKRs, aligning with CU objectives, as well as concerning the target group (users or organizations), research value, and revenue-cost.

University contribution

This study was contributed by 32 university members from 14 universities in Thailand. (See Table 1) However, COVID 19 pandemic is a main limitation for this study. 18 university in Bangkok and central, 8 university in north, one in south and 5 in north-eastern were collected

between July 2020 to May 2021. There is individual scholar, dean, head of department and university representative were responded in this survey. (See detail in table 33)

Table 33 Participant HEI's list in this study

| Region	Institution	Number	Percent
Bangkok & central (18)	Chulalongkorn University	11	34.38
	Thammasat University	2	6.25
	Mahidol University	1	3.13
	Silpakorn University	2	6.25
	Srinakarintarawirod University	1	3.13
	AIT	1	3.13
North (8)	Chiang Mai University	6	18.75
	Chang Rai University	1	3.13
	Majeo University	1	3.13
South (1)	Prince of Songkla University	1	3.13
North-Eastern (5)	Mahasarakham University	2	6.25
	Khon Kaen University	1	3.13
	Ubon Ratchathani University	1	3.13
	Wongchuwarit kul Universtiy	1	3.13
Total		**32**	**100.00**
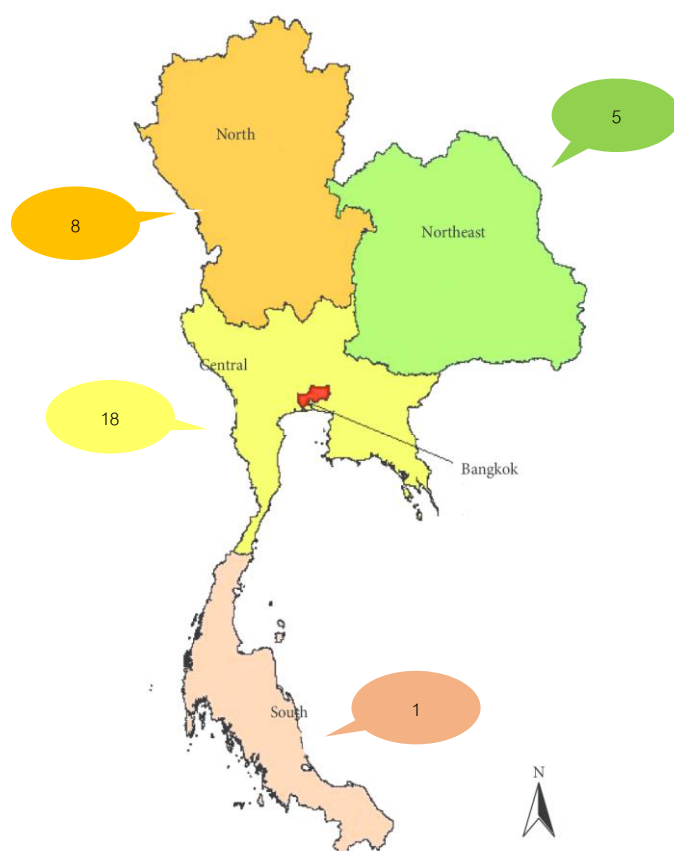
Figure 19 Participant HEI's list in Thailand

Methodology

This research implied two set of questionnaires, personal and institution to conduct among university staffs in Thailand. The data collection is as fellow;

Step 1 project planning and develop the tools: Project members were met and developed the plan and questionnaire through online meeting. Pre-test of the questionnaire was collected in Thailand between April-June 2020. The 7 respondents give some picture of the difference information between individual and institution representative. So, project members were revised questionnaires for the individual and the institution.

Step 2 collected data: Snow ball sampling was selected. Email, mail, face to face interview, telephone interview, online interview and focus group were use to collected the data in the first step between July 2020 to May 2021. According to the COVID pandemic in Thailand, many scholars cannot respond our survey by self-respond survey. We use many tools, techniques and time to collected the data. SWOT analysis was used for analysis the data.

Step 3 validate data: the online focus group among respondent was used to validate data on 9 May 2021. SWOT analysis data was discussed and rewrite the data by the respondents and stakeholders.

Step 4 national conference: national conference was organized on 2 June 2021 to confirm the situation and explore the ideas for next step. 83 academic speakers and many scholars from many universities in Thailand were attend our conference.

Step 5 sharing experience: reginal meeting among university member of this project was conduct on 18 August 2021 for analysis the data and develop the final report.

A SWOT analysis focuses on the four elements of the acronym, strengths (S), weaknesses (W), opportunity (O) and threat (T). Strengths (S) and weaknesses (W) refer to internal factors, which are the resources and experience readily available to project. External forces influence and affect organization, project and individual. Whether these factors are connected directly or indirectly to an opportunity (O) or threat (T), it is important to note and document each one. So, external factors are typically things project do not control. (See table 34) Additionally, the data from individual survey was separate from institution data.

Table 34 SWOT analysis

	Favourable	Unfavourable
Internal	strengths (S)	weaknesses (W)
	What are our strengths? What do we do better than others? What unique, capabilities and resources do we possess? What experience do us have? What do others perceive as our strengths?	What are our weaknesses? What do we competitors do better than us? What can we improve given the current situation? What do others perceive as we weakness?
External	opportunity (O)	threat (T)
	What trends or conditions may positively impact us? What opportunities are available to us? What else can support us to increases effective?	What trend or conditions may negatively impact us? What are our competitions doing that may impact us? Who are our competitors? What impact do we weakness have on the threat to us?

Analysis of survey data including findings

Demographic profile

Table 35 Demographic of Participants

	Frequency	Percent
Gender		
Male	19	59.38
Female	13	40.63
Age		
20-30	1	3.13
31-40	13	40.63
41-50	12	37.50
51-60	5	15.63
>60	1	3.13
Position		
Senior Researcher/ researcher	4	12.50
Research assistance	2	6.25
Lecturer	23	71.88
Academic admiration in Faculty /university (Dean or vice president)	3	9.38
Representative of		
Institution	5	15.63
Individual	27	84.38
Research area		
Nature science	12	37.50
Social and Humanity science	20	62.50
Role in project		
Leader	22	68.75
Project manager	1	3.13
Researcher	8	25.00
Assistance	1	3.13

The respondent's demographic was showing their summarized details as table 35. The majority of respondents were male, 59 %, and most were between the ages of 31-50, which was the working age, about 72% being lecture and about 9% being the academic administration of the university.

From table 35, 84 % responded in individual and another 16 % responded on behalf of an institution or university. However, 63 % of the respondents were from sociology and humanity. The most respondents were project leaders, 69%, 25% were project researchers, 3% were project managers and project assistant.
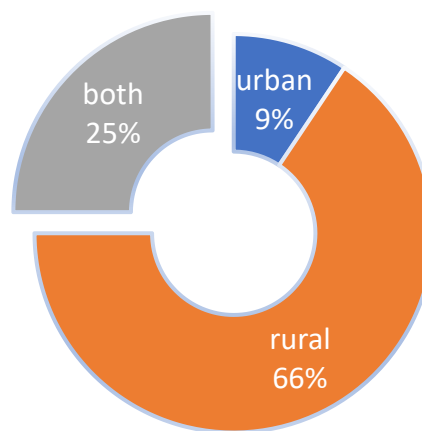

Figure 20 Six study areas of case studies

Most study area are in rural area 66%, only 9% are working in urban area and 25% are working in rural area and urban area. (Fig. 20) This very interesting that all HEIs are in urban area 31% of research and activities are in urban next to university but 91% are working in rural area.

When asked about the people involved in the project or activities, in Table 36, it was found that most of the projects worked with local authorities (14), followed by community (10) and school leaders (10)

Table 36 Stakeholders who were involvement in project

Stakeholders	Frequency
Local government	14
Schools	10
NGOs	6
Community leaders	13
Businesses	5
Women's association	2
Workers' union	1
Farmers' association/cooperatives	4
Elderly	2
Youth & child	4
Adolescents	6
Family	3
Local university	2
Police	1

Regarding the relevance of the SDGs in table 37, it was found that when using the data of each university to create relevance, it was found that Goal 10 had the highest number of people working involved, followed by 11 and 4. Many universities are involved in all aspects of the SDGs such as Thammasat University, Silpakorn University and Chiang Mai University, but since the survey does not cover all departments in each university, the answer to this issue may be incomplete. We can assume that some universities have also dealt with all issues in the SDGs.

Table 37 SDGs concentration from each HEIs projects

HEIs	SDGs																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Chulalongkorn University	■	■		■			■		■	■	■	■	■		■		■
Thammasat University	■	■	■	■	■	■		■		■	■	■	■		■	■	■
Mahidol University	■	■						■		■							
Silpakorn University	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■
Srinakarintarawirod University										■							
AIT					■					■	■						
Chiang Mai University	■	■	■	■		■	■	■		■	■	■	■		■	■	■
Chang Rai University	■	■						■		■	■	■					
Majeo University				■													
Prince of Songkla University			■					■		■							■
Mahasarakham University				■						■		■					
Khon Kaen University	■		■	■		■	■	■		■	■	■	■	■	■	■	■
Ubon Ratchathani University	■		■	■		■	■	■		■	■	■			■	■	■
Wongchuwaritkul University			■							■							■
Total (14)	**8**	**6**	**7**	**10**	**4**	**5**	**7**	**7**	**4**	**12**	**10**	**8**	**5**	**4**	**6**	**5**	**8**

SWOT Analysis

       This section will identify SWOT from each participant, individual and institution.

SWOT for individual Case

       In the case of individuals responders with a greater number than case of institutions, it was found that in terms of strengths, most researchers and professors are willing with passion and want to do that research on their own. Some of which already have relationships between the communities they work with. Some responders have worked together with community before leading to building or knowing community's needs and developing a project under that need. This kind of project or activity is often highly recognized, participated and engaged by community members. The high impact output and outcome was come from need assessment approach between community and researcher.

       While the weakness of working at the individual level was found that, limitation budget is always address. Lack of supported or supported in small numbers of individual projects are limit project output. This is not only unsustainable as it is a short-term project or year-to-year project that often depends on funders but also lack of resources to run project. In some cases, it is found that researchers or professors use their personal budget to conduct research projects. Some project was supported by small budget from the community. Most of them are small research projects and limited when expanding the working area. In addition, another ongoing problem which is important for small projects with low budgets is the limited number of staffs. Some case, the small project does not get the attention from researchers or other professors because they are very specialized.

       The opportunities are arising in three main areas. The community or group are need someone to solve their problems, so their work are focuses on meet the needs of the community. Therefore, there is a high possibility that the working area can be extended to other relevant communities, school and local authorities. In the past four or five years, there are many HEIs in Thailand that have adopted SDGs as a HEIs policy. Therefore, the opportunity for HEIs supporting and Government supporting are more open, such as research grant from National Research Council of Thailand which related to SDGs are higher.

Table 38 SWOT of individual Case

S	W
- Researcher's strong willing (passion & inspiration) - Community demand + Researcher supply - High level of community participation => Visible Benefits	- No Funders / Limitation of Budget - Non-sustainable research project - Lack of project staff - Limitation of project extension to areas located far from researcher's office
O	T
- Gaining interest from local governments - Research collaboration with new community or school or other organization in community. - University engagement was main activities for USR, staff might be supported by university. - Government unit adopted SDGs in to policy plan and setting grant for sustainability issue.	- By Covid-Lockdown, governments and/or university do not allow the researcher to conduct field work research. - The university prefer academic publications as researchers KPIs rather than PAR in community level. - The university defines research impact based on area scales and numbers of institutional collaborations. Small scale community research is perceived as small impact research. - The university assigns more administrational jobs to researchers. - New funding.

The threat is an issue that has received a large number of opinions. Almost all of which are involved at the HEI or university level and the national policy level. At the HEI level, it was found that The HEI KPIs focuses on publishing rather than social services. However, KPI in social service is depend on high-impact output with a large number of stakeholders more than a small community. While personal duties are not only teachers and researchers but also include varied activities, meeting, student consultation, attend conference, etc. In addition, in the covid situation, working with the community is difficult. due to part of the university's policy on the safety of personnel, the community does not want outsiders to enter the community because of the epidemic. Many research project can't conduct. On a larger scale,

budget constraints such as year-to-year project were also found. As a result, it is not possible to develop long term research for more effectively result. The country's research budget constraints in the past three or four years have significantly decreased. The issues listed above are the main problems that have caused a sharp decline in community research over the past five years. Not counting the inequality proportion of research between the nature sciences and the social sciences and humanities.

SWOT for institution Case

Institutional cases are quite clearly different from individual-level cases. The strengths of the institutional level, it was found that institutionalism was very useful because it receives financial support from the university or HEI on behalf of the faculty status. At the same time, output can be counted as indicators at the institutional level according to the HEI or university's policy. People working in a faculty or institute will have the ability to work together because they have to work on behalf of an agency and are considered as a measure of a person. Moreover, in terms of asking for budgets or projects from outside agencies, it is more accepted than an individual. This makes it possible to have a large number of collaborative tasks.

Most of the weaknesses at the institutional level are factors that are difficult to control, such as research continuity. In terms of funding agencies, there is a limited understanding of sustainability, which makes research projects difficult and delayed. If researcher want to work in the long-term project in community, institution or researcher could generate knowledge for local authority and community because it will involve the cooperation, participation and budget for the operation the project. Study area of researcher was change from community study to other area, for example, online study or virtual study. So the numbers of researcher was drooping.

In terms of opportunity at the institutional level, it is a policy issue for HEI to focus on SDGs from a few years. So, many funding was open for submitted. COVID is an opportunity to work on new issues. Finally, the opportunity for the institution to build more cooperation with other institutions both inside and outside the university.

The three main threats that institutional were faces is a conflicts in the field study, limited participate from local authorities and national policies. Conflict will greatly impede the conduct of the research project. Some projects having to withdraw from the community because the conflict among the community members. Some project was interrupted by the

political issues in the area as well. Often times, project cannot be carried out because of political conflicts in the area. The worst problem that the institution level sees as a barrier is a very limited support from national research policy, especially in social sciences and humanities sciences.

Table 39 SWOT of institution- faculty -university

S	W
- Gaining both Financial and Personnel Support from the University - Community researches are counted as researchers/lecturer's workload for University Responsibility. - Strong collectiveness among faculty staffs - Funding from local governments / Good relationships with local authority - Foundation	- Short term research grant (year by year project) was the main barrier to strengthen community. - Some governmental staffs do not understand what is SDGs, which took time to communicate. Local authority staffs become main target to educate first. - Less community study prior project initiation (it was found later that there exists some conflicts in the community)
O	T
- SDGs as one of the main university policies - COVID issue - More collaborate form other HEI.	- Community conflicts affect the project effectiveness. - Even related policies, some local authorities do not participate or support research project. - National research policy was limited to support in Socia science area.

In conclusion, the SWOT analysis between the individual and the institutional level found that there are quite differences. As an institution with access to more resources than individual, it can operate with greater resource support than an individual level. But in terms of passion of researchers, individual level is more than institutional level. Moreover, individual can keep in touch the issue more than institutional while the impact is to smaller than huge project with high funding and project staffs.

National conference

The webinar organized virtually by Human Security and Equity, Social Research Institute, Chulalongkorn University, Thailand, under Development of a framework for the local implementation of the SDGs – Phase II on June 02, 2021 gathered 83 speakers and participants.

With keynote speech live session titled; "Higher Education in the New Normal World towards Building a Sustainable Future" by Dr. Krisanapong Kiratikorn, President of Kasetsart University Council, underscored the inequalities and difficulties among poor and rich students to access to education, "Poor children rarely completed their education even for free due to lack of foods and travel expenses. Covid-19 is making more poor children dropped out of the school system. What schools or universities have to do is to find those children and help them stay in the school system." He added. Disruption issues in his speech referred to technology stagnation or digital disruption will change the world and change education, and birth of a non-degree or micro-degree where subjects are less study but really meet the needs of the market. The stagnation caused by COVID-19 has resulted in greater inequality in almost every aspect of education, health, and works. Not all groups of people are equal, both regarding recovery from COVID and how to live in the future where we are entering an aging society.

Another keynote speech gives by Prof. Deepak Sharma ProSPER.Net's Board Chair, mentioned that; The Covid-19 pandemic has forced us to redefine the crisis. This crisis affects every sector, including higher education institutions, and it has raised questions about its relevance and existence. The challenge of self-recovery is extremely difficult and leads to a review of our old paradigms, old ways of thinking, and the will to adapt. The overall crisis response has to focus on the response to the virus, how to produce the vaccines and where to vaccinate, not a response to the social development direction. The reason is that the education system focuses on efficiency values inconsistent with sustainability emphasized that human beings are an economic race, supernatural taking advantage of the natures. Therefore, the role of higher education we need metamorphosis to transform the relationship we have with the nature. Our region is biodiverse and home to original civilizations. Orientation of the education system and socio-economic system to deal with the crisis is a must for returning to sustainability. If higher education does not, who will be responsible for this humanity? Are we willing to accept this challenge?

For the virtual plenary session, policy dialogue, and panel discussion, Prof. Surichai Wankaew, Director of Center for Peace and Conflict Studies, Chulalongkorn University, has concluded that; In fact, under Covid-19, all parties are called upon to adjust their attitudes where with the Sustainable Development Goals (SDG), also called on humanity to adjust its collective attitude to live in a world with limited resources. Therefore, the dialogue must be organized in such a way that one country does not take advantage of another. Of course, moving towards to the future together there are both management issues and problems along requires an exchange of diverse of knowledge, experiences, and solutions with mutual understanding and trust. Politics is not about the exercise of coercion alone; it is a space where original ideas can be discussed to check which one is right and which one is wrong. The evidences should be more likely to be heard, space of freedom and the openness for discussion have to be uncovered. If we ignore the emotional inequality and only care about income inequality, it will prior lead us to focus on solving material problems, mental disparity and later this is how they fill the gap of mutual distrust and turned into a clash between generations. If we use little knowledge, limited mutual understanding, and exercise more power over each other, the society will be trapped in a cycle of conflict and reproducing more distrust among each other. Therefore, the role of the university is not just a machine for value-adding to the society, it should be a place where space being provided for discussion and sharing solutions.

Discussion

HEIs policy; SDGs community engagement is a university policy

Many university staffs can engage community through research projects and practice activities with community with university supporting. Education and research are explicitly recognized in a number of the SDGs and universities have a direct role in addressing these. University role not only learning and teaching, research and organizational governance of university but also making leadership outside university too.

In the past, members of the university have worked for themselves on their own duties and needs which both works related to SDGs and not related. In a decade, university policies became more responsive to SDGs, the working patterns of university members began to shift and work on issues related to SDGs in community level. This is partly due to the university's policy of working with the community around the university in the name of USR.

However, a whole-of-university approach is essential and universities can use the following Steps to start and deepen their engagement with the SDGs as 1. Mapping what they are already doing, 2. Building internal capacity and ownership of the SDGs, 3. Identifying priorities, opportunities and gaps, 4. Integrating, implementing and embedding the SDGs within university strategies, policies and plans and 5. Monitoring, evaluating and communicating their actions on the SDGs (SDSN Australia-Pacific 2017) As many HEIs in Thailand like Chulalongkorn University, Thammasat University or others HEIs were act in stage 1 to 4. So, many HEIs in Thailand are in transitioning phase to a SDGs' s university.

Thus, the gap between institutional project and individual researchers' projects; institutions can access resources more than personal. How to close the gap? It is clear that working at an individual level has barriers to accessing both university resources and external resources. Therefore, closing the gap in the HEIs is the role of universities to meet a successful in the implementation of SDGs. Under the HEIs policy, they might develop a working platform that can integrate individual workers into faculty work. An example of the Faculty of Science at Chiang Mai University show that platform for all faculty members to share their works are success because members can deliver their private KPI while Faculty can deliver the KPI to university too.

The bottom-up approach and SDGs implementation in community

Research questions from community or problem base approach is the main point to meet SDGs community engagement. In the past, the SDGs in Thailand has focused on matching the KPI's number of 17 goals. Government agencies are taken responsible for each goal without emphasizing the involvement of the problem owner. Although many studies suggest that working together is a way to achieve the Sustainable Development Goals. Therefore, the creation of partners in Goal 17 is one of the roles of universities in implementing the SDGs. Many university were seen address community need by they often react without network of the other influential actors such as NGOs, industry (Neary and Osborne 2018). In addition, the cooperation found in this survey confirms that multisectoral work contributes to make it more sustainable.

Stakeholders in community can support university to matching their need and develop the project or activities. Building cooperation at the community level or building cooperation

with the problem owner is another strategy that can be developed to create sustainability in solving problems at the community level. This is because the search for community problems or community needs will be a guarantee of cooperation in work and will eventually become community work when researchers withdraw from the area.

The last point for working with community is the technical term of SDGs. So, how community understand and meet SDGs? University role to facilitate SDGs understanding. The academic languages along with official languages of SDGs are difficult for community members and local government agencies to understand. Therefore, working process with the community has always been a problem and delay. Several studies have suggested creating a new word that communities and people outside of the academic area can understand those technical terms. Therefore, the role of the university, in addition to creating sustainability with other agencies, also means creating a knowledge set of language on the term of sustainable development for lead the society to truly achieve sustainable development goals.

Main challenge: Transitioning HEIs from Unsustainability

Main challenge of HEI is unsustainability supporting. From the threat and weak in SWOT analysis show abundantly of hampers. Many university staffs agree with external factors as funder, project timing was obstructed their community engagement. Year by year funding is the most important point that all university was faced. Additionally, limited funder who interesting sustainability development issue was the second point that hinder research with community and community engagement activities.

National educational policy in Thailand focusses on the innovation and basic science more that social sciences. Inequality among researchers was make community research feeble. Research mainstream in Thailand is not the SDGs issue and language barriers are the problem for Thai scholar to access the international funding too. Some scholar from small university with limited resources was accessible only small grant or non-access.

Moreover, not only lack of capacity of higher education institutions (HEIs) to integrate the principles and practices of sustainable development into all aspects of education and learning, but also research with the community was hampered the capability to act as an entrepreneurial university (Elena et al. 2018). HEI can strengthen the interface between research findings and decision-making using evidence-based data, as well as problem-based scientific research but university's KPI was counted by academic publications more than

problem base research or activities in community. The university competition was main issue for university policy. The number of academic publications becomes the most wanted for the university to claim for the world ranking. So, HEI is not only excellent for carrying out cutting-edge research, and that other aspects such as commitment to society should be included in the assessment of a university's activities (Boni, Lopez-Fogues, and Walker 2016).

Conclusion

The roles of HEIs in SD and SDGs are very important. Teaching and learning and research are the key role of HEI but new university's vision is expanded to other missions (Sánchez-Barrioluengo and Benneworth 2019). They are serving as knowledge producers, teach and are agents of exchange in a society (Etzkowitz et al. 2000). Though they provide the requisite research, knowledge and a highly skilled workforce (Badat 2010) and one of the major roles of higher education is clearly to meet the socio-economic needs of the state and the country. To meet SDGs, role of HEI was related to society and community engagement (Hazelkorn 2016). In Thailand, research is the key role of HEI to apply SDGs implementation in community level. Several scholars who work with community are the problem base approach and activities while teaching and learning from community is the target not only in social and humanity science but also in natural science too. Alternatives electricity for community project project in South of Thailand is a Participatory Action Research project with community members and herb directory in Chiang Mai village in North of Thailand is research which bases on community wisdom. Furthermore, many field studies in social subjects were selected rural and urban areas for students to learning from community as same as the thesis topic in Master degree and Ph.D. degree. The practice from Thai academics agrees that even though the SDGs is the university policy but universities are still stuck with the number in KPI more than the quality of work

Project funding is a significant factor for reach the SDGs from HEI role. A small amount of research project was accessed which bases on community base approach. Unsustainable funding hinders community development by HEI research activities. However, some scholars continue their research with strong will by their own budget or lower budget to run their project. The institution project was better than the individual project because the institution can access resources.

Finally, HEI roles in SDGs are increasing for more decade and expanded more than teaching & learning and research. Internal and external factors can support and obstruct HEI to meet SDGs. One challenge of HEI in not only how to improve their roles to sustain society but also need partners to support their vision. Community, civic and government are the best partners for HEI to sustain the role. The trap of publication KPI is another challenge for HEI.

Acknowledgment

References

Badat, Saleem. 2010. *The Challenges of Transformation in Higher*. the Development Bank of Southern Africa.

Boni, Alejandra, Aurora Lopez-Fogues, and Melanie Walker. 2016. "Higher Education and the Post-2015 Agenda: A Contribution from the Human Development Approach." *Journal of Global Ethics* 12(1):17–28. doi: 10.1080/17449626.2016.1148757.

Du, Xiangyun, Liya Su, and Jingling Liu. 2013. "Developing Sustainability Curricula Using the PBL Method in a Chinese Context." *Journal of Cleaner Production* 61:80–88. doi: 10.1016/j.jclepro.2013.01.012.

Elena, Fleaca, Bogdan Fleacă, and Sanda Maiduc. 2018. "Aligning Strategy with Sustainable Development Goals (SDGs): Process Scoping Diagram for Entrepreneurial Higher Education Institutions (HEIs)." *Sustainability* 10:1032. doi: 10.3390/su10041032.

Etzkowitz, Henry, Andrew Webster, Christiane Gebhardt, and Branca Regina Cantisano Terra. 2000. "The Future of the University and the University of the Future: Evolution of Ivory Tower to Entrepreneurial Paradigm." *Research Policy* 29(2):313–30. doi: 10.1016/S0048-7333(99)00069-4.

European University Association. n.d. "Universities and Sustainable Development Towards the Global Goals."

Hazelkorn, Ellen. 2016. "Contemporary Debates Part 1: Theorising Civic Engagement." Pp. 34–64 in *The Civic University: The Policy and Leadership Challenges*. Cheltenham: Edward Elgar.

Neary, Joanne, and Michael Osborne. 2018. "University Engagement in Achieving Sustainable Development Goals: A Synthesis of Case Studies from the SUEUAA Study." *Australian Journal of Afult Learning* 58(3):29.

Sánchez-Barrioluengo, Mabel, and Paul Benneworth. 2019. "Is the Entrepreneurial University Also Regionally Engaged? Analysing the Influence of University's Structural Configuration on Third Mission Performance." *Technological Forecasting and Social Change* 141:206–18. doi: 10.1016/j.techfore.2018.10.017.

SDSN Australia-Pacific. 2017. *Getting Started with SDGs in Universities: A Guide for Universities, Higher Education Institutions, and the Academic Sector.* Australia, New Zealand and Pacific Edition. Melbourne.: Sustainable Development Solutions Network-Australia/Pacific.

The Times Higher Education. 2021. "World University Ranking 2021." *Times Higher Education (THE)*. Retrieved July 11, 2021 (https://www.timeshighereducation.com/rankings/impact/2021/overall).

UN. 2021. "Goal 4 | Department of Economic and Social Affairs." Retrieved August 14, 2021 (https://sdgs.un.org/goals/goal4).

Vaughter, P., M. McKenzie, Lauri Lidstone, and T. Wright. 2016. "Campus Sustainability Governance in Canada: A Content Analysis of Post-Secondary Institutions' Sustainability Policies." doi: 10.1108/IJSHE-05-2014-0075.

Chapter 8

Analysis and Synthesis

According to the HEIs roles towards SDGs implementation in local community, all researches from six universities including Keio University (Japan), TERI School of Advanced Studies (TERI-India), Universiti Sains Malaysia (USM-Malaysia), Universitas Gadjah Mada (UGM-Indonesia), University of the Philippines Diliman (UPD-Philippines) and Chulalongkorn University (CU-Thailand) will be demonstrated and analyzed in this report.

In the beginning, all research findings of each country will be presented and summarized. Afterwards the 'Integration of Community Engagement within HEIs Activities' Framework will be introduced as the analytical framework. Best practices of our studies will be categorized and envisaged. This chapter will be close with proposed recommendations and conclusion.

Overview of HEIs SDGs Implementation in Local Levels

The preliminary SWOT analysis of each country research group was presented in Table 1. Each dataset is unique according to each country context. Since the data source consists of diverse demographic characteristics and perspectives including institutional and individual level, the results of each country is noticeably dissimilar.

Nevertheless, the fluidity of SWOT framework provide the close association between the 'strength' and the 'weakness' factors obviously. Hence, if any 'weakness' evidences in one country could be mitigated, it is already confirmed of being the 'strength' evidences in other countries. Conversely, the lack of a 'strength' evidence in one country, it is designated as 'weakness' evidence in other countries.

Moreover, while most countries face with the same 'threat' evidences, various 'opportunities' are proposed constructively.

Table 40 Summary of SWOT Analysis Results

Country	Strength	Weakness	Opportunity	Threat
Japan	• Funding • Networks / Multi-Stakeholders • Multidisciplinary • SDGs Awareness	• No Common Goal Among Stakeholders • Short-Term Funding • Opacity of Private Sector Data • Lack of Diversity	• Development of a HEIs curriculum on SDG • New researches based on available experiences and networks • Collaboration to develop resources supporting HEIs Community Engagement	• Funding Shortage • Quantitative Prior Qualitative Impact • Bureaucratic measures limiting resources
India	• Community Engagement Strategy (Vision + Mission + Plan + Budget) • Community Needs / Problem-Based • Multi-Stakeholders • Curriculum Embedment	• Unrecognized C.E. Workload (Informal, Invisible) • Mutual Distrust between HEIs and Regulatory Authorities • Lack of Funds (institutional, local/national government) • Inadequate Interdisciplinary Collaboration, Learning and Understanding Required for Sustainable Engagement • Overlook of Embedded Engagement / C.E. Impact	• Innovations: social entrepreneurship, multi/interdisciplinary, multi-collaboration • Trust and Reputation: HEIs reliability and integrity; reinforcement of gender equality, social equity and inclusive societies • Digital Age: Leveraging IT and closeness to the local communities • Disaster Responsive C.E. Knowledge • Network with NGOs/CSOs: Participation Enhancement • Recognition of C.E. as Institutions Missions	• Funding Shortage • Missing trust • Vulnerable Population Inaccessibility by Disaster • Unrecognized C.E. Impact by curricular activities • Lack of Staffs causing by unrecognized C.E. Work • De-commoditization of C.E. centered courses • Clash between government and institutions

Indonesia	• Funding • Directorate of Community Services (DOCS) • SDG #3 (Good Health and Well-Being) Focused • Diverse Local Communities • Targeted Vulnerable Community • Multi-Stakeholders • Community Well-Being • Trust between Researchers and Communities • Promotion of Community Services through various Communication Channels	• Limits of Communication and Interaction (Pandemic) • Few Impact Stories Promoted by Academic Publication • Struggle of Creative Methods • Rigid Response of Researchers to Disaster • Changed Community Needs by Disaster • Non-responsive to Community Need • Time Required for Gaining Trust and Acceptance from Community • Non-Conformity with HEIs KPI • Bureaucratic Budget Management	• Community Services Promotion by Local Media • More impact by expansion of targeted communities • Collaboration with Alumnae with support of DOCS Grant • Coaching programs for researcher (integrated community service model) • Government as a Supervisory and Guiding agent for Sustainability of Program • Reduction of Repetitive Programs and Increase Access for Community in Need	• Information Illiteracy • Community Distrust to Researchers • Abrupt Discontinuity • Community Fatigue because of long period struggles • Funding Shortage
Thailand	• Strong Researchers Will • Community Needs Based • Community Participations & Empowerment	• Lack of Funds / Limit of Budgets • Short-Term Project • Scarcity of Community Engagement Researchers • Inequitable Geographical Distribution of HEIs	• Gaining Interest from Local Authorities • Research collaboration with new community / school / organization in community • Community Engagement as the University Responsibility	• Limit of Data Collection causing by Mobility Limits by Disaster Period • Acceptance of Academic Publication Prior Community Engagement Research • Small scale community research as small impact research

			• Adaptation of SDGS in local authorities policy plan with budget plan	• More administrative job for researchers • Exclusion of Sustainability Research from At-The-Edge Research Roadmap
Philippine	• Equitable Geographical Distribution of HEIs • Largest Government Budget Share (among 114 HEIs) • Largest Leading Public Hospital • Community Services as Formal Workload • Community Affair Offices	• No HEIs Mechanism for SDGs Implementation • No SDGs Roadmap / Strategy • Less Recognition of C.E. Work	• Gaining Interest from Local Authorities • Participation of NGOs in HEIs community service courses • Contribution of HEIs graduates to communities	• Funding Shortage • Decline of HEIs community-oriented service • Centralization of HEIs Governance
Malaysia	• Grant opportunities • Policy support • Pool of Experts & their Resilience • Facilities and infrastructure management • Repertoire of students and staff • Institutionalized Leadership • Reputation, location and prior network	• Financial mismanagement • Mismatch of aspiration and available structures • The demand for more facilities and physical support • Bureaucratic procedure • Working fatigue • Exclusive database • Specific training and professional development	• External funding and policy • Database of the targeted community • Location nearby to the targeted community • Volunteers and person-in-charge • Community leaders and driver • Diverse culture • Virtual ecosystem	• Diverse culture and needs • Communication barrier of marginalized group

Integration of Community Engagement within HEIs Activities' Framework

For a long time, two core missions of HEIs have been teaching and research. Since the 1980s, the debate of the 'third mission' was increasingly intensive among HEIs. The concept of 'engagement' was proposed as a way of articulating and structuring how higher education interacts and organizes its relationships with society (Hazelkorn, 2016). Therefore, both academic staffs and students are obliged to conduct activities in accordance with those HEIs missions.

Though, sustain community engagement could take place only after it is integrated with both teaching and research activities as well as structures and policies of HEIs (Holland, 1997; Kellogg Commission, 1999; Hollander, Saltmarsh and Zlotkowski, 2001; Watson, 2007; Garlic and Langworthy, 2008; Furco et al., 2009; Goddard et al., 2016; Benneworth et al., 2018).

A number of community engagement tools have been established. One of them is TEFCE toolbox, whose central thematic dimensions are teaching and learning, research, service and knowledge exchange, student initiatives, university-level engagement, university-level policies and support structures and supportive peers (Farnell et al., 2020).

Although the university-level engagement is emphasized as an essential factor, the participation of HEIs students within is a critical factor for future sustainability (Farnell, 2020). Activities within the community engagement process will cultivate young generation's aspiration, which direct them towards sustainability goals.

Our analytical framework emphasizes predominantly on HEIs activities involving teaching and learning, research, service and knowledge exchange, student initiatives (Figure 1). The concept of the integration of community engagement within four aspects of HEIs activities are described as followed:

i) **Service and Knowledge Exchange**: Provision of academic consultancy and capacity-building programme for community groups and contribution of expertise in socio-economic, political and cultural debates.

ii) **Student Initiatives**: is students directly address the needs of external communities by launching their own community engagement activities, either via student organisations or through activism and advocacy initiatives.

iii) **Teaching and Learning**: The community-based learning is combined with the teaching methodology through classroom instruction, community service provision, student reflections and civic responsibility.

iv) **Research**: The community-based research is a collaborative form of research that addresses a community-identified need, validates community knowledge, and contributes to social change.
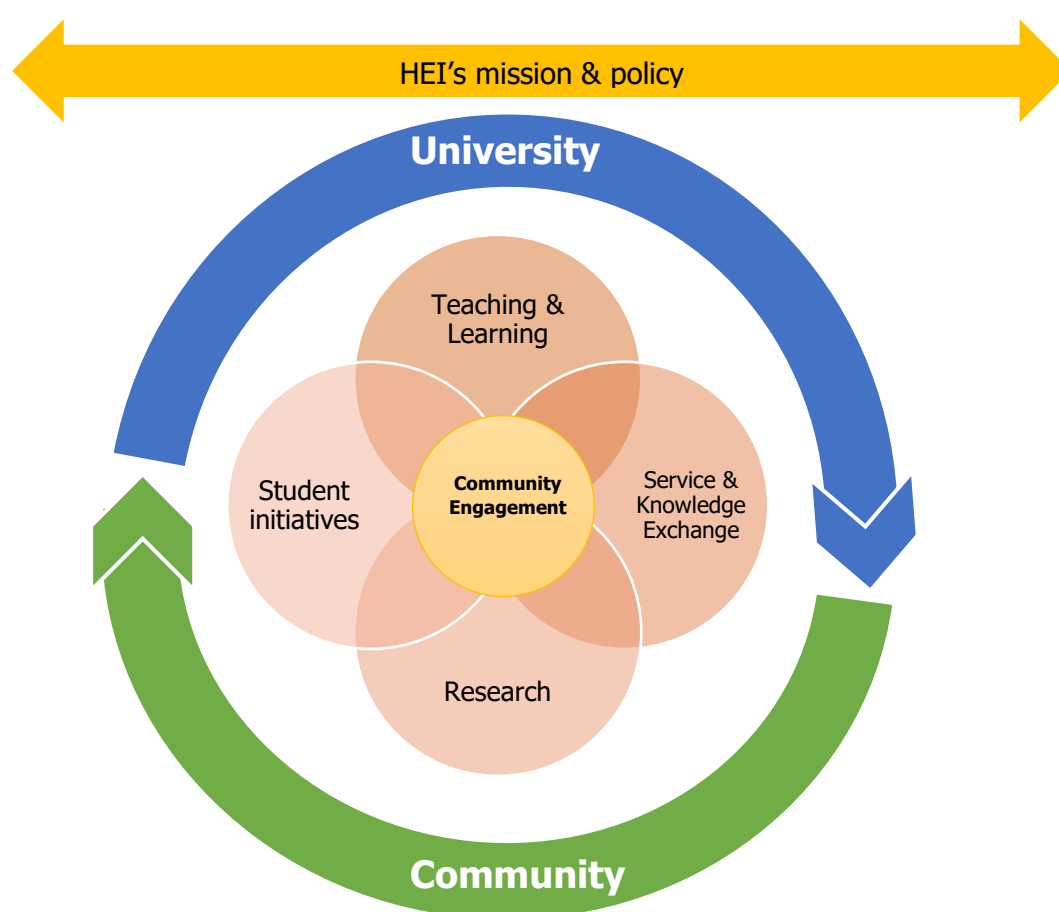
Figure 21 HEI roles and community engagement framework

Since the goal of sustainable development of community is the community well-being, the implementation of SDGs in local level put an emphasis on the community need. Both participation and empowerment approaches are required in each activities of community engagement. As the HEIs provide services and the communities offer learning space, their mutual 'give and take' relationship enlarge space of trust and respects.

All six country research reports exhibit that the community engagement in HEIs becomes the central goal of a novel form of HEIs.

Since the vital mission of HEIs is still *teaching and learning*, all universities have incorporated community based learning within the curriculum and developed training courses in response to community need. Engagement with schools, community leaders, local wise men/women and affected people has turned into an important part of education.

The growth of applied *researches* is the result of research questions developing on numerous community issues. Social issues have get more attention from the research community. The application of science and technology aims to seeking resolution for social problems.

Simultaneously, some university's lecturers and researchers provide community policy dialogue facilitation and policy recommendations grounded with participation and empowerment approaches, which intensify HEIs role of *service and knowledge exchange*.

Besides, from each country research report it is outstandingly that in many universities student councils, student clubs and student interest groups have participated with communities as a part of University Social Responsible (USR). By the community nearby university, students have contributed in protection of community belief and cultural. By the community of vulnerable informal workers within university, student groups have collected interviewed information and proposed a set of fair employment recommendations to the university authorities.

HEIs Roles Towards SDGs Implementation in Local Community

Based on our retrospective studies according to the local implementation of the SDGs s in six countries, apart from four fundamental HEIs roles, supportive factors both internal and external are essential for sustaining collective achievement of SDGs. Internal factor requires a strategy, which specify missions, stakeholders, tactics and budgets to support community engagement activities. External factor calls for supportive resources and atmosphere to maintain sustainability and efficiency of community engagement works (Watson, 2008).

A collection of HEIs best practices from six countries are presented in Table 2. (see HEIs Best Practices towards Community SDG Collection report)

Table 41 *HEIs Best Practices towards Community SDG*

Practices / Country	Teaching & Learning	Research	Service & Knowledge Exchange	Student initiatives	HEIs Policy	Challenges
Japan	• Learning from community	• Community based • Research grant for SDGs research	NA	NA	• SDGs in university policy	• External grant
India	• Field work in community • CE embedded in curricula of various disciplines.	• Community based • Supporting KVIC by training artisans.	• SUN Program • Upscaling Community Forest Resource (CFR) Rights and governance in India PhD Scholars' projects and research forays.	• Covid Task Force; student project with vulnerable e groups • DHWANI rural info. System; Ekta Nagar project; blood drives, etc. (IRMA).	• SDGs mission (Unnat Bharat Abhiyan) • SDGs policy (action plan & budget) • National policy & organizational support for CE (NSS) • Leadership and mission/vision of the HEIs.	• National policy & organizations support Community Engagement • Inadequate financial support/budgetary enabling • Disconnect between the larger programme goals and the community's needs. • Possible friction between the local cultures, and the institution.
Indonesia	• Education for Sustainable Development (ESD) programs	• Mechanism responsible for community SDGs	• Community service as obligatory program for university staff • Training as empowerment	NA	• University mission & practice • CE & SDGs unit • Special track funding	NA

Malaysia	•Embedded into Curricular (Course, assignment & project) •Specific course, training & workshop on SDGs	• Research Grant on CE • Adhere to the systematic reporting	• Policy for service learning at national level • Knowledge transfer through scale up project	• CE as part of Extra-curricular activity & student volunteerism • Student Internship	• USM Sustainability Policy	•Liaise the bureaucratic procedure of different partners
Thailand	•life-long learning program for everyone •Field work, Thesis topics, course session, study program related to SDGs & CE	• Community based • AR&PAR approach to solve community problems	• USR program around campus • Blend in the academic job assignment	• student council project (TU, CU) with vulnerable e groups • student volunteer work with the community or cultural groups around the university	• SDGs in university policy • Set up SDGs unit under university policy • University's networking for SDGs co-working platform Student's internship with SD partners	•joint task force with industrial and civic sectors •joint funding for research grant
Philippine	NA	• Research funding for university	NA	NA	NA	NA

Teaching and Learning Towards Community Sustainability

In Japan, community engagement has led to curriculums, which assist teaching and learning to have a deeper understanding of community issues and pave the way for the sustainable development in community level. In India, the University Grants Commission (UGC) has introduced a national guideline for school and universities to integrate the community engagement within curriculum.

All of countries research reports highlights the significance of breaking down the knowledge silos and stepping to multidisciplinary teaching. Various types of integration community sustainability study within curriculum are: (a) in one of course session; (b) as a course; (c) as assignments and thesis topics; (d) as a study program; (e) as a non-degree program and training courses. Evidences from five countries reports (India, Indonesia, Japan, Thailand, Malaysia) point out that the integration of community sustainability study as a study program (d) has a high level of prioritization. While TERI (India) offers the Education for Sustainable Development (ESD) programs as a non-degree program for partners from primary and secondary education, campus communities and other HEIs, CU (Thailand) provides CUVIP as a short training program for everyone who interest in lifelong learning. Besides, Malaysia have integrated community engagement in most of teaching and learning activities (a, b, c and d).

As indicated in India and Thailand research findings, field trips have cultivated educational and aspirational experiences, since communities are rich learning laboratories. although students' academic performances are verified by their reports, reflections and discussions connecting their real life experiences with theories have facilitated them to practice critical thinking. While this field trip tradition is found in sociological and anthropological education globally, education of natural and applied sciences tend to provide more community services. As medical students hold community health screening, they have gained understanding about health inequality. As pharmacy students provide counsel services during community pharmacy clerkship, they have learned about health promotion provision. As engineer students observe, listen to and incorporate innovation to both community problem and solution, their innovation ability has been developed.

Student volunteering is combined with teaching and learning activities as well. In India and Thailand, lecturers could provide alternative students assignments to make a community

field trip and count those time as course sessions. In India, the National Service Scheme allows student to complete a number of hours during an academic year by volunteers work in villages, slums, and other voluntary communities.

Although teaching and learning towards community sustainability is main responsibility of HEIs, collaboration between HEIs with community, non-governmental agencies and policymakers are inevitability. The promotion of community engagement requires numerous participatory works between HEIs and communities including data collection and curriculum development. Providing community services requires substantial supports from non-governmental agencies working closely and continuously with community. The case study of India indicates that policy supports from both universities and educational authorities are necessary as well.

Community Based Research

All six country research reports confirm that countless HEIs community based researches have already taken place for a long time. With different levels of engagement, those researches consist of participatory researches, action researches and participatory action researches (PAR). Since doing research with people and community with sustainability and community livelihood as a goal, many participatory methods, tools and techniques are required

UGM, Indonesia has developed a research program called 'Community Service Program Activities Based on the Utilization of Research Results and Application of Appropriate Technology', whose aim is tackling local problems, improving performance and independence of rural and urban community groups. Furthermore, research evidences from five countries (India, Indonesia, Thailand, Malaysia) demonstrate that the community based researches have contributed to community problem resolutions and have been developed as a guideline to working with other communities as well.

The nature of community based research calls for collaborations among multi-stakeholders consisting of community members, community leaders, school, local authorities, governmental and non-governmental agencies, policy makers and civil society. Although diverse research scales involving household, community, regional and country level, the application of community based research is committed to problem solving and adaptation to

community and household nature with consideration of strengthening community and facilitation of community learning.

Community Services and Knowledge Exchange

Several universities have distinctly designated their academic staffs to provide community services. As community service provision is an obligatory program of UGM, Indonesia, all lecturers and researchers have formal duties to deliver community services activities. However, though without regulations, several guidelines and best practices for community service provisions are generated. CU, Thailand offers knowledge distribution program and/or communication with community and society in various ways.

The sustainable development promotion is another responsibility of HEIs. The survey result report of TERI, India points out that facilitation of dialogue on sustainable development is one of the effective role of HEIs. The promotion of sustainable development makes the connection between communities and policy makers and assist the collaboration in response to community need. In order that, communication about sustainable development is not only writing academic publications, but mostly public communication to diverse population groups.

Moreover, some HEIs delivers community services in the form of trainings program. An example of UGM, Indonesia is a capability development programs, whose objective is to empower villagers. Among four countries (India, Thailand, Indonesia, Malaysia), this kind of community services have transformed to action researches and workshops.

Student Initiatives with Community Engagement

Student initiatives has get a high level of attentions from research community as a crucial actor of sustainable development process (Drupp et al., 2012; Krizek, Newport, White, & Townsend, 2012; Sharp, 2002).

Globally, students initiate their own activities to assist community in health, well-being and culture.

In India, 8 students and lecturers of TERI establishes the 'Covid Task Force' assisting their people in response to the second wave of Covid.

In Thailand, the Student Council of Chulalonglongkorn University studied an impact assessment of university land development on tenants and communities around the university, whose location is in the central of Bangkok Metropolitan with highest land price. During pandemic lockdown periods, they interviewed university cleaners, who are outsourced employees with indecent working conditions. At the same time, the Student Council of Thammsat University established a set of recommendations to decent employment for outsourced security guards of universities.

HEIs Mission and Policy

The effectiveness of SDGs implementation in local level by HEIs depends considerably on their own mission and policy.

The leading missions of most HEIs are becoming leaders of both academic community and society. Although the concept of sustainable development was accepted in global level since the promotion of the MDGs in 2000 and SDGs in 2016 consecutively, the integration of sustainable development within HEIs mission is obscure. Nevertheless, since the historical backgrounds of some universities such as UGM in Indonesia and TERI in India associates with education need to tackle societal problems, the core university mission aims to community development. This led to full support of community engagement activities by university staffs.

As HEIs mission towards SDGs represents the commitment, transformation into effective action calls for a set of policies including action plan and budget. All public universities in Malaysia had established a dedicated office or institution that is responsible for promoting community engagement projects specifically such as Universiti Sains Malaysia's Division of Industry and Community Network. Some universities in Japan, Indonesia, Malaysia and Thailand designated university executives to take an obligation for SDGs implementation. Several universities in India, Thailand and Indonesia have established a working unit for SDGs or community engagement. Various kind of authorized mechanism for HEIs SDGs implementation provide a flawless working framework, collaboration with communities and other stakeholders, supportive resources including funding (as in Indonesia).a

In general, integrated SDGs within HEIs mission is a guarantee of SDGs achievement. A distinct example is the popularized concept of 'Green Campus' among Thai HEIs. The

majority of Thai universities, especially in Bangkok Metropolitan, have encourage the application of renewable energy transportation system in their campuses and the expansion of green areas in the form of new construction of public gardens.

All six country research reports confirm that HEIs mission and policy supporting sustainable development or community livelihood provide friendly and creative working atmosphere among lecturers and researchers with community engagement. In addition, during disaster period such as pandemic, HEIs could provide financial support for community health and well-being projects as promptly response to vulnerable population in the community affected by Covid.

HEIs Common Challenges

All country research reports have specified three key external factors threatening SDGs implementation of HEIs, which are funding shortage, new form of HEIs competition and centralized HEIs governance.

Every universities confess that their budget depends on external funding sources. However, the sustainable community development research has get more attention from funding agencies including governmental, private sector and international, which provides more windows of opportunity for research granting. Though, existing unsustain funding practice cause another problem.

A new form of HEIs competition emerged after comparison and rankings between individual researchers, research units, higher education and research institutions and countries were allowed for several decades. As a result, the international rankings have enormous impact on university leaders (Hazelkorn, 2015). Additionally, mainstream academic judgment is dependent on references based assessment, quantitative indicators and standardized processes, whose algorithm is believed to be objective, although its technically easy to manipulate the data in electronic form. Therefore, all HEIs become alliances of this new form of competition, which lead to quantified measurement of academic activities. Since university ranking relies on number of academic publications and number of references, community engagement activities towards SDGs have a low level of priority from university leaders. All country research reports reveal that community based researches are unrecognized by university

leaders, which leads to less incentive for lecturers and researchers to conduct community based researches.

In combination with the crave of success according to annual performance measures, the lack of understanding of SDGs implementation, especially the engagement with targeted vulnerable population groups, which requires more effort and time than general population group, have led to short-term period funding as normal practice of many research funding agencies.

Bureaucratic is the result of centralized governance of HEIs and the lack of collaboration towards the same goal, specifically SDGs goal. Hence, indicator for HEIs governance towards SDGs, particularly 'Partnerships for the Goals', could enhance collaboration among individual, institutional and international.
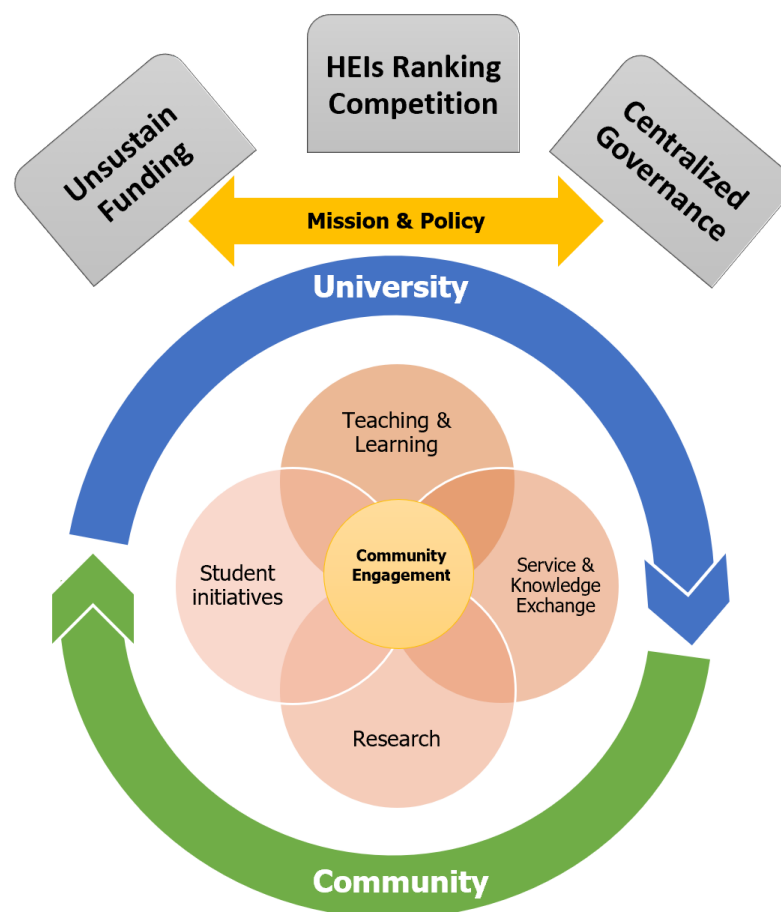

Figure 22 The HEIs Common Challenges for SDGs implementation in community level

Lastly, during pandemic disaster, HEIs with 'shock responsive' knowledge and infrastructure could continue most of their activities in four aspects. Lecturer and students have adopted online teaching and learning with financial support scheme from the university to maintain quality education. Several HEIs provide health services for community surrounded such as establishment of field hospitals, university isolation facility and vaccination centre. Some HEIs supports community based researches in the form of emergency assistance for vulnerable population group such as elder people, homeless people, migrant workers including women and children. Active students launch new initiative focusing on vulnerable working people in the university area. The long-lasting pandemic disaster will stay with us further and provide a great opportunity for HEIs to rethink deeply about recent development paradigm, which is not sustainable development.

References

Drupp, M. A., Esguerra, A., Keul, L., Löw Beer, D., Meisch, S., & Roosen-Runge, F. (2012). Change from Below—Student initiatives for universities in sustainable development at Universities: New Horizons. In *Sustainable Development at Universities: New Horizons* (pp. 733–742).

Farnell, T. (2020). *Community engagement in higher education: Trends, practices and policies* (p. 94). Luxembourg: Publications Office of the European Union. Retrieved from Publications Office of the European Union website: https://nesetweb.eu/en/resources/library/community-engagement-in-higher-education-trends-practices-and-policies/

Farnell, T., Ćulum Ilić, B., Dusi, D., O'Brien, E., Šćukanec Schmidt, N., Veidemane, A., & Westerheijden, D. (2020). *Building and Piloting the TEFCE Toolbox for Community Engagement in Higher Education*. Zagreb: Institute for the Development of Education. Retrieved from Institute for the Development of Education website: https://www.tefce.eu/toolbox

Krizek, K., Newport, D., White, J., & Townsend, A. (2012). Higher education's sustainability imperative: How to practically respond? *International Journal of Sustainability in Higher Education*, *13*, 19–33. https://doi.org/10.1108/14676371211190281

Sharp, L. (2002). Green campuses: The road from little victories to systemic transformation. *International Journal of Sustainability in Higher Education*, *3*, 128–145. https://doi.org/10.1108/14676370210422357

Watson, D. (2008). The university in the modern world: Ten lessons of civic and community engagement. *Education, Citizenship and Social Justice*, *3*(1), 43–55. https://doi.org/10.1177/1746197907086718

Annex

A. SWOT Analysis Results from 6 case studies

B. Tool: Questionnaire for institution

C. Tool: Questionnaire for individual and researcher

A. SWOT Analysis Results from 6 case studies

SWOT Analysis Results from 6 case studies				
Country	**Strength**	**Weakness**	**Opportunity**	**Threat**
Japan	1. Provision of funding from the university and other organizations (e.g., ministries, private sector) that help facilitate research activities. 1. Existing networks and networking capacity between the university as a research institute and diverse stakeholders, including local governments, NGOs/NPOs, and companies. 2. Ability to work with researchers and experts from various disciplines and backgrounds; this is especially important for addressing complex sustainability issues at the local level.	1. Different priorities among stakeholders often hinder goals/target alignment at the local level. 2. Short-term funding. 3. Lack of data disclosure (especially companies) when engaging with sustainability issues at the local level. 4. Lack of diversity.	1. Developing a higher-education curriculum on SDG implementation. 2. Ability to build up on past experiences and existing networks to explore new projects/activities in the future. 3. Collaboration to develop resources that support university-community engagement.	1.Funding cuts. 2.Prioritization of numerical performance over qualitative results when doing SDGs action at the local level. 3. Bureaucratic measures that could strain resources.

	3. High level of awareness among local stakeholders of opportunities and challenges related to SDGs			
India	1.Vision and Leadership: Presence of a dedicated department/centre /division that overlooks and promotes C.E. 1.1This includes an enabling leadership that not just supports C.E. initiatives but also prioritizes the well-being of its staff. 1.2A separate budget for C.E. activities. 2. Impact/Outcome: Tangible impacts that address the needs of a community like education, public health concerns, conservation, etc. 3. Stakeholder engagement: Diversity in stakeholder	1. Incentives/rewards: Lack of incentive for the time invested by the staff/faculty. No reward mechanism. No recognition beyond regulatory guidelines. 2. Relation with government: Scarce engagement between HEIs and regulatory authorities, often stemming from mutual distrust. 3. Funding support: Lack of funds at institutional and local/national government level. 4. Mode of engagement and sustainability: Interdisciplinary collaboration, learning, and understanding required for a sustained and sustainable engagement is inadequate.	1. Space for innovation: To promote social entrepreneurship, break disciplinary barriers, and further collaboration between academic and other communities. 2. Trust and Reputation: HEIs have greater acceptance among various stakeholders and their active engagement has greater potential to reinforce principles of gender equality; social equity and inclusive societies; their ethical stance also helps long-lasting relationship 3. Digital age: Leveraging IT and closeness to the local communities.	1.Funding: Inadequate funding. 2. Missing trust/Sustainability: Distrust and disillusionment within a community regarding the extent of material or immediate impact. 3.Infrastructure: Challenges in terms of access to people and communities and dissemination of information (e.g., during COVID infrastructure has come up as a limitation for particularly the economically and geographically disadvantaged groups) 4. Impact of C.E. through curricular activities overlooked. This may dissuade interested students.

engagement; HEIs not limited by geographical or technical challenges. 3.1Proactive engagement that targets community issues with ever evolving methods, which have the capacity to increase outreach (especially in the aftermath of COVID-19). 4. Curricular embeddedness shows sustained and deep engagement	5. Embedded engagement is overlooked and taken for granted, as C.E. is not an explicit goal of some courses. Impact that is being generated is lost.	4. Ways to engage and sustain: Building upon the "lessons learnt" during the pandemic, a future action plan can be charted so that C.E sustains even during unforeseen circumstances. 5. Network with NGOs/CSOs: can help in understanding and approaching communities; and in participatory planning 6. C.E can be leveraged as a strength and a differentiating factor for institutions to set them apart in the job ecosystem	5. Lack of incentives for staff supervising the "service learning" assignments can derail C.E activities if the supervisors feel that the gratuitous benefits are not worth the effort. 6. Market pressures and reducing student interest could make C.E. centred courses archaic. 7. Non recognition of C.E and its forms as a measure of achievement can have a subduing effect on zeal of the staff and others towards future C.E exercises. 8. Relationship with the government: Clash between government and institutional mandate for engagement might derail meaningful engagement.

| Indonesia | 1. The policy, strategy, facility, assistance, and fund support from the university

2. The human resource under the coordination of DOCS that support and facilitate the community service activities and administration

3. The community services activities performed have addressed all the SDGs, with SDG #3 (Good Health and Well-Being) dominating

4. The diversity of the local community whom professors worked with (see Table 5)

5. The locations of the community activities were dominated by places that require the most assistance and support, so it matches the program's target. (see Table 5) | 1.The limited communication and interaction as most of it was performed online due to the pandemic situation

2.Only a few of the impact stories that were published on the scholarly publication

3.Some professors thought that their community service methods were not exciting and seemed monotonous (not evolving)

4.Some professors were not ready with the sudden policy change of the community service activities due to the pandemic

5.Some programs did not answer the needs and the problems of the local community when the pandemic started striking

6.Some programs were not focused on activities area and | 1.Local media involvement in the future to promote community service works. The use of social media and modern enterprise video communications nowadays give a better opportunity in promoting community services to gain support from as many as possible stakeholders

2.The broader impact of community service activities can be reached with the expansion of targeted communities that are not only in Yogyakarta Province but also outside the Yogyakarta area, such as the whole Java region, even nationally.

3.University could cooperate with alumnae and put it in the DOCS grant regulations as good networking will make the community service programs more successful | 1. In the age of social media freedom, information can be easily distributed in a fast-paced. However, the receiver end of the information (people) does not have prior knowledge or the ability to filter this information, thus creating widespread disinformation.

2. The majority of people tend to believe in inflamed hoaxes rather than what experts say in front of them. This could create an unacceptance and a distrust of the community to the professors that could prevent the program from going according to plan

3. The possibility of sudden discontinuity or unsolved problems in the target community due to the limit of time and funds

4. There will be community fatigue from the pandemic and |
|---|---|---|---|

6. The diversity of the professors' main partners and stakeholders (see Table 5)

7. The main objectives of the activities were to improve the work quality of the target community, to provide knowledge and insight for the targeted community, to enhance the awareness of the environment, and to support the community economy during the COVID-19 pandemic, which has addressed SDG #1, #3, #4, #8, #11, #15 (See Figure 4)

8. The familiarity and the close-knit relationship between the professors and the communities where they conducted the community service

9. Most of the professors involved in the community service were seasoned experts, | did not have a practical impact on the community

7.It took time and patience to get the acceptance and the trust of the local community and to carry out the transitional activity of what the professors bring to the community

8.The current university reporting model is not activity-output-based, and some professors think it is quite complicated

9.The carried-out control was still focused on how the grant (fund) was spent and not how the programs were applied during the community services performance as the fund flow mechanism still seemed inefficient | 4.University could develop training, extension, and mentoring models for the professors to provide one integrated community service model

5.The government could function as a supervisory and guiding agent, allowing existing implemented programs to continue indefinitely

6.The government could provide a map of developed home industries or villages records to reduce repetitive programs in the exact location and to even out the implementation in the place or groups that never experienced it before | economic struggle since it has been ongoing for more than a year. This fatigue surely will make the community less welcome to any community service activities

5. UGM will always support community service. However, due to the world's current economic suffering from the pandemic, there could be a budget cut from the government, which will affect the community service programs grant. |

	thus seen as more believable by our hierarchical community. Most of the communities are more than welcome to UGM professors and willing to be involved in the program

10. Most community service activities are accessible on social media, websites, YouTube, and scholarly publications. to raise a more comprehensive awareness (see the Impact Stories in Chapter C)

11. Most of the community service activities performed have an impact on the local communities (see the Dissemination Link in Chapter C) | | | |
| **Malaysia** | 1.Grant opportunities

• The IHL offer a variety of financing opportunities for community engagement projects. All of the projects | 1.Financial mismanagement

• The sum of funds received was determined by the scale of the project. The challenges of the pioneered project with a | 1.External funding and policy

• The partnership of government and private sector are encouraged by shared national funding and policy on | 1.Diverse culture and need

• The value-driven projects are sometimes does not match the urgent need of the community. Therefore, the |

163

studied received funding from a variety of sources, including institutional, national, and foreign. • The systematic grant reporting culture also enables project coordinators to systematically plan the expenditure of funds. 2.Policy support • Community projects are greatly encouraged by IHL and national policies. As a result, community projects are conducted as it is or infused in curriculum, extra-curriculum or research or combination. • The project leaders also well-versed with the policy details which is shared though the official depository and website of IHL. 3.Pool of experts • The project coordinator matched their expertise to the	novice project coordinator also knots with lack of experience in fund management and procurement procedure. • Project coordinators claimed that additional funding is required to help the project evolve more effectively, particularly when a pandemic disrupts project planning. • Limited sustained projects due to short-term funding. 2. Mismatch of aspiration and available structures • The policy are entails with project grant. The project coordinator shares about their experience of turned-down proposal of community engagement because it wasn't trendy or didn't fit the general themes. The demand for more facilities and physical support	the society transformational agendas. 2.Database of the targeted community • The private and government agency with specific advocacy has had the established interaction and communication with the community which bring in huge participation in the projects tailored with the demand of the community. • The stakeholder with specific advocacy also has the database of the community they are serving. 3.Location nearby to the targeted community • The community could benefit the public space to conduct the activities such as park, townhall, gazette natural area, indoor, outdoor and even interactive virtual platform.	participation is low and the situation worsened as the pandemic hits. • The diversity of the community reflected the specific need and the sensitivity of the community according to the race and ethnicity, religion, geographic location, socio-economic status and age. 2.Communication barrier of marginalized group • The community of indigenous, refugee, mentally challenged and disabled have limited ability to converse in English and Malay which become a barrier to address their need. This group need a intermediator to facilitates communication with the stakeholder • The communication barrier also formed among those community at the remote area

requirements of the project. The multi-institutional project drew on their collective expertise to meet a broader range of community needs. 4.Facilities and infrastructure management • IHL provides general facilities and infrastructures to utilized for project execution. The facilities include the large meeting rooms, transportation, laboratories and logistics. The infrastructure includes the communication tools, digital access and systems for queuing to use certain inventories. • The autonomous queuing system and digital communication ease the communication and better reference to be shared among the team members though e-mailing. 5.Repertoire of students and staff	• The IHL is an active living space and the facilities and infrastructure are for all its community. The need for more facilities is required as the community projects always involved a huge of participants at one time. • In the face of pandemic, the development of software, tissue culture, tools was paused since the lab are closed. Bureaucratic procedure • The project coordinator has to go through arduous bureaucratic procedures of a partner organization, which can result in miscommunication. • The stratified procedure of certain organisation (the culture of private, ngo, government agency and IHL are different) also demotes the enthusiasm of the project's team member.	4.Volunteers and person-in-charge • Volunteers are great in assisting the project. The expenditure of the funding could be allocated for other aspects to increase the impact of the project. • The person-in-charge mainly are the dedicated institutional or stakeholder's officer to ease in communication. 5.Community leaders and driver • The community leaders in Malaysia are structured and governed by state leaders. The projects details could be brokered during the meetings with community leaders which scheduled regularly. This penetration point is politically driven. As the IHL tended to be neutral, most state are welcoming community projects from IHL.	with digital gap. As the pandemic hits, the requirement to abide the MCO, and most social activities went into virtual, these community are harder to reach. The digital gap also sometimes related to the socio-economical status. • The community and stakeholder have limited knowledge on the way IHL conducts the projects includes all the formalities, data collection and staff mobility. • News is not spread in public readership.

• Students and staff whom involved in the project are acknowledged for their performance and credited in their progress report/yearly evaluation. 6.Institutionalised eadership • IHL has the dedicated institution to drive the societal transformation agenda. The projects deliverables delegated to group of experts from different institute/centre/school in the IHL for synergistic collaboration. • The communication and strategic planning across the multiple organisation spearheaded with the strong leadership of manager and leaders 7. Reputation, location and prior network • The IHL reputation is well known among the public and community leaders. The IHL	• Limited support to social science as compares to science area are also reported which possibly related to the availability of grant. 3.Working fatigue • The communication of the project sometimes is out of the formal working hour. The synergic collaboration of different group of personnel become lethargic as the instruction are top down without acknowledging the personal time of the staff and students. • The pandemic has cause more virtual interaction with blurry line in work-hour • Micromanage several community projects. 4.Exclusive database • Even though IHL use the research-driven data, however the actual and situational data	6.Diverse culture • The community in Malaysia have diverse culture and identity. Therefore, the dimension of the projects are various tackled upon different aspect of community wellbeing and elevate their quality of life. 7.Virtual ecosystem The communication and knowledge dissemination through the social media and mobile social network gained the interest of targeted community. The behavior of the social media with use of 'like', 'shares', 'tagging' brought the projects into the community organically.	

	recognition, visibility, network of alumni and academic contribution had gained the trust of the fund donor and stakeholders and gained participations • The location of the IHL is in the main city throughout the nation. However, the campuses and center of excellence of IHL are widespread all over the countries which could be reached by public. Furthermore, the professional profile of project coordinator and teams is updated in the staff directories to be openly-accessed by the community, stakeholder and partners.	is dynamics and contextual. The lack of actual evidence and the prospective individual of certain issue limits the reachability of the project to the targeted community. 5.Despite the fact that community engagement is highly commended in IHL, the necessity to highlight outcome-based evaluations such as quantitative data, scientific writing, public readership, and visibility has been identified as a hurdle for the project's coordinators. Specific training and professional development • Limited highly specialized training in involving community project in term of risk, safety, insurance and barriers. Most project leaders exposed on the community project soft skills is by in-service mentoring process and practice sharing from team members as the project run.		

167

		IHL prefers indexed publication of the scholarly product rather than third mission agenda.		
Thailand	1. Researcher's strong willing (passion & inspiration) 2. Community demand + Researcher supply 3. High level of community participation => Visible Benefits	1. No Funders / Limitation of Budget 2. Non-sustainable research project 3. Lack of project staff 4. Limitation of project extension to areas located far from researcher's office	1. Gaining interest from local governments 2. Research collaboration with new community or school or other organization in community. 3. University engagement was main activities for USR, staff might be supported by university. 5. Government unit adopted SDGs in to policy plan and setting grant for sustainability issue	1. By Covid-Lockdown, governments and/or university do not allow the researcher to conduct field work research. 2. The university prefer academic publications as researchers KPIs rather than PAR in community level. 3. The university defines research impact based on area scales and numbers of institutional collaborations. Small scale community research is perceived as small impact research. 4. The university assigns more administrational jobs to researchers. 5. New funding.

| **Philippine** | 1. The University is strategically spread throughout the Philippine archipelago covering the major geographic regions.

2. UP gets the biggest government budget share among the country's 114 state universities and colleges.

3. UP administers and operates the country's foremost and largest public hospital.

4. Faculty members providing extension work, including community service activities, are given Extension Load Credit.

5. There are Community Affairs offices in most of these Constituent Universities. | 1. There is no clearly designated university office that is in charge of planning, implementing, and monitoring sustainability programs and related concerns.

2. There is no university sustainability plan or roadmap in contributing to the attainment of the SDGs.

3. Extension work is given less weight compared to teaching and research. | 1. Many local government units are interested in undertaking joint projects with the University.

2. Members of NGOs and people's organizations enlist in university courses to further enhance their theories and approaches in undertaking community service.

3. Many of the graduates of the University go back to their respective communities and render services to these communities. | 1. There is the constant threat of budget cuts from the national government because of changing government priorities.

2. Some University community-oriented service programs are being phased out or given less importance than before.

3. There is a growing tendency to centralize operations instead of allowing more autonomy and flexibility by Constituent Universities. |
| --- | --- | --- | --- | --- |

B. Tool: Questionnaire for institution

ProSPER.Net/UNU-IAS/UNESCO Joint Project

Development of a framework for the local implementation of the SDGs – Phase II

Survey on community engagement in higher education for sustainable development

- institution -

Introduction.

The present survey is conducted under the project "Development of a framework for the local implementation of the SDGs – Phase II." The project aims to explore and re-imagine the role of higher education in supporting the implementation of the Sustainable Development Goals (SDGs) at the local level by examining the past and current practices of higher education institutions to collaborate and engage with local communities for sustainable development. As a first step, this survey was designed to collect information on higher education institutions' practices to work with local communities. The returns will be analyzed and consolidated as a report.

This questionnaire consists of the following four parts.

I.	Basic information about the institution and the person completing the form.
II.	Questions on community engagement practices before the COVID-19 pandemic.
	a) The most successful case of community engagement
	b) The least successful case of community engagement
III.	Questions on community engagement practices under the COVID-19 pandemic.
	a) The most successful case of community engagement
	b) The least successful case of community engagement
IV.	Questions on the future of community engagement in higher education for sustainable development.

As regards Part II and Part III, please complete either or both that applies to your institution. We created Part II and Part III because some institutions may not have been able to work with local communities since the pandemic began while others may have started working with them under the pandemic. For others, it may have been the case that they continued to work with local communities both before and under the pandemic, but the content and the methods of the work may have changed. You are most welcome to choose either Part II or Part III to complete, or respond to both.

Whether you choose to respond to Part II or Part III, or both, if your institution conducts more than two activities that involve collaboration with local communities, please select two among them – one that you consider most successful with regard to community engagement, and the other that you consider least successful.

The data and information obtained through this survey will only be used to inform the research of this project, and the personal information collected will not be disclosed publicly.

We thank you sincerely for your kind cooperation and contribution.

I.   Information on the institution and the person completing the form.

Name of the institution			Country of the institution
Name of the person completing the form	Sex	Age	Position in the institution
Research area	Phone number		Email
Does your institution have a policy, strategy, leadership and/or funding instruments that specifically promote community engagement? If yes, please explain.			
Does your institution provide its staff and/or students with support and/or incentives for community engagement? If yes, please explain.			
Does your institution have a support structure (e.g. committee, office or staff) for embedding and coordinating community-engagement activities at the university level? If yes, please explain.			

II. Community engagement practices before the COVID-19 pandemic.

Before the COVID-19 pandemic, did your institution work with local communities for sustainable development? If yes, please respond to the questions below. If your institution has more than two activities that involve collaboration with local communities, please select two among them – one that you consider most successful with regard to community engagement, and the other that you consider least successful.

a) The most successful case of community engagement	
1. Who were the local communities that your institution worked with? Please be specific. You can provide up to five responses.	a) b) c) d) e)
2. Where did this activity take place?	
3. Who were your institution's main partners in this activity?	
4. Please describe the activity, including the main objectives, key actions taken, and the SDGs that you think are addressed by the activity. (Max 600 words)	
Objectives:	
Key actions:	
SDGs addressed:	
If you have any links to information about the above activity, such as websites, articles, reports, publications, etc. please share.	

Who	Role (What did they do?)
5. What was your institution's role in the activity?	
6. Who was involved in the activity? (e.g. local government, farmers, teachers, businesses, schools, single mothers, children and their families, youth, community leaders, women's association, workers' union, NGO, members of the parliament, religious leaders, media, etc.) What were their roles?	
Who	Role (What did they do?)
Local government	
Schools	
Teachers	
Students	
Members of the parliament	
Religious leaders	
NGOs	
Community leaders	
Businesses	
Media	
Women's association	
Workers' union	
Farmers' association/cooperatives	
The elderly	
Youth	
Adolescents	
Children	
Single parents	
Families	
Other (Specify)	
Other (Specify)	
Other (Specify)	

7. How did your institution communicate with the different people involved in the activity?

8. What were the impacts of the activity on the local communities? Please share an impact story.

If you have any links to information related to the impacts described above, such as websites, articles, reports, publications, etc. please share.

9. What challenges did your institution face in the process of working with the local communities? How did your institution respond to or overcome these challenges?

10. In your observation, what are some of the factors that enabled, facilitated or supported effective collaboration between your institution and the local community? Please share any thoughts or ideas you may have.

b) The least successful case of community engagement	
1. Who were the local communities that your institution worked with? Please be specific. You can provide up to five responses.	a) b) c) d) e)
2. Where did this activity take place?	
3. Who were your institution's main partners in this activity?	
4. Please describe the activity, including the main objectives, key actions taken, and the SDGs that you think are addressed by the activity. (Max 600 words)	
Objectives:	
Key actions:	
SDGs addressed:	
If you have any links to information about the above activity, such as websites, articles, reports, publications, etc. please share.	
5. What was your institution's role in the activity?	
6. Who was involved in the activity? (e.g. local government, farmers, teachers, businesses, schools, single mothers, children and their families, youth, community leaders, women's association, workers' union, NGO, members of the parliament, religious leaders, media, etc.) What were their roles?	

Who	Role (What did they do?)
Local government	
Schools	
Teachers	
Students	
Members of the parliament	
Religious leaders	
NGOs	
Community leaders	
Businesses	
Media	
Women's association	
Workers' union	
Farmers' association/cooperatives	
The elderly	
Youth	
Adolescents	
Children	
Single parents	
Families	
Other (Specify)	
Other (Specify)	
Other (Specify)	

7. How did your institution communicate with the different people involved in the activity?

8. What were the impacts of the activity on the local communities? Please share an impact story.

If you have any links to information related to the impacts described above, such as websites, articles, reports, publications, etc. please share.

9. What challenges did your institution face in the process of working with the local communities? How did your institution respond to or overcome these challenges?

10. In your observation, what are some of the factors that enabled, facilitated or supported effective collaboration between your institution and the local community? Please share any thoughts or ideas you may have.

III. Community engagement practices under the COVID-19 pandemic.

Has your institution worked with local communities since COVID-19 began? If yes, please respond to the questions below.   If you have more than two activities that involve collaboration with local communities, please select two among them – one that you consider most successful with regard to community engagement, and the other that you consider least successful.

a) The most successful case of community engagement	
1. Who are the local communities that your institution works/has worked with? Please be specific. You can provide up to five responses.	a) b) c) d) e)
2. Where does/did the activity take place?	
3. Who are/were your institution's main partners in this activity?	
4. Please describe the activity, including the main objectives, key actions taken, and the SDGs that you think are addressed by the activity/activities. (Max 600 words)	
Objectives:	
Key actions:	
SDGs addressed:	

If you have any links to information about the above activity, such as websites, articles, reports, publications, etc. please share.	
5. What is/was your institution's role in the activity?	

6. Who is/was involved in the activity? (e.g. local government, farmers, teachers, businesses, schools, single mothers, children and their families, youth, community leaders, women's association, workers' union, NGO, members of the parliament, religious leaders, media, etc.) What are/were their roles?

Who	Role (What do/did they do?)
Local government	
Schools	
Teachers	
Students	
Members of the parliament	
Religious leaders	
NGOs	
Community leaders	
Businesses	
Media	
Women's association	
Workers' union	
Farmers' association/cooperatives	
The elderly	
Youth	
Adolescents	
Children	
Single parents	
Families	
Other (Specify)	

Other (Specify)	
Other (Specify)	

7. How does/did your institution communicate with the different people involved in the activity?

8. What are/were the impacts of the activity on the local communities? Please share an impact story.

If you have any links to information related to the impacts described above, such as websites, articles, reports, publications, etc. please share.

9. What challenges does/did your institution face in the process of working with the local communities under the COVID-19 pandemic? How does/did your institution respond to or overcome these challenges?

10. In your observation, what are some of the factors that can enable, facilitate or support effective collaboration between higher education institutions and local communities in times of crisis like the ongoing pandemic? Please share any thoughts or ideas you may have.

b) The least successful case of community engagement	
1. Who are the local communities that your institution works/has worked with? Please be specific. You can provide up to five responses.	a) b) c) d) e)
2. Where does/did the activity take place?	
3. Who are/were your institution's main partners in this activity?	
4. Please describe the activity, including the main objectives, key actions taken, and the SDGs that you think are addressed by the activity/activities. (Max 600 words)	
Objectives:	
Key actions:	
SDGs addressed:	
If you have any links to information about the above activity, such as websites, articles, reports, publications, etc. please share.	
5. What is/was your institution's role in the activity?	
6. Who is/was involved in the activity? (e.g. local government, farmers, teachers, businesses, schools, single mothers, children and their families, youth, community leaders,	

women's association, workers' union, NGO, members of the parliament, religious leaders, media, etc.) What are/were their roles?	
Who	Role (What do/did they do?)
Local government	
Schools	
Teachers	
Students	
Members of the parliament	
Religious leaders	
NGOs	
Community leaders	
Businesses	
Media	
Women's association	
Workers' union	
Farmers' association/cooperatives	
The elderly	
Youth	
Adolescents	
Children	
Single parents	
Families	
Other (Specify)	
Other (Specify)	
Other (Specify)	
7. How does/did your institution communicate with the different people involved in the activity?	

8. What are/were the impacts of the activity on the local communities? Please share an impact story.

If you have any links to information related to the impacts described above, such as websites, articles, reports, publications, etc. please share.

9. What challenges does/did your institution face in the process of working with the local communities under the COVID-19 pandemic? How does/did your institution respond to or overcome these challenges?

10. In your observation, what are some of the factors that can enable, facilitate or support effective collaboration between higher education institutions and local communities in times of crisis like the ongoing pandemic? Please share any thoughts or ideas you may have.

IV.   The future of community engagement in higher education for sustainable development

1. Based on the experiences of your institution to work with local communities before and during the COVID-19 pandemic, if your institution were to work with local communities to promote sustainable development in the future, what would you do again and what would you do differently?	
What your institution would do again/repeat	
What your institution would do differently	
2. Based on the experiences of your institution to work with local communities before and during the COVID-19 pandemic, what changes would you suggest to your institution with regard to its collaboration and engagement with local communities? Changes could be about any aspects, including but not limited to the areas and focus of work, the scope and extent of work, methods of work, or whom to partner with, etc. with regard to policy and strategies, management and governance, facilities, programmes and services, partnerships, teaching and learning, research, funding mechanisms, etc.	
3. Based on the experiences of your institution to work with local communities before and during the COVID-19 pandemic, what advice would you give to other higher education institutions wishing to collaborate and work with local communities for sustainable development? The advice could be about any aspects, including but not limited to the areas and focus of work, the scope and extent of work, methods of work, or whom to partner with, etc. with regard to policy and strategies, management and governance, facilities, programmes and services, partnerships, teaching and learning, research, funding mechanisms, etc.	

4. Based on the experiences of your institution to work with local communities before and during the COVID-19 pandemic, what suggestions would you give to your local and national governments in order to create enabling and supportive environments for higher education institutions to collaborate and engage with local communities to promote sustainable development?	
What would you suggest to the local government?	
What would you suggest to the national government?	

Contacts

Please submit your completed form to the following focal point in your country. If you have questions or need clarifications, please do not hesitate to contact them as well.

India

Smriti Das (TERI School of Advanced Studies)   Email: smriti.das@terisas.ac.in

Indonesia

Nanung Agus Fitriyanto (Universitas Gadjah Mada) Email**:** nanungagusfitriyanto@ugm**.**ac**.**id

Japan

Tarek Katramiz (Keio Institution)   Email: tarek.katramiz@unu.org

Malaysia

Munirah Ghazali (Universiti Sains Malaysia)   Email: munirah@usm.my

Philippines

Nestor T. Castro (Institution of the Philippines)   Email: ntcastro1@up.edu.ph

Thailand

Sayamol Charoenratana (Chulalongkorn Institution) Email: saya21@yahoo.com

C. Tool: Questionnaire for individual

ProSPER.Net/UNU-IAS/UNESCO Joint Project

Development of a framework for the local implementation of the SDGs – Phase II

Survey on community engagement in higher education for sustainable development

- **individual lecturers and researchers -**

Introduction.

The present survey is conducted under the project "Development of a framework for the local implementation of the SDGs – Phase II." The project aims to explore and re-imagine the role of higher education in supporting the implementation of the Sustainable Development Goals (SDGs) at the local level by examining the past and current practices of those working in higher education to collaborate and engage with local communities for sustainable development. As a first step, this survey was designed to collect information on the practices of educators and researchers in higher education institutions to work with local communities. The returns will be analyzed and consolidated as a report.

This questionnaire consists of the following four parts.

- V. Basic information about the person completing the form and her/his institution.
- VI. Questions on community engagement practices before the COVID-19 pandemic.
  - c) The most successful case of community engagement
  - d) The least successful case of community engagement
- VII. Questions on community engagement practices under the COVID-19 pandemic.
  - c) The most successful case of community engagement
  - d) The least successful case of community engagement
- VIII. Questions on the future of community engagement in higher education for sustainable development.

As regards Part II and Part III, please complete either or both that applies to you. We created Part II and Part III because some respondents may not have been able to work with local communities since the pandemic began while others may have started working with them under the pandemic. For others, it may have been the case that they continued to work with local communities both before and under the pandemic, but the content and the methods of the work may have changed. You are most welcome to choose either Part II or Part III to complete, or respond to both.

Whether you choose to respond to Part II or Part III, or both, if you have more than two activities that involve collaboration with local communities, please select two among them – one that you consider most successful with regard to community engagement, and the other that you consider least successful.

The data and information obtained through this survey will only be used to inform the research of this project, and the personal information collected will not be disclosed publicly.

We thank you sincerely for your kind cooperation and for sharing your thoughts.

I. Information on the person completing the form and her/his institution.

Name of the person completing the form			
Sex	Age	Email address	Phone number
Name of the affiliated institution		Position in the institution	Research area

Does your institution have a policy, strategy, leadership and/or funding instruments that specifically promote community engagement? If yes, please explain.

Does your institution provide its staff and/or students with support and/or incentives for community engagement? If yes, please explain.

Does your institution have a support structure (e.g. committee, office or staff) for embedding and coordinating community-engagement activities at the university level? If yes, please explain.

II.   Community engagement practices before the COVID-19 pandemic.

Before the COVID-19 pandemic, did you work with local communities for sustainable development? If yes, please respond to the questions below. If you have more than two activities that involve collaboration with local communities, please select two among them – one that you consider most successful with regard to community engagement, and the other that you consider least successful.

a) The most successful case of community engagement	
1. Who were the local communities that you worked with? Please be specific. You can provide up to five responses.	a) b) c) d) e)
2. Where did the activity take place?	
3. Who were your main partners in undertaking this activity?	
4. Please describe the activity, including the main objectives, key actions taken, and the SDGs that you think are addressed by the activity. (Max 600 words)	
Objectives:	
Key actions:	
SDGs addressed:	
If you have any links to information about the above activity, such as websites, articles, reports, publications, etc. please share.	
5. What was your role in the activity?	

6. Who was involved in the activity? (e.g. local government, farmers, teachers, businesses, schools, families, single parents, children, adolescents, youth, the elderly, community leaders, women's association, workers' union, NGO, members of the parliament, religious leaders, media, etc.) What were their roles?	
Who	Role (What did they do?)
Local government	
Schools	
Teachers	
Students	
Members of the parliament	
Religious leaders	
NGOs	
Community leaders	
Businesses	
Media	
Women's association	
Workers' union	
Farmers' association/cooperatives	
The elderly	
Youth	
Adolescents	
Children	
Single parents	
Families	
Other (Specify)	
Other (Specify)	
Other (Specify)	
7. How did you communicate with the different people involved in the activity?	

8. What were the impacts of the activity on the local communities? Please share an impact story.

If you have any links to information related to the impacts described above, such as websites, articles, reports, publications, etc. please share.

9. What challenges did you face in the process of working with the local communities? How did you respond to or overcome these challenges?

10. In your observation, what are some of the factors that enabled, facilitated or supported your collaboration with the local community? Please share any thoughts or ideas you may have.

b) The least successful case of community engagement	
1. Who were the local communities that you worked with? Please be specific. You can provide up to five responses.	a) b) c) d) e)
2. Where did the activity take place?	
3. Who were your main partners in undertaking this activity?	

4. Please describe the activity, including the main objectives, key actions taken, and the SDGs that you think are addressed by the activity. (Max 600 words)	
Objectives:	
Key actions:	
SDGs addressed:	

If you have any links to information about the above activity, such as websites, articles, reports, publications, etc. please share.	
5. What was your role in the activity?	

6. Who was involved in the activity? (e.g. local government, farmers, teachers, businesses, schools, families, single parents, children, adolescents, youth, the elderly, community leaders, women's association, workers' union, NGO, members of the parliament, religious leaders, media, etc.) What were their roles?	
Who	Role (What did they do?)
Local government	
Schools	
Teachers	
Students	
Members of the parliament	
Religious leaders	
NGOs	
Community leaders	
Businesses	
Media	
Women's association	
Workers' union	
Farmers' association/cooperatives	
The elderly	
Youth	
Adolescents	
Children	
Single parents	
Families	
Other (Specify)	
Other (Specify)	
Other (Specify)	
7. How did you communicate with the different people involved in the activity?	

8. What were the impacts of the activity on the local communities? Please share an impact story.
If you have any links to information related to the impacts described above, such as websites, articles, reports, publications, etc. please share.
9. What challenges did you face in the process of working with the local communities? How did you respond to or overcome these challenges?
10. In your observation, what are some of the factors that enabled, facilitated or supported your collaboration with the local community? Please share any thoughts or ideas you may have.

III. Community engagement practices under the COVID-19 pandemic.

Have you worked with local communities since the COVID-19 pandemic began? If yes, please respond to the questions below. If you have more than two activities that involve collaboration with local communities, please select two among them – one that you consider most successful with regard to community engagement, and the other that you consider least successful.

a) The most successful case of community engagement	
1. Who are the local communities that you work/have worked with? Please be specific. You can provide up to five responses.	a) b) c) d) e)
2. Where did/does the activity take place?	
3. Who are/were your main partners in this activity?	
4. Please describe the activity, including the main objectives, key actions taken, and the SDGs that you think are addressed by the activity/activities. (Max 600 words)	
Objectives:	
Key actions:	
SDGs addressed:	
If you have any links to information about the above activity, such as websites, articles, reports, publications, etc. please share.	

5. What is/was your role in this activity?	

6. Who is/was involved in this activity? (e.g. local government, farmers, teachers, businesses, schools, single mothers, children and their families, youth, community leaders, women's association, workers' union, NGO, members of the parliament, religious leaders, media, etc.) What are/were their roles?	
Who	Role (What do/did they do?)
Local government	
Schools	
Teachers	
Students	
Members of the parliament	
Religious leaders	
NGOs	
Community leaders	
Businesses	
Media	
Women's association	
Workers' union	
Farmers' association/cooperatives	
The elderly	
Youth	
Adolescents	
Children	
Single parents	
Families	
Other (Specify)	
Other (Specify)	
Other (Specify)	

7. How do/did you communicate with the different people involved in the activity?

8. What are/were the impacts of the activity on the local communities? Please share an impact story.

If you have any links to information related to the impacts described above, such as websites, articles, reports, publications, etc. please share.

9. What challenges do/did you face in the process of working with the local communities under the COVID-19 pandemic? How do/did you respond to or overcome these challenges?

10. In your observation, what are some of the factors that can enable, facilitate or support effective collaboration between those working in higher education and local communities in times of crisis like the ongoing pandemic? Please share any thoughts or ideas you may have.

a) The least successful case of community engagement	
1. Who are the local communities that you work/have worked with? Please be specific. You can provide up to five responses.	a) b) c) d) e)
2. Where did/does the activity take place?	
3. Who are/were your main partners in this activity?	

4. Please describe the activity, including the main objectives, key actions taken, and the SDGs that you think are addressed by the activity/activities. (Max 600 words)
Objectives:
Key actions:
SDGs addressed:
If you have any links to information about the above activity, such as websites, articles, reports, publications, etc. please share.

5. What is/was your role in this activity?	

6. Who is/was involved in this activity? (e.g. local government, farmers, teachers, businesses, schools, single mothers, children and their families, youth, community leaders,

women's association, workers' union, NGO, members of the parliament, religious leaders, media, etc.) What are/were their roles?	
Who	Role (What do/did they do?)
Local government	
Schools	
Teachers	
Students	
Members of the parliament	
Religious leaders	
NGOs	
Community leaders	
Businesses	
Media	
Women's association	
Workers' union	
Farmers' association/cooperatives	
The elderly	
Youth	
Adolescents	
Children	
Single parents	
Families	
Other (Specify)	
Other (Specify)	
Other (Specify)	
7. How do/did you communicate with the different people involved in the activity?	

8. What are/were the impacts of the activity on the local communities? Please share an impact story.
If you have any links to information related to the impacts described above, such as websites, articles, reports, publications, etc. please share.
9. What challenges do/did you face in the process of working with the local communities under the COVID-19 pandemic? How do/did you respond to or overcome these challenges?
10. In your observation, what are some of the factors that can enable, facilitate or support effective collaboration between those working in higher education and local communities in times of crisis like the ongoing pandemic? Please share any thoughts or ideas you may have.

IV.   The future of community engagement in higher education for sustainable development

1. Based on your experiences in working with local communities before and during the COVID-19 pandemic, if you were to work with local communities to promote sustainable development in the future, what would you do again and what would you do differently?	
What would you do again/repeat	
What would you do differently	
2. Based on your experiences in working with local communities before and during the COVID-19 pandemic, what advice would you give to others working in higher education and wishing to work with local communities for sustainable development? The advice could be about any aspects, including but not limited to the areas and focus of work, the scope and extent of work, the ways of working, or whom to partner with, etc.	
3. Based on your experiences in working with local communities before and during the COVID-19 pandemic, what changes would you suggest to your university or institution in order to facilitate and support your collaboration and engagement with local communities? Changes could be about any aspects, including but not limited to policy and strategies, management and governance, facilities, programmes and services, partnerships, teaching and learning, research, funding, etc.	
4. Based on your experiences in working with local communities before and during the COVID-19 pandemic, what suggestions would you give to your local and national governments in order to create enabling and supportive environments for those working in	

higher education to collaborate and engage with local communities to promote sustainable development?	
What would you suggest to the local government?	
What would you suggest to the national government?	

Contacts

Please submit your completed form to the following focal point in your country. If you have questions or need clarifications, please do not hesitate to contact them as well.

India
Smriti Das (TERI School of Advanced Studies)   Email: smriti.das@terisas.ac.in

Indonesia
Nanung Agus Fitriyanto (Universitas Gadjah Mada) Email**:** nanungagusfitriyanto@ugm**.**ac**.**id

Japan
Tarek Katramiz (Keio University)   Email: tarek.katramiz@unu.org

Malaysia
Munirah Ghazali (Universiti Sains Malaysia)   Email: munirah@usm.my

Philippines
Nestor T. Castro (University of the Philippines) Email: ntcastro1@up.edu.ph

Thailand
Sayamol Charoenratana (Chulalongkorn University) Email: saya21@yahoo.com