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Book review

Editorial address

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Aims and scope

South East Asia: A Multidisciplinary Journal (SEAMJ) marked its 20th year of publication in 2020, having been published annually by the Faculty of Arts and Social Sciences (FASS), Universiti Brunei Darussalam (UBD) since 2000. While the regional focus of the journal is South East Asia and, therefore, most of the articles reflect and relate to this geographical region, articles may still be considered if the topics are of relevance and have significant implications to the region. SEAMJ aspires to become a leading platform for the publication of original and path-breaking research catering to Southeast Asian regional and global readership.

Disclaimer

Southeast Asia: A Multidisciplinary Journal (SEAMJ)

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Editorial: Contemporary issues in Southeast Asia

AKM Ahsan Ullah, Noor Azam Haji-Othman and Kathrina Mohd Daud

To emphasize the critical nature of the world's ongoing crises, we have developed this regular issue around the themes of COVID-19's impact on education and national integrity in Southeast Asian countries. The way the world treated vulnerable groups during this challenging period has heavily influenced the content of this issue. This issue contains articles on a variety of topics on Southeast Asia, including history, environment, governance, and political systems.

While each of the seven articles is self-contained, we have attempted to impose a loose subject structure and logical flow on their arrangement in order to demonstrate some of the methodological parallels and differences. The focus of this issue is on three major pillars: COVID-19, urban growth, modern transport and history. Here, we demonstrate how the seven articles hang together in relation to the main focus of this issue.

SEAMJ runs both regular and special issues to aggregate papers on specific topics. For the growth of knowledge in areas (such as Linguistics and English Language and Literature, Environmental Studies, Geography and Development; Sociology and Anthropology, Bahasa Melayu & Linguistik, History and International Studies; Professional Communication), the Faculty of Arts and Social Sciences (FASS) of the Universiti Brunei Darussalam (UBD) publishes SEAMJ twice a year.

SEAMJ ran a special issue on in 2021 the COVID-19 pandemic. Authors and readers convene to debate the most recent discoveries and generate ideas for future research initiatives. The COVID-19 outbreak has placed the region at a critical juncture. It has resulted in a prolonged, severe recession, exacerbated by restricted borders and characterized by growing social tensions, increased vulnerability, and a return to environmentally appropriate economic development. At the same time, establishing internationally and geographically coordinated policies that recognize the need for an inclusive, resilient, and sustainable development approach has happened.

Our top objective is to publish high-quality material that is representative of the entire epistemic community and comes from that community itself.

In order to ensure that everyone has an equal voice in the world, it is our duty to do so. We are interested in broadening our horizons, both geographically and academically. The current issue has included two articles on COVID-19, two articles on Malaysia's E-waste recycling and urban growth, one article on digitalization of land services delivery and one article on the development of modern transport systems in the Bengal delta and British Borneo.

Numerous social and cultural aspects of the epidemic in the region have been largely concealed. Governments have enacted policies from on high. There is much to be learnt from the response of nations in the subregion, whose governments have acted swiftly to contain the pandemic and minimize its worst effects despite having little fiscal space. In spite of this, as in numerous other places of the world, the epidemic has caused tremendous suffering, with a disproportionate impact on the most vulnerable. It has shown pervasive inequities, governance challenges, and the unsustainable nature of the current development route. After two years, Southeast Asia is recovering from the coronavirus disease (COVID-19) epidemic.

The current issue (Vol 22, Issue 1) includes seven original articles. The first one, 'Knowledge of E-Waste Recycling Among Communities in Selangor, Malaysia' by Amirah Sariyati Binti Mohd Yahya, Tengku Adeline Adura Binti Tengku Hamzah and Aziz Bin Shafie argue how that the environment and human health can be jeopardized if e-waste is not properly managed. Global E-waste production continued to rise as a result of rapid technological advancement and increased purchasing power among the global population. Recycling E-waste is one of the possible sustainable methods for managing E-waste. The purpose of this research is to determine which demographic factor has the greatest influence on local residents' understanding of e-waste recycling in Selangor. Selangor is one of Peninsular Malaysia's wealthiest states, with a diverse population of ethnic and racial backgrounds. In 2019, 779 people participated in a survey to learn more about local residents' understanding of e-waste recycling, as well as the social and demographic factors that influence that understanding. Three aspects of a person's background stand out: their educational attainment, the nature of their job, and their income. This study intends to determine which demographic aspect influences Selangor people's knowledge of e-waste recycling the greatest.

The next article, 'Organic Solidarity in the National Response to COVID-19 in Brunei Darussalam' by Hannah Ming Yit Ho explores the national unity in Brunei Darussalam during the COVID-19 pandemic and its impact on the younger generations. Using Emile Durkheim's notions of solidarity, researchers investigate how young people's social media use contributes to the pandemic's official discourse. Social cohesion based on varied roles is an indicator of a shift towards an organic society. Citizens play a crucial role in the momentum toward Industrial Revolution (IR) 4.0, demonstrating that unity cannot be generated via a direction from above. The local social media during the crisis has shown the government a new way to promote solidarity by fostering economic and creative divisions of labour.

The third piece, 'Factors Influencing Community Participation of Youth Affairs Committee Members in Mon State' by Atar Thaung Htet examines the elements that influence the community involvement of Mon state youth affairs committee members. This article aims to determine which factors had the most impact on youth affairs committee members' participation in their respective communities. This article bears out that social and, political & legal issues favourably influence the community involvement of young leaders. Policymakers in the state of Mon should provide youth with opportunities to participate in community development projects.

The fourth article, 'Development of Modern Transport System in the Bengal Delta and British Borneo: A Comparative Environmental Perspective, 1850-1963' by Md Mamunur Rashid compares contemporary transportation networks in the Bengal Delta and British Borneo. To satisfy the demands of the new resource extraction methods, British colonial rulers developed a new transportation system in both regions and constructed roads, trains, and maritime routes linking key commercial and political centers. When current transportation was established, little environmental considerations were made. As a result, considerable ecological alterations and decreases were created accidentally. The changes in the environment brought about by these transport systems in these two distinct regions were not identical. This article takes a comparative approach as there has been little investigation into the historical connections between modern infrastructure and environmental changes in colonial South Asia and Malaysia.

In the fifth article 'Digitalization in the Land Service Delivery: Comparison between Bangladesh and Indonesia' Marufa Akter focuses on the fact that the governments of Bangladesh and Indonesia have established a digital land management framework within the land system to ensure optimal land development in particular the effective delivery of land services. Both countries' land offices have numerous hurdles when it comes to providing digital services. In order to make informed decisions about their future, it is crucial to assess the existing use of digitalization and identify the aspects driving digitalization in land service delivery by land offices. The correct application of digitization in land administration in both nations is being hampered by a lack of institutional and operational capabilities and service delivery employee misconduct.

The sixth piece, 'Readiness and Problems Encountered by Teachers in Quezon Province Due to Covid-19: Basis for an intervention scheme' by Ramil A. Borreo and Gilbert C. Alva indicates that, in times of crisis such as COVID-19, the readiness of teachers for the start of the school year and their responses to difficulties they experience are crucial. This article focuses on the readiness and issues of teachers in Quezon Province for the forthcoming school year 2020-2021 in order to gain a better understanding of this issue and develop an intervention plan. The perspective on the teaching profession was optimistic, and instructors reported that they were prepared to carry out their obligations and responsibilities under the new standard imposed by the COVID-19 epidemic. Teachers were concerned about the impact and compromise that the reproduction of modules would have on their time management. Even more concerning was the fact that teachers appeared to have difficulty accessing online seminars and training due to unstable or inadequate internet connections. Teachers may benefit from the intervention approach described in this paper in order to solve their current issues.

We believe that researchers, academics, policymakers and stakeholders will find this issue informative and useful.

Knowledge of E-Waste Recycling Among Communities in Selangor, Malaysia

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Abstract

The environment and human health can be jeopardized if E-waste is not properly managed. Global E-waste production continued to rise as a result of rapid technological advancement and increased purchasing power among the global population. One of the possible sustainable methods for managing E-waste is to recycle E-waste. This study aims to find out which demographic factor has the most influence on local residents' understanding of E-waste recycling in Selangor. Selangor is one of Peninsular Malaysia's wealthiest states, with a wide range of ethnic and racial backgrounds among its residents. In 2019, 779 people took part in a survey to learn more about local residents' understanding of E-waste recycling and the social and demographic factors influencing that understanding. Three characteristics of a person's background stand out: their educational attainment, the nature of their job, and the amount of money they make. The p-value for each of these variables was less than.05. Respondents with the following social backgrounds have the best understanding of E-waste recycling: higher education, employment in the private sector, and a monthly income between RM1,501 and RM3,000. The government and other stakeholders, such as non-profits and the private sector, should take more comprehensive and coordinated actions to ensure that the public is informed about E-waste recycling.

Keywords: *Environment, E-waste recycling, Human health, Knowledge, Public*

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Introduction

E-waste is a global environmental problem, and Malaysia is not exempt from it. E-waste generation in Malaysia reached 706,295 metric tons in 2010, and that it is expected to rise to 1,119,155 metric tons by 2020 (Nair, 2018). E-waste is defined as electronic and electrical goods that have already been used and discarded from households, industries, and commercial entities (Afroz et al. 2013; Tiep et al. 2015). Consumer demand for electrical and electronic appliances has fueled the electronic industry's explosive expansion into the world's fastest-growing manufacturing sector (Afroz et al. 2013; Babington et al. 2010; Sivathanu, 2016). As a result of the rapid development of the electrical industry and the advancement of technology, electrical and electronic appliances are constantly evolving in terms of their design, features, and style. As a result, new technology will lead to more affordable and easier-to-use appliances (Akhtar et al. 2014; Soo & Doolan, 2014). As a result of these factors, the product's lifespan will be reduced, which will lead to an increase in the number of products produced and consumed worldwide, which in turn will lead to an increase in E-waste generation (Jang, 2010; Kiddee et al. 2013; Umair et al. 2015; Zeng et al. 2013; Zhong & Huang, 2016).

Plastic, ceramic, ferrous and non-ferrous metals, as well as precious metals such as gold and silver, are among the materials that make up E-waste (Tesfaye et al. 2019). Electronic waste contains a variety of substances, including lead, mercury, cadmium, beryllium, brominated flame, manganese, cobalt, iron, gold, polybrominated diphenyl ethers (PBDEs), phthalates, niobium, cobalt, titanium, platinum, chromium, and polychlorinated dibenzodioxins and dibenzofurans (PCDD/PCDF) (Babington et al. 2010; Jang, 2010; Sivathanu, 2016; Tiep et al. 2015; Xavier et al. 2018; Xu et al. 2015). Similar to the First Schedule Environmental Quality (Scheduled Waste) Regulations 2005 (code SW 110), the 'E-waste is defined as waste from electrical and electronic assemblies that contain components such as accumulators and mercury switches, glass from cathode-ray tubes and other activated glass or polychlorinated biphenyl-capacitors, or that is otherwise contaminated with the above-mentioned hazardous materials.

Since electronic waste releases toxic pollutants into the environment, it must be properly disposed of in order to avoid harming wildlife and the people who live in the vicinity of recycling and dumping facilities for

electronic waste (Kiddee et al., 2013). E-waste recycling is one environmentally friendly approach. E-waste can be recycled because it contains a lot of toxic and hazardous materials but is still valuable, and it will help reduce carbon and greenhouse gas emissions, increase environmental protection, conserve natural resources, reduce landfill usage, reduce energy consumption, and help create a sustainable production and consumption model for the general public (Babington et al. 2013; Nguyen et al. 2019; Realff et al. 2004; Zhong & Huang, 2016). E-waste must be separated from household waste at the point of generation and disposed of separately (Sivathanu et al., 2016). The nearest collection centre or points that have been legally registered must therefore be contacted. Some challenges in managing electronic waste, such as lack of monitoring, transboundary movement of electronic waste, financial issues, and lack of knowledge about the proper disposal methods, have been identified (Nduneseokwu et al., 2017). This investigation will focus on determining the public's awareness of this E-waste recycling activity. To have knowledge, one must have a thorough familiarity with the subject under study, as well as a grasp of the larger societal context, as well as a grasp of universal truths and scientific facts (Ahmad et al. 2015; Babaei et al. 2015; Launiala, 2009).

Materials and method
Study area

Located at 3.0738°N, 101.5183°E on the Malaysian peninsula, the state of Selangor has a total land area of approximately 7,931 km2 (Official Portal of Selangor State Government, 2019). About 5,462,141 people live in Selangor (Town and Country Planning Department, 2017). Kuala Langat, Kuala Selangor and Sabak Bernam are the nine districts in the state of Selangor. Petaling and Klang are the two other districts. There is a local authority in charge of each district in Selangor, Malaysia. Perak, Negeri Sembilan, Pahang, and the Straits of Malacca border the north, south, east, and west of Peninsular Malaysia's west coast state of Selangor (Official Portal of Selangor State Government, 2019; Department of Statistics Malaysia Official Portal, 2019) (Figure 1).

Figure 1: Maps of Negeri Selangor

As of September 1, 2011, Malaysia's parliament has finally put into effect the Solid Waste and Public Cleansing Management Act 2007 (Act 672), which was passed in 2007. The privatization of waste management is mandated in order to provide a better service. Although Selangor is one of the states in Malaysia that hasn't implemented Act 672, it's still a state (Alias et al., 2018). It was not implemented in Selangor because the local authorities were not satisfied with the private services and operational costs, according to Abas and Wee (2014). Overall, Selangor generates 4,800 tonnes of waste daily, and this figure is expected to rise to 7,200 tonnes per day in 2035 (Selangor Town and Country Planning Department, 2017). KDEB Waste Management is responsible for waste collection in

Selangor, and the frequency of collection varies based on the residential area (KDEB Waste Management, 2019). Malaysia, on the other hand, still has no specific guidelines for the management of e-waste.

The Environmental Quality (Scheduled Wastes) Regulations 2005, First Schedule, lists E-waste as code SW 110 in Malaysia (Regulations 2). SW 110 defines E-waste as 'waste from electrical and electronic assemblies containing components such as mercury-switches and glass from cathode-ray tubes and other activated glass or polychlorinated biphenyl-capacitors, or contaminated with CdMn, HgCl2, PbCl2 or polychlorinated biphenyl'. The Household Scheduled Waste Regulation 201X, on the other hand, is still under development and has not yet been published by the Department of Environment Malaysia.

Sampling and conducting the survey

Seven hundred seventy-six people in Selangor took part in this cross-sectional study. A survey was conducted to find out how much people know about electronic waste recycling based on their sociodemographics. A questionnaire-based survey was used to collect personal data all over Selangor. This method was chosen because it has questions in a logical order that will yield consistent results and can be analyzed statically (Chaudhary & Vrat, 2019). According to Islam et al. (2016), conducting a questionnaire-based survey is a convenient way to gather information about people's current knowledge of E-waste management. Face-to-face data collection yields a response rate of between 90 and 98 percent (Babaei et al. 2015; Huang et al. 2006; Vidanrachchi et al. 2006; Zhuang et al. 2008).

Instrument

The public has been given copies of the survey based on filling out paper questionnaires. Gender, age, education, marital status, number of people living in the home, type of people living in the home, occupation and income were all included in the questionnaires' first section (Part A). When determining the relationship between the study topic and the demographic variables, Castagna and colleagues (2013) and Chu and colleagues (2016) in Almasi and colleagues (2019) say that demographic variables are the most important factor. In the second section, there were eight questions pertaining to knowledge of electronic waste recycling (Part B). This material was mostly taken from Akhtar et al. (2014) and Akhtar (2015),

Ahmad et al. (2015) and Babaei et al. (2015). It was also taken from Babington et al. (2013) and Chibunna et al. (2013) as well as Malik et al. (2015), and Sivathanu (2016 & 2007).

Research design and data analysis

As part of this research, surveys and statistical tests are utilized to conduct quantitative research. After data collection was completed, the data were entered into the Statistical Package for Social Science (SPSS) and analyzed. The percentage of people who know about E-waste recycling was used as a measure of public awareness. A statistical analysis of the collected data was used to demonstrate the correlation between demographic background and knowledge of E-waste recycling.

Results and discussion
Respondent's background

Selangor-based respondents were asked to complete Part A of the questionnaires, and the results are shown in Table 1. Age, level of education, marital status, occupation, as well as the size of the household are all important variables in community-based surveys (Almasi et al., 2019). Gender, income level, and residence type are just a few of the variables examined in this study.

Table 1. Respondent's background in Selangor (N=779)

Demographic background		Frequency	Percentage (%)
Gender	Male	304	39.0
	Female	475	61.0
Age (Years old)	< 24	298	38.3
	25-34	319	40.9
	35-44	93	11.9
	45-54	47	6.0
	> 55	22	2.8
Educational background	Higher Education	611	78.4
	High School	164	21.1
	Primary School	3	0.4
	No Formal Education	1	0.1
Marital status	Single	495	63.5

	Married	277	35.6
	None above	7	0.9
Household numbers (Persons)	1-5 6-10 > 11	Mean ± SD 4.27 ± 2.412	
Type of residents	Strata Houses	272	34.9
	Twin house/Bungalow	50	6.4
	Terrace	311	39.9
	Village	122	15.7
	Townhouse	24	3.1
Occupation	Government Sector	102	13.1
	Private Sector	340	43.6
	Self Employed	89	11.4
	Housewife	37	4.7
	Student	203	26.1
	Pensioner	8	1.0
Income (RM)	< 1500.00	160	20.5
	1501.00 – 3000.00	259	33.2
	3001.00 – 4500.00	113	14.5
	> 4501.00	73	9.4
	No income / No stated / Not related	174	22.3

Source: Authors

Of the total of 779 respondents, the male respondents are about 39%, and the female respondents are about 61%. The highest percentage of respondents aged between 25-34 years old (40.9%) and the least percentage of respondents aged more than 55 years old (2.8%). The majority of the respondents had higher education (78.4%), and most respondents were working in the private sector (43.6%). About 63.5% of 779 respondents are not married yet. With the mean size of a household of 4 persons, most live-in terrace houses (39.9%). For those respondents who are working, the majority have an income between RM1,501 and RM3,000 (33.2%), and about 9.4% have an income of more than RM4,501. With respect to each of the knowledge items listed in the following section, only three demographic variables will be discussed from among all those listed respondents' histories: educational background, occupation, and income.

Respondents' educational background is an important consideration (Al-Khateeb et al. 2017), because those with more education are more likely to respond positively to a given stimulus. A higher salary means that more people can afford to buy electrical and electronic appliances, which in turn means that more people can get better training and education. This is one of the measurement levels (Al-Khateeb et al. 2017; Miner et al. 2019; Tarawneh & Saidan, 2013).

Knowledge on E-waste recycling among the public in Selangor

Community participation can only be ensured if the community has an understanding of what is going on, which is why it has been agreed that knowledge is the most important factor (Babaei et al. 2015; in El-Gilany et al. 2017; Keramitsoglou & Tsagarakis, 2013; Mathur et al. 2011; Madhukumar & Ramesh, 2012; Refsgaard & Magnussen, 2009). Knowledge about E-waste disposal, generation, and segregation has also led to a positive shift in attitudes (Iyer, 2018). When it comes to environmental knowledge, Akhtar et al. (2014) argue that an individual's demographic background is critical. As a result, eight questions for the knowledge section of Part B have been developed, which resulted in five questions related to education, five questions related to occupation, and five questions related to the respondents' incomes. Table 2 shows the p-value .05 for the association between three demographic variables and the knowledge questions. According to the findings, educational attainment, employment status, and household income all play a significant role in one's ability to correctly answer the knowledge items. It was found that knowledge items were also significant for educational background and occupation in Almasi (Laor et al 2019; Mangiri et al 2017; Patchen et al. 2006; Shorofi et al. 2017; Song et al. 2012).

Table 2. Association between knowledge items and demographic variables

Knowledge items	Demographic variables (p-value) *Insignificant p-value		
	Educational background	Occupation	Income
B1: Definition E-waste	<.001	.005	**
B2: Content of electrical and	.022	**	**

	electronic applications			
B3:	Impact of E-waste on the environment	.001	**	<.001
B4:	Impact of E-waste on the human health	.009	.005	<.001
B5:	Generation of E-waste in Malaysia	**	.008	.008
B6:	E-waste recycling will reduce the impact on the environment and human health	<.001	.003	<.001
B7:	E-waste recycling will reduce the usage of raw materials	**	**	.006
B8:	E-waste needs to be disposed of separately from domestic waste	**	.004	**

Sources: Authors

Ninety-nine percent of the 779 people who took the survey are familiar with the term "E-waste." Only 80.6 percent of those polled know what E-waste is, and that percentage is statistically significant (p=.001). A person who did not receive formal education stated that they were unaware of the term E-waste. Question B2, p-value =.022, where most respondents know that electrical and electronic appliances contain toxic and harmful substances, is the only educational background that shows significance. The majority of respondents, 88.6 percent, have a college degree or higher, compared to the reported 79.4 percent. This study's findings are in line with those of a similar study conducted in Ghana's capital city, Accra. A previous study found that educational level had a p-value of less than.001 when it comes to respondents' knowledge of the toxic chemicals in E-waste (Owusu et al. 2017). In this way, education serves as a means of encouraging, promoting, and increasing community awareness (Jekria & Daud, 2016; Sharifah et al. 2018; Mathatha et al. 2018) argues that proper

training can help students gain a better understanding of their subject matter.

P-values of.001 were reported for both questions related to the environmental impacts of E-waste on the environment (B3) and human health (B4) with income variables. In a survey of 779 people, 86.1% agreed that E-waste has an impact on the environment, and 79.7% agreed that E-waste has an impact on human health. Based on this, Selangor residents are aware that electronic waste will have a negative impact on the environment and human health. Compared to the Kampala, Uganda study, the percentages in this one reflect a better outcome; only 64.84 percent of those polled are well-versed in the dangers of E-waste to the environment and human health (Nuwematsiko et al. 2021). E-waste, according to the findings of a study by Juyal et al. (2018), could be harmful to the environment and human health in the Madri Industrial Area (MIA) of Udaipur, Rajasthan. E-waste has also been linked to environmental and human health issues in a study conducted by students at Kurnool Medical College in Kurnool, Andhra Pradesh (Subhaprada & Kalyani, 2017). When it comes to (B3) and (B4), 34.4 and 34.9 percent of respondents, respectively, reported having incomes between RM1,501 and RM3,000, respectively, in this study. Respondents who had a higher income were found to purchase and own more appliances because of their purchasing power; however, they also tend to use their appliances for a longer period of time (Islam et al. 2021). As a result, consumers with higher incomes are more aware of the negative effects of E-waste and are making better use of their appliances to lessen those effects.

According to Mane et al. (2019), only a few reasons, such as the loss of functionality or permanent damage to electrical or electronic equipment, are acceptable to consumers for purchasing new appliances. A shorter lifespan and an increase in E-waste generation are both a result of changing consumer habits that necessitate buying new appliances. According to the Department of Environment (DOE), Malaysia generated 706,295 metric tonnes of E-waste in 2010, which is expected to rise to 1,119,155 metric tonnes by 2020 (Nair, 2018). As a result, it's clear that the volume of E-waste generated each year is on the rise. Where is it predicted that in the future, mobile phones and rechargeable batteries will be the most significant sources of E-waste? (Tiep et al. 2015). A significant p-value of.008 indicates that 75.9 percent of Malaysian respondents are aware that E-waste generation is on the rise. As a result, the general public should be

aware of the growing problem of E-waste generation. E-waste disposal practices can be improved with this information, allowing the public to rethink their purchases before making a final decision. People who earn between RM1,501 and RM3,000 per month in the private sector account for the vast majority of survey participants, with 45.2% of them and 32.7% of them reporting the highest incomes.

When a product has reached the end of its useful life, it can be recycled to create something new, according to Chibunna et al. (2013). Ultimately, waste can be a valuable material and resource if it is properly reprocessed and recycled. To conserve raw materials and ecosystems, these activities will help to increase the value of waste while also reducing the amount of waste in landfills (Brosius et al. 2013; Desa et al. 2011; Schill & Shaw, 2016; Sharifah et al. 2018). Ninety-two percent of those polled agreed that recycling E-waste would lessen its negative impact on the environment and health. Respondents with higher education (81.0 percent) and those with an annual income of between RM1,501 and RM3,000 made up the majority of those who were aware of this sustainable method of managing E-waste, according to the p-value of.001 for both groups. Next, 80.6 percent of the total respondents are aware that recycling E-waste can reduce theamount of raw materials used in the manufacturing process. A p-value of.006 was found to be associated with this item, with respondents who earned between RM1,501 and RM3,000 reporting the highest percentage of respondents who agreed.

In order to protect the health of humans and the environment, electronic waste must be disposed of separately from household waste (Hendricks, 2012; Kiddee et al. 2013; Shumon et al. 2014), which contains chemicals, flame retardants, heavy metals, and toxic gases (Kiddee et al. 2013; Sivathanu et al. 2016). About 84.9% of those who answered the question in Selangor agreed that E-waste could not be dumped with other types of waste, such as household waste. Question B8 reported this. Among those with knowledge (44.2 percent), the majority (p-value =.004) work in the private sector, as indicated by their occupation. E-waste cannot be disposed of in the same way as other types of waste, so it is critical that the public, as a key consumer, understands this. At the household level, E-waste segregation needs to be practiced before E-waste is sent for recycling.

Conclusion

The majority of respondents in Selangor are aware of E-waste recycling in all eight questions. In general, about 70 to 90 percent of the respondents know the definition of E-waste, the content and impact of electrical and electronic appliances, the management and advantages of recycling electronic waste, and the definition of E-waste. According to these findings, people in Selangor are well-versed in the subject of E-waste recycling. In order to encourage the public to help reduce E-waste generation, knowledge can be seen as a key to influencing the public's attitude and encouraging good practice. Despite the fact that residents of Selangor are well-versed in the recycling of E-waste, the general public still requires education on this topic, particularly in the locations where E-waste can be collected. Television, radio, Facebook, newspaper, public talk, or any other relevant source can provide the information and facts. Thus, the public will be better informed about this major global environmental issue as a result of this effort to provide adequate information. In order to make the public aware of this global environmental issue, various forms of information will be used to ensure that the public is adequately informed. Good environmental awareness is a result of both adequate information and the demographic background of the respondents. Since the majority of those who participated in the survey were from the private sector, had a degree, and made between RM1,501 and RM3,000 per month, the government, non-governmental organizations, and other accountable bodies are in charge of disseminating the findings to the general public, and the study's findings can be used to help determine the best method for doing so in light of the respondents' demographics.

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Organic Solidarity in the National Response to COVID-19 in Brunei Darussalam

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Abstract
This paper examines the national solidarity in Brunei Darussalam during the COVID-19 pandemic and its consequential impact on younger generations. Utilising Emile Durkheim's solidarity theories, I examine how young people's social media use builds on state discourse in the pandemic. I contend that a shift towards an organic society is visible through a social cohesion that is based on differentiated roles. I argue that the citizenry plays a vital role in the forward momentum toward Industrial Revolution (IR) 4.0, which illustrates that solidarity cannot be forged as a top-down directive. By prompting economic and creative divisions of labour, the local use of social media in a public health crisis has shown the government a new way to foster solidarity. Significant implications for youth as future leaders of the nation are discussed.

Keywords: *Brunei Darussalam, organic solidarity, state rhetoric, social media, identity*

Introduction

Within the Southeast Asian region, the Bruneian nation stands out for its rigorous management of this pandemic that continues to rage through its neighbouring countries (Cucinotta and Vanelli, 2020). Since its first detected coronavirus case on 9 March 2020, Brunei Darussalam managed to smoothen the curve in under a month (Kon, 2020a). Brunei's success story (Khan, 2020) is attributed to the government's swift and pre-emptive action, which has included their shaping of public discourse of identity through official narratives of national security, social responsibility, and transparent communications. In addition to robust testing and contact

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tracing,[2]The public perception of the government in their management of the health crisis has been well navigated. In their daily press conferences, ministers have not just reached out to the public but also taken questions from local media personnel. These communications have gone a long way to forging a collectivist aim for the nation's health, economic, and social outcomes.

Within the nation, the people's reactions to the government's handling of the crisis caused by SARS-COV-2 or COVID-19 have reflected favourably on His Majesty the Sultan's leadership, as he delegates the work of crisis management to ministers. Given that two particular ministers, the Minister of Health (MOH) and the Second Minister of Finance and Economy (MOFE II), have steered public perception of the government's management of COVID-19, solidarity is fostered through their joint efforts. The former is ethnic Malay, and the latter is ethnic Chinese Bruneian. In this perspective, the Bruneian monarch has become a symbolic figure to harness solidarity. Apart from his two public addresses to the nation (PMO, 2020), the Bruneian monarch has delegated the task of COVID-19 management to a Malay Muslim Minister of Health and Chinese Muslim Second Minister of Finance and Economy, both of whom have been pivotal in public health matters and keeping the national economy afloat during the COVID-19 pandemic.

Amid a public sense that the government has commendable control over a health pandemic, the coronavirus has served the nation in unexpectedly positive ways. By reinforcing the nation as a social cohesive unit, the crisis has emerged as a gelling agent instead of a social fracturing tool. In fact, governmental and most public responses have been motivated by a common aim to safeguard a touted pace, which is embodied in the nation's self-named label as 'The Abode of Peace. In contrast to positive cases and escalating deaths in neighbouring nations of Singapore, Indonesia and Malaysia (Yildiz & Atanur, 2020; Sullivan, 2020; Lee, 2020). Brunei's flattened curve ('Brunei Darussalam', 2020) can be attributed to the nation's sense of solidarity. Throughout the first wave of the pandemic, it has maintained a state discourse that appeals to humanity by generating a message of unity that counteracts discrimination based on race and religion. The rhetoric of togetherness is employed in official public briefs, press

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[2] Testing is free for citizens, and migrant workers are randomly selected for tests. In Southeast Asia, Brunei is second to Singapore in tests per 1 million population ('COVID-19 coronavirus,' 2020).

conferences, and social media posts. Furthermore, released official statements do not segregate foreign workers from domestic COVID-19 cases.[3]

To explore the nation's solidarity, this paper adopts Emile Durkheim's theories of mechanical and organic solidarity. In addition, Louis Althusser's ideological state apparatus (ISA) will be used to illuminate the strategies deployed by the nation in building a sense of collectivity at a time of a health and social crisis in the Bruneian nation. Even as state discourse is a focus of this paper, social discourse engendered on social media platforms is also examined as a response to official discourses. Consequently, state objectives of national cohesion and a young generation's expressions of solidarity through social media during a national crisis posed by COVID-19 are discussed.

This paper argues that COVID-19 serves as a non-traditional tool of social cohesion to suture ethnic and religious divides within the nation. In particular, the young generation's turn to social media signals Brunei's headlong entry into Industrial Revolution (IR) 4.0. Their mobilization via social media illustrates that individualized or organic solidarity is more potent than mechanical solidarity. As Brunei's young generations gravitate to social media platforms, they demonstrate that their solidarity is not from a top-down directive. In this respect, COVID-19 has shown the government a new and more effective way to foster solidarity, as youths cannot be coerced to exhibit their solidarity through official propaganda. Despite identity differences, indigenous (Malay) and non-indigenous (non-Malay) people have come together with shared aims for a COVID-free community. Just as the virus does not discriminate, the pandemic is a good vehicle for bringing together people from various backgrounds as they unite for the collective cause to guard against an equally non-discriminatory virus. Coupled with Malay Islamic Monarchy or MIB (*Melayu Islam Beraja)* as the national identity, state rhetoric aligns with Malay and Muslim dominance in the sultanate. A state philosophy emphasizing likeness or homogeneity through the Malay Muslim identity supports mechanical solidarity, which is delivered as a top-down directive. However, social media highlights young people's solidarity formulated horizontally across their many differences.

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[3] While Singapore differentiates between community cases and migrant workers living in dormitories, Brunei consolidates the two. See Instagram infographics by the Ministry of Health @MOHBrunei.

To this end, this paper provides a textual analysis of press statements that have shaped state discourse about the COVID-19 situation in Brunei. In addition, I will also deal with the interaction offered in 'Question and Answer' sessions during these media conferences. An analysis will further provide insights into the government's response to this ongoing pandemic. Their motivations and objectives will also be discussed in relation to the nation-state's maintenance of peace and stability. Significantly, a collective spirit and strong leadership demonstrated across ministries encourage ties between indigenous Malay and minority communities within the nation. While travel bans and restrictions have imposed a state of partial lockdown in Brunei ('Brunei bars', 2020), the nation has neither suffered from a claustrophobic backlash of parochialism nor unchecked fear, even though 'a narrative of fear' (Mohamad, 2020: 351) has appeared via social media. In Brunei's tightly controlled society, the solidarity is authentic rather than coerced, such as expected from authoritarian states. In public health matters, it is not surprising to find Bruneians coming together to display their solidarity.

Even as the United Nations define youths by age to refer to those between 15 and 24 years (United Nations, 2020), I employ this term to delineate a young generation who are experiencing a transitional period as they secure permanent jobs for a stable income (Evans, 2008: 1659). Therefore, my definition of youth embraces Skelton's concept of youth as 'a transition between childhood and adulthood, marked predominantly by increasing responsibility and independence' (Skelton, 2002, cited in Evans, 2008: 1664). This paper focuses on official responses by the Ministry of Health (MoH) and Ministry of Finance and Economy (MOFE), who play significant roles in ensuring the safety and security of all people, including youths, within Brunei. Communications to the public are dealt with by the Minister of Health on a daily basis and the Second Minister of Finance and Economy on a regular basis up until 2 July 2020. At these media conferences,[4] Local media personnel often serve as a vessel to channel public concerns to the ministerial officers. Given Brunei's high social media penetration rate (Othman, 2020a), it is little surprise that the public has responded to the pandemic via their digital creative content.

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[4] All press conference footage is available from 'Nasional FM Radio Brunei' Facebook (FB) account.

Thus, this paper explores Bruneians' collective gravitation towards solidarity through their use of social media. Social engagement and participation are salient responses to MOH's 'Do Your Part Movement' promoted on their official Instagram (IG) account to curtail COVID-19's spread. Even while social cohesion nurtured in press conferences demonstrates mechanical solidarity, there is also a palpable call to organic solidarity, which the local social media community has taken up. Ultimately, this cohesive culture fosters solidarity among people of different cultures, races, religions and languages residing within the nation. Notwithstanding nationalism promoted via MIB ideology, which has existed since 'time immemorial' (Talib, 2002: 141) and was proclaimed upon independence on 1 January 1984, the authorities' coordinated approaches to contain COVID-19 and a young citizenry's communal goals of collective humanity exhibit solidarity across cultural, racial, religious and linguistic divisions.

Brunei: Syariah law, statelessness, and a benevolent monarchy

Brunei is a small nation on the northeastern tip of Borneo in Southeast Asia. With a population of 429 999 people (Department of Economic Planning, 2022) and a land size of 5765 sq. km, the nation's people have concentrated in urban areas away from the forests that cover 81 percent of the total land (Forestry Department, 2015). The economy is driven by the oil and gas sector, which accounts for more than 95 percent of its national exports (Prusark, 2016). Since 2016, it has reported year-on-end budget deficits primarily due to plunging oil and gas prices in the world (Bandial, 2018). A dominant Malay identity is encapsulated by its MIB national philosophy. The Malays in Brunei subsume seven indigenous groups or puak jati, which are the Brunei Malay, Dusun, Tutong, Bisaya, Kedayan, Belait, and Murut (Ho, 2019). The ethnic Chinese are the largest minority group (Deterding and Ho, 2021; Ho, 2021a). Other minorities include the Ibans and Penans (Ho, 2020a). Since its political independence in 1984, Brunei has defined itself through MIB ideology. The nation is governed by one of the longest reigning monarchies. Its people enjoy welfare benefits funded by its oil and gas economy, resulting in a 'very high human development index (Human Development Report, 2019).

As an MIB nation, Brunei enacted the Syariah Penal Code Order in 2013. While there has been international criticism of the implementation of Islamic law (Muller, 2016: 415), the promotion of Islamic values, morals

and norms has gone largely uncontested (Lindsey and Steiner, 2016: 553). Nonetheless, ethnic minorities comprising Chinese, Indians, Ibans and Penans who have not converted to Islam may not necessarily identify with the state's Malay Muslim identity. Its legal jurisdictions preside over both citizens and residents too. Contrary to popular conception, syariah law affects both Muslims and non-Muslims. On 22 October 2013, Brunei Darussalam Government Gazette released the Syariah Penal Code Order with clause 3.1 stating, 'Save as otherwise expressly provided therein, this Order shall apply to Muslims and non-Muslims' (SPCO, 2013: 1680). In Brunei, Malay identity does not necessarily entail a Muslim identity, as non-Muslim Malays comprise the Dusun, Tutong, Bisaya, Kedayan, Belait, Murut subjects (Brunei Nationality Act of 1961). Even as British civil law was implemented during the Protectorate era, Islamic criminal law takes precedence as it predates the English common law (Lindsey and Steiner, 2016: 554). On political independence, the Bruneian monarch underscored the process of Islamisation. In his *titah* (royal speech), he called for 'all people of Brunei' to 'honour and practise […] Islamic principles and values based on the Quran and Hadith as the basis of all activities concerning the racial necessity [sic], language, Malay culture and the monarchy institution as the governing system and administration of Brunei Darussalam' (cited in Black, 2011: 302-303).

In addition to the 'pivotal role of Islam in the state' (Talib, 2002: 145; see also, Schottman, 2006; Haqqi, 2017). Malay racial identity is fundamental to Brunei's MIB tripartite national ideology. With Islam as a religious, ideological state apparatus and Malay as a cultural, ideological state apparatus (Althusser, 1970: 121–76), the state has deployed specific ISA tools of national identity to bind its people together. As Naimah Talib (2002) points out, MIB serves to signify 'the consolidation of the Malay culture as a dominant feature in the state's cultural life' (142). As a result of Malay dominance, discursive and materialist marginalization of non-indigenous cultural groups may exacerbate social fissures that can potentially cause national fragmentation. Coupled with non-indigenous and racial minorities' lacking visibility in state discourses, stateless subjects complicate the process of social integration ('Permanent residents', 2009). Statelessness is often ascribed to Chinese born and bred in Brunei but without citizenship, because they are not subsumed under the 'puak jati' (Hussainmiya, 2010: 69). While some Chinese are granted citizenship, others remain stateless (Ho, 2021b). Not confined to the ethnic Chinese, statelessness may also include non-Chinese people whose parents are

originally from neighbouring Malaysian states of Sabah and Sarawak. Another case-in-point is Ibans, who are not considered puak jati. Non-belonging does not help the cause of national cohesion. However, MIB, which serves 'as a basis for national unity and development' (Talib, 2002: 143; Pehin Aziz, 1992) is promoted to forge mechanical solidarity.

Notwithstanding 'hardline laws' (Agence, 2019) to deter crime,[5] It can largely be seen that Brunei enjoys a high degree of national security, thus also peace and unity. In fact, the 'Abode of Peace' has lived up to its nomenclature as a sense of communal identity has triumphed in moments of crisis. Amid the coronavirus pandemic, a sense of togetherness has been evident in collective and socially collaborative efforts to curb COVID-19. In this respect, local and foreign commentators (Kon, 2020a; Kon; 2020b; Khan, 2020; Ho, 2020b) have attributed Brunei's success to a coordinated ministerial approach that they characterize as an 'aggressive strategy of proactive measures' (Bodetti, 2020) that has resulted in its flattened curve. As of 7 July 2020, Brunei has gone two months without recording a positive coronavirus case (Othman, 2020b). Even though decisive governmental action via travel restrictions and a partial lockdown has been lauded, much of its success is also attributable to public inclination and compliance with calls to keep their distance from one another by staying and working at home. In fact, the public's obedience and general consensus highlight a strong sense of social collectiveness, which has been tapped and cultivated at a time of a national crisis of a public health threat. Hence, this paper analyses this social cohesion as a way forward to understand the mechanisms of organic solidarity that have taken root in the nation. In spite of people's racial, cultural, linguistic and religious differences, the nation demonstrates a high level of social cohesion that is fostered, rather than weakened, by the pandemic.

Amid well intentions to give credit to Brunei's benevolent monarch for his leadership during COVID-19, there is also a tendency to overlook the citizenry's part in contributing to national cohesion, which feeds into the nation's social harmony. With the monarch as an absolute ruler, he is regarded as a benevolent king in his nearly six decades of rule. On the nation's COVID-19 handling, Asif Khan (2020) notes that 'Brunei has emerged as a shining example of the preparedness, concern and care for

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[5] Erywan Yusof, then minister of foreign affairs, states that Sharia law 'focuses more on prevention than punishment. Its aim is to educate, deter, rehabilitate and nurture rather than to punish' ('Brunei says', 2019).

not only its citizens but all who are present in the country, including foreign nationals and tourists. Although this perspective addresses an all-encompassing and non-discriminatory way in which the Ministry of Health, under the leadership of His Majesty the Sultan, has curtailed COVID-19 cases, it overlooks the readiness of citizens and foreigners to comply with social responsibility. With a monarch who prioritizes the 'welfare of all' (Khan, 2020), reports have underscored that 'Bruneian Sultan Hassanal Bolkiah put[s] himself at the forefront of his country's efforts to combat the coronavirus' (Bodetti, 2020). In pre-coronavirus times, the Sultan is known by his rakyat (people) as a patriarchal leader or fatherly king (Low, 2018). Considering benefits granted to Bruneians, including free education, health services and land/housing entitlements, social cohesion has been promoted via the rakyat's loyalty (*taat dan setia)* towards the generous monarch. While welfare continues during COVID-19, its citizenry has also exhibited organic solidarity.

Situating Brunei in the international context

Since its first detected case, Brunei has been effective in keeping COVID-19 in check. Daily press conferences organized by MOH ran daily from 9 March until 1 July 2020 upon Brunei recording fifty-four consecutive days with zero cases. At the time of writing, only 3 covid-related deaths have been announced. Its testing capability and numbers are also high, with a new virology lab built in a timely manner to facilitate more testing (Wasil, 2020). Operational Readiness Level 4 commenced on 27 July 2020, marking the penultimate stage before the nation prepares to revert to its new normal. Despite their success in curtailing the spread of coronavirus, there is an uneasiness amongst Bruneians as they observe escalating cases in regional counterparts of Malaysia, Singapore, Thailand and the Philippines that have struggled to keep numbers down while reopening their economies after national lockdowns (Nupus, 2020). As Brunei learns from the handling of COVID-19 in the West, cautionary lessons from Italy and USA, with their strained health care systems, have been drawn too (Horowitz, 2020; 'COVID-19 puts', 2020).

The uneasiness caused by the novel coronavirus extends not only to COVID-19 being a biological threat against humanity. Significantly, it also exacerbates inequalities and social fractions that are already in place within a nation. For instance, the politicization of the virus in America has exposed power disparities along the lines of socioeconomic class and racial

identities, with disadvantaged non-white working-class people gravely affected by COVID-19 (Walker, 2020). The U.S. Center for Disease Control and Prevention (CDC) has also released research data highlighting racial disparities during this pandemic (Stokes et al., 2020). In Singapore, the government has received criticism for differentiating between community cases of COVID-19 and cases amongst migrant workers living in dormitories (Khalik, 2020). Against this trend, Brunei seems to have forged a strong sense of togetherness amid an international and national crisis.

Analysis: State rhetoric and public responses on social media
Towards an organic solidarity

Brunei's MIB ideology asserts a mechanically organized society in that 'a religiously-based common culture that reproduces in each person the same ways of thinking, feeling and acting' (Hornsby, 2007: 1) affirms a collective consciousness or 'collective type' (Durkheim, 2010: 25) of identity in the nation. This kind of solidarity that is based on likeness is thoroughly instilled by ideological state apparatuses, most notably that of the nation as an imagined MIB community where a collective personality prevails over individual personalities. However, with social modernization causing a division of labour, organic solidarity based on differentiation has gradually emerged. In this vein, it is during COVID-19—a time of national crisis where different specializations and differentiated identities are evident—when organic solidarity arises. Consequently, a 'harmonious cooperation' is forged by advocating a 'greater justice by diminishing those external inequalities that are the source of our [society's] ills' (Durkheim, 2010: 28). Herein, organic solidarity highlights unity in diversity, even as state rhetoric may assert mechanical solidarity in MIB identity.

Although nationalist narratives continue prescribing 'ideas and tendencies common to all members of the society [that] are greater in number and intensity than those which pertain personally to each member' (Durkheim, 1964: 129), it can be seen that individuals are making their mark in different ways while also gravitating towards a form of interdependence. Rather than forging independence away from a social unit within the nation, I argue that Durkheim's concept of organic solidarity helps us understand a display of social cohesion beyond the state dictates of a unifying MIB ideology. With threats posed to humanity in the COVID-19 pandemic, the Bruneian nation is focused on achieving 'a distinctive internal, interdependent

functioning of modern, "organized" industrial society marked by increasing differentiation' (Lukes, 2013: xxviii), while it remains equally interested in framing this health threat within an Islamic context that attends to the state narrative of collective consciousness in the MIB identity. With MIB identity assigned by the state as 'the basis for national unity and development' encompassing 'the substance as well as the spirit of traditional Brunei' (Talib, 2002: 143), individuals have initiated social cohesion to 'progress towards greater equality in the external conditions of struggle' (Durkheim, 2014: 329) in COVID-19 times.

The following sections discuss the rhetoric of press conferences, *titahs* (royal speeches), and candid interactions between government ministers and local media representatives from various ethnic and religious backgrounds. The analysis also focuses on the social media use of Bruneians and their social organizing around the collective cause of national unity at a time of uncertainty. Herein, it is not my intention to propose that the Bruneian society is moving towards a fully organic society, nor should they be aiming to do so. Rather, there is a combination of mechanical and organic at the same time, as the organic organization of people becomes more overt and exists alongside its mechanical counterpart. Consequently, a strong sense of social cohesion demonstrated in COVID-19 times suggests a gradual shift toward interdependence, where integration as 'an organic whole is due to 'the recognition of the value of otherness' (Thijssen, 2012: 456). In this respect, media use is scrutinized as these IR 4.0 platforms attest to a complex division of labour that forges, not inhibits, solidarity.

Organic Solidarity: Emile Durkheim's Discourse of Social Advancement

First conceived during the first industrial revolution, organic solidarity affirms a sense of community through an interdependence between different social components (Durkheim, 2014). In industrialized societies, there is a risk of decreased social solidarity via different roles, assignments, and occupations of people. Rather than being undermined by such differences, organic society negates this risk and builds on social solidarity predicated on differences. Thus, social advancement via organic society departs from a cohesion formed in the homogeneity of individuals in their work, education, and religious beliefs.

In this paper, the term organic solidarity is usefully adopted to evaluate the Bruneian community as they encounter various challenges of an Industrial Revolution 4.0 accelerated by the pandemic. Instead of accentuating a disparity, unity is forged from within the differences of a people. Identity roles become multiple, not singular. Rather than gravitating toward fixed identity categories, the Bruneian community demonstrates their embracing of an identity in flux that navigates global and national demands. The ability to recognize different identity roles and assume different economic and social roles are leveraged by different ethnic groups to forge social cohesion within the nation.

State discourse and local media

Employing a firm and calm tone when calling for collectivity, the Ministry of Health (MOH) and Ministry of Finance and Economy (MOFE) in Brunei have consistently issued press statements demonstrating their combined interest in protecting public health and ensuring welfare.[6] Ullah et al. state that 'in Brunei, [there is] quite a relaxed mood because of the assurances provided by the respective government' (Ullah et al., 2020). The government's role in promoting solidarity during this pandemic has been crucial to the nation's success in containing the spread of the novel coronavirus, for which there is no known and effective vaccine (WHO, 2020). Effective cooperation across the ministries is positively correlated to the nation's containment of the virus.

In this section, an examination of state rhetoric will show that information dissemination is deeply ensconced within the MIB national identity, which serves as an ideological state apparatus in Louis Althusser's sense of the term (1970: 121–76). A close analysis further reveals that the ministers tend to employ tones of transparency to gain the trust of their audience, comprising Bruneians and non-Bruneians. Likewise, they can be seen adopting an image of themselves as responsible stewards or guardians who offer direction and pastoral care to the nation's people. In keeping with the MIB national philosophy, press statements have been delivered in the official language of Malay, even as local journalists may tend to use English during the Question and Answer session with the ministers. Significantly, an Islamic discourse frames these media conferences, as they always commence and close with a *doa selamat* (prayer). His Majesty the

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[6] Besides MOH and MOFE, several other ministries also attend press conferences.

Sultan is the exemplar with his substantive act of closing his *titah* on 21 March 2020 with an extended prayer to request for divine protection over the entire nation. Upon announcing Brunei's three COVID-19 fatalities, the Minister of Health Dr Hj Mohd Isham Hj Jaafar, also led special Islamic prayers dedicated to each of the deceased on behalf of the MIB nation. Even as both he and the Second Minister of Finance and Economy Dr Hj Mohd Amin Liew Abdullah code-switch between Malay and English in their responses to the local media's questions, their accommodation of *dwibahasa* illustrates the official status of Malay while also recognizing that English is widely spoken in the nation. Code-switching is also a manner of speech that connects with the younger generations who tend to be bilingual.

Thus, it is observed that these leaders straddle trust, leadership, and care while using MIB-compliant rhetoric. Their main approach has been characterized by their equitable approach to residents and citizens. There is an acknowledgement of organic solidarity based on difference, even while reflecting a mechanically organized nation that partakes in likeness based on a national MIB identity. For solidarity's sake, trust is built through transparent statistics offered daily to the public. MOH's comprehensive statistics include the number of tested, total accumulated tests to date, number of quarantined, total quarantine to date, number of recovery cases, number of positive cases, and the death count due to COVID-19. Furthermore, strong leadership is balanced with intimate expressions of concern. For instance, MOFE II took considerable time to explain to the public Brunei's unique economic structure when comparisons were being made with Singapore's generous financial stimulus packages (Azahari, 2020). On 30 March 2020, speaking unscripted and entirely in English prior to his official Malay press statement, he pointed out that the government monies spent in the fight against COVID-19 would inevitably reduce the sum of financial assistance available to younger generations. Coupled with flagging oil prices, coronavirus challenges the limited resources within national reserves. Herein, MOFE II was seen to invite public support and understanding. Rehashing the adage of 'ask not what the country can do for you, but what you can do for it' (MOFE, 2020), he simultaneously issued news of a BND$450 million stimulus package. Collectively, both ministries are attuned to public anxiety during a time of uncertainty, as their leaders focus on the impact to young generations.

While stay-at-home advice and social distancing calls are presented routinely,[7] A resounding message against discrimination has also been sounded through these press conferences. The English translated version of MOH's press statement delivered on 10 March 2020 states that '[W]e must stand together in solidarity in facing COVID-19 outbreak and not to discriminate anyone. Insya Allah, with prayers and faith to Allah, we will succeed in controlling the spread of this outbreak' (MOH, 2020a). The Minister of Health also reiterated this message in the Q and A session. To substantiate MOH's active stance against non-discrimination, he further announced free random testing for migrant workers in the country. On 6 April 2020, the Minister of Health elaborated,

> 25 out of 135 [COVID-19 positive] cases detected (18.5%) were foreigners. This includes some of the foreign workers who are working in the country. Therefore, the Ministry of Health will monitor the spread of COVID-19 in the country, especially among migrant workers; in collaboration with the Ministry of Home Affairs, the Ministry of Health will conduct laboratory tests at random among migrant workers working in this country. (MOH, 2020c)

While early detection amongst foreign workers helps to curb the spread of the coronavirus in the nation, such an initiative taken by His Majesty the Sultan's government signals an important act of solidarity fostered beyond the limits of MIB likeness. The markers of ethnic, religious and linguistic differences signalled by foreign workers, for whom the Bruneian government cares, are comparable to locals who are marked by their non-Malay and non-Muslim status. MOH can thus be seen to acknowledge organic solidarity that is further promoted and generated through the use of social media.

The interaction between local journalists and ministers has also been encouraging, as both parties have been attentive in straddling differences in culture and ethnicity. Humour that is employed in responses to questions about economic strategies, such as journalists' questions about the feasibility of 'drive-through wedding receptions', during a media conference on 5 June 2020, builds rapport between the public and the

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[7] MOH's Media Statement, March 19, 2020. 'The Ministry of Health would once again like to seek cooperation from the public in practicing social distancing in order to contain the spread of COVID-19 that has befallen the nation at this time' (MOH, 2020b).

government. In addition, a local Chinese reporter from the national English newspaper *Borneo Bulletin*, James Kon, has been seminal in bridging ties between the government and the public by eliciting humanistic responses to the situation. Even as social media users have criticized this reporter for asking questions in English, his use of English over Malay is increasingly accepted. He has also attempted to placate his national audience by using Malay on some occasions. On 28 April 2020, when responding to his question on public barbeques, MOH pointed out the commencement of the fasting month (Ramadhan) as a reminder of the Islamic socio-cultural context of the nation. Such interactions between Malay Muslim ministers and a non-Muslim Chinese journalist reflect intercultural and interethnic channels of communication to forge, rather than undercut, solidarity.

Social media: Building organic solidarity

Brunei's high social media penetration rate, which ranks fourth globally with a 94 percent standing in January 2020, means that social media use in the nation is thoroughly elevated. Along this line, social media has gained traction in the fight against COVID-19 as it accentuates individuals' distinct but collective roles. In addition to MOH Brunei's media campaigns such as 'Do Your Part', the public has picked on MOH's lead to *taranah di rumah* ('stay at home') and build a collective spirit ('together we can') to foster positive connections while being attentive to the central issue of humanity. There has been public compliance with COVID-19 restrictions, which has been demonstrated via social media posts, such as the IG account 'thenewnormal.bn' that is 'a platform dedicated to capturing moments during the current global pandemic' spawning a stream of hashtags (#copingwithcovidbn, #thecovidexperiencebn, #bruneivscovid and #quarantinelifebn) to mobilize a sense of solidarity during the pandemic within the nation.

In her article 'Creative Production of 'COVID-19 Social Distancing' Narratives on Social Media,' Mohamad (2020) states that a "narrative of responsibility" is apparent within social media ' content that call for the community to play their role as responsible citizen[s] and community members to flatten the curve' (5). Even as her study positions social media users' appropriation of the MOH's 'Don't Push It' cautionary remark as a narrative of responsibility, I argue that this public responsibility reflects the nation's organic solidarity. If responsibility is generated via social media

responses to official statements, then I contend that solidarity is characterized by its organic form.

Social media movements have been patronized by a host of local netizens, ranging from social media personalities to avid digital creators and individual members of the public. 'The Covid Experience Art Competition' in 2020 has attracted not just visually artistic pieces but also individual creations of poetry. All winning entries of this competition are posted on @thenewnormal.bn, with each winner tagged with their creative contributions. Significantly, the winners represent a diverse range, comprising ethnic Chinese and Malays. While several Chinese won for their digital art installations, there were a few Malay winning entries for poetry. The competition was divided into three themes: 'human nature/balance', 'self-care / health and hygiene' and 'stay at home / social distancing'. Aligning with a narrative of responsibility, the overarching objective is an attempt to instil a sense of harmony and coherence within an otherwise discordant situation catechized by COVID-19. For instance, Muhd Hamizan Nor Iman's poem addresses 'Two perspectives of the coronavirus' as stay-at-home measures result in 'income disappearing', 'pause to suffer', and a switch to 'online school' that leads to grievances about 'the internet price [being] painful'. Another entry by Armuba deals with 'this time of isolation and feelings of 'devastat[ion] at being alone. Finally, Mohd Khairul Aziman Hj Zamady's poetic piece invites the nation to 'grow together' by 'tak[ing] time to seek / *yourself".*

Ranging from students to working professionals in myriad industries, the contributors exemplify what Maria Grace Koh @eiamusic articulates in her song dedicated to the nation's efforts in curbing COVID-19 as 'com[ing] together'. Reflecting organic solidarity, its lyrics are attentive to Brunei's young and diverse population. Teaming with Malay local Malay artiste Zed Peace, Koh produces a song that serves as an anthem for overcoming identity differences in the fight against coronavirus. With a music video that includes overt images of a church and temple situated in Brunei's capital of Bandar Seri Begawan, its attendant lyrics resonate with a theme of inclusivity to build solidarity: 'It don't matter who you are / your colour and religion, if you're near or far.' Here, race and religion are explicitly mentioned as potential sources of division but can be overridden by a sense of organic solidarity. State media has also chosen to give this collaborative song airtime, by playing it on the national radio station 'RTB Pilihan FM'. Moreover, with the lines 'Come together, all you daughters and sons', the

song articulates solidarity based on love for a communality within the family of the nation. Koh's collaborative song is augmented by a group of young students' lyrical compositions about staying strong in the pandemic, such as those offered by Seri Mulia Sarjana International School (SMSIS).

Local IG account holders also often frame their volunteering efforts as a display of their solidarity with COVID-19 front-liners. For instance, @jeeradoesfashion whose day job is as a 'Stylist and Creative Director' includes several posts that show her dedicating time to lend a hand at local quarantine centres. Paediatric ophthalmologist @islandeyedoc, whose efforts during COVID-19 has been acknowledged through the award of the Commonwealth Point of Light for leading the design of child-friendly masks, is also active in encouraging a collective spirit through her motivational IG posts. In addition, she worked as a front-liner at national COVID-19 test centers. Even as these two local IG personalities hold day jobs, they join in the collective movement to articulate and commit to a sense of unity targeted at their young followers. While marking out differentiated identities, they also lend support to social media movements and have been involved in voluntary work to combat COVID-19 to serve as role models to the nation's youth.

In the early days, comparisons between COVID-19 and the seasonal flu pointed to the former's potential to be more lethal than the latter (Higgins-Dunn and Berkeley, 2020). However, scientific reports are gradually emerging, such as from the team of Timothy Russell, a mathematical epidemiologist at the London School of Hygiene and Tropical Medicine, that indicates COVID-19's infection fatality rate (IFR) may be as low as 0.6 percent (Mallapaty, 2020). As such, lockdowns are beginning to be viewed as overreactions at the expense of a nation's economy, education and other health services. The draconian measure of shutting down national borders has had devastating effects on employment, schooling, mental health and cancer treatments, where full lockdowns have been momentarily implemented (Triggle, 2020; Arnold & Valentina, 2020; AFP 2020). Although short of a complete lockdown, travel bans and restrictions that limit flights into and out of Brunei have resulted in declining revenues of the national airline carrier, Royal Brunei, thus inevitably dampening local tourism (Bandial, 2020). The subsequent redirecting of resources and manpower to COVID-19 testing sites, isolation centres, quarantine venues, and running of a special health advice line 148 inevitably result in some downscaling of other health services. Even as rates for mental health

illnesses during a nationwide stay-at-home period have not yet been published,[8] The national Hope Line 145 continues to receive calls, and mental health campaigns remain prominent on MOH Brunei's official IG page, including a public broadcasting service posted on 24 June 2020. With school closures from mid-March until 4 July 2020,[9] online learning has been promoted but at the expense of those without pecuniary means to internet access. Home-based online learning also places a responsibility on parents to guide their children. Hence, economic and domestic strains due to stay-at-home measures during the coronavirus outbreak could potentially deepen, rather than suture, fault lines.

In this perspective, the national cohesion that has been forged through organic solidarity threatens to implode upon itself as people continue to suffer from economic strains, domestic demands, and stress to provide for their families during COVID-19. Blandau states, 'half of the country depends on welfare to survive' (2017). Those less financially stable with lower incomes thus cannot afford hired domestic helpers to help with children's home-schooling. Thus, economic disparities between households are visibly broadening and threatening national solidarity during the COVID-19 crisis. Those advised to bring forward the following year's annual leave to cover their compulsory leave and suffer pay cuts would tend to break away from the cohesive bonds that are promoted during this time (Bandial, 2020). In this way, the organic organization of society may be undermined. Given that a division of labour creates and is created by lacking opportunities for minorities, one study shows that 'South Asians run most barber shops in Brunei, especially Indians' (Ullah & Kumpoh, 2018: 11), thus emphasizing a racial division of labour. With COVID-19 shuttering businesses and causing furlough schemes, further disadvantages to the tourism, food, beverage, and service industries are also experienced. Within the local Bruneian demographic, an existing gap between poor (unemployed) and rich (employed) is exacerbated by stay-at-home measures supported during COVID-19. As Mohamad (2020) argues, a 'narrative of resistance' has also emerged, albeit 'less prominent in Brunei's context' (353). Part of the discontent with authority's directive with stay-at-home measures and social distancing is its impact on jobs. According to the Labour Force Survey 2017, Brunei's youth

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[8] All other non-COVID administrative work has been postponed. Annual medical performances are usually reported at the start of each calendar year.

[9] The Ministry of Education closed down private and government schools from 12 March 2020 and began partially reopening on June 2, 2020.

unemployment rate was already on an upward trend, rising to 9.3 percent, which tops ASEAN (Bakar, 2019; Ullah et al., 2020). Locals are also increasingly driven into jobs that ethnic minorities or foreign workers conventionally fill. While the national infrastructure for food, health, and education remains robust, poverty-stricken households are most affected. The Community Development Department (JAPEM) and Brunei Islamic Religious Council (MUIB) have supported the poor comprising 5.04 percent of the Brunei population (Blandau, 2017). On 22 June 2020, MOFE announced the implementation of a National Welfare Scheme (SKN) to alleviate those financially afflicted ('Sistem Kebajikan Negara', 2020). It is apparent that COVID-19 exposes job and educational inequalities threatening to widen socioeconomic fault lines if left unchecked by the government.

Implications

Strategies against COVID-19 have ranged from those undertaken within health, education and travel industries that span the public and private sectors. While many nations in the West are now ruminating and, indeed, providing national reports and gathering official statistics to illustrate the once inconceivable argument that 'the cure [lockdown] is worse than the disease', Brunei has been unique in that full lockdown was never necessary as heavy social restrictions were implemented as early as a few days after reports of its first positive case. With Brunei's success in containing the novel coronavirus that has made international headlines (Bodetti 2020), it must be noted that this accomplishment is difficult to model elsewhere. Firstly, Brunei's economy is overseen by an absolute monarch that offers a 'comprehensive system of social welfare programmes unique to the region', (Talib, 2002: 135) which contributes to the national solidarity that already existed in the nation prior to COVID-19 pandemic. Secondly, even as national statistics and annual reports from various health departments have not yet been published, 'collateral damage from delays to healthcare and the effects of recession' (Knapton, 2020) looks to be minimal as Brunei has been quick to revert to a semblance of normality. Children went back to school under the advice of the Ministry of Education from 6 July 2020. Civil servants were also instructed to cease work from home in favour of resuming travel to their offices, as stipulated by the public service commission.

In all this, implications of an emerging organic society to the economy, education, and health sectors include a reorganization of resources that have prompted the adage of what one can do for the country, rather than what the nation can do for its people—thus, focusing on the theme of (social) responsibility of the *rakyat*. As much as physical or social distancing and keeping hands clean are the main thrusts of 'social responsibility during COVID-19, a call for people from all walks of life to pick up different jobs (from that they normally attend to) and innovate ways to earn a living is its further connotation. To achieve this, ethnic, racial and religious distinctions tend to blur into insignificance as the focus lies in jointly overcoming the challenges of COVID-19. On the social front, an increased use of social media serves not only to lend support to the government's decisions on COVID-19 related matters, but also to inspire creative divisions of labour that help to unite the nation. As the nation enters headlong into Industrial Revolution 4.0, internet connectivity via personal devices has also meant that society is adeptly changing to reflect a new reality of 'online learning' done from home (MOE, 2020). Acting collectively to mitigate the economic downturn has also meant that locals are taking up jobs that were previously off-limits due to their own self-limiting beliefs. For instance, local runner app services such as 'GoMamam' and 'Dart' have arguably set up a new division of labour as locals join foreign workers as part of the national delivery workforce too.

Conclusion

At a time when many countries around the world are struggling to contain coronavirus that has ravaged the economy, health system and public welfare, the cohesive responses elicited from the Brunei Government and its citizenry have been evident. While social cohesion has been a fundamental component of life prior to COVID-19's arrival, it may be argued that the pandemic crisis has brought the Brunei community closer together. This may be seen in the shifts towards organic solidarity, which reflects a unified identity that is forged between different segments of society. As Durkheim (2010) explains, 'The individuality of the whole grows at the same time as its parts' (27). Through social media, individual expressions of solidarity with the government's directives, advice and leadership have fostered a stronger community with a positive attitude of 'together we can', which is MOH's nationwide slogan. In multiple poems, songs and videos, the public has supported various campaigns spearheaded by MOH, such as the 'Do Your Part Movement'. Local communities lent

their support by staying at home, especially in the second quarter of 2020 when COVID-19 cases were rising and school, mosque, and restaurant closures were among its restrictive measures (Bowie, 2020). Consequently, there was a palpable sense of people coming together to push through the pandemic during uncertain times. With the virus under control in the third quarter of 2020, there has been a lifting of social restriction measures. However, international travel bans for both citizens and residents have remained in place (Bakar, 2020). Social cohesion has been the foundation of Brunei's success, and the nation stands to benefit further from a collectivity forged amongst individual members of its society.

Even as an organic society arguably existed at a time before COVID-19, its iterations evident on the social platform have been apparent throughout the COVID-19 pandemic. For instance, state television and ministries have used Facebook and Instagram to disseminate video footage of media conferences. Considering these shifts towards a visibly organic society, a balance between a mechanical society based on likeness in MIB and an organic society based on diversity offers a positive alignment with processes of modernization that the government has pursued as part of its aspirations for a people skilled in Industry 4.0. In the dual areas of national economy and health, a modernized division of labour alleviates pressure on the government to provide local employment as the rakyat is encouraged to be proactive in their job searches. There will also be less demand for heavily subsidized public health services with increasing openings of private clinics. This kind of diversity strengthens, rather than undermines, solidarity in the Bruneian nation.

Crucially, the issue remains whether organic solidarity fostered by IR 4.0 can be maintained once the pandemic transpires. This is a pertinent question for Brunei's younger generations as they will lead the nation further into the new millennium, a time of challenges following nationalism and globalization (Ullah and Ho, 2020). Considering Brunei's population's multiethnic and socioeconomic composition, organic solidarity based on individualized differences supplements the mechanical solidarity achieved via MIB national philosophy. Although contrasted against mechanical solidarity, organic solidarity is increasingly forged in times of a pandemic. The challenges of sustaining an organically structured society lie in the population's responses to the government and the maintenance of dialogues across communities facilitated by social media. In fact, IR 4.0 has shown the government that solidarity cannot be shaped via top-down directives.

Instead, it is harnessed through a young generation's affinities to social media as a mode of communication. Hence, this paper has been attentive to collective activities of mobilization through an engagement with social media, which the government should utilize to forge social cohesion within the nation. Significantly, a new and effective way of bringing people together through grassroots activities signals future directions for younger generations as they establish their collective presence in the nation.

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Factors Influencing Community Participation of Youth Affairs Committee Members in Mon State

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Abstract

There are many ways for young people to get involved with their communities, but Community participation is one of the most important ways. As a way of expressing their commitment, young people form political and social action groups, devise educational initiatives tailored to their interests, and serve as community activists. This study was carried out in Myanmar prior to the military takeover in 2021. A military coup protest was organized by CEC (Chief Executive Committees). In addition, the majority of the committee members advocate for democratic values in this era. For the purpose of this study, researchers looked into which factors had the greatest impact on the participation of youth affairs committee members in their communities. Mon State was chosen as the study site because the median age of the population there is 26.7 years old. The 2014 Census revealed a range of median ages that is lower than this one. It shows that the median age of Mon state's youth affairs committee members is lower than the state's overall median age. In addition, the state of Mon was home to three major ethnicities: the Mon, the Kayan, and the Burmese. This situation demonstrates that young people have settled in Mon state with a wide range of viewpoints and ideas. The 131 members of Mon state's youth affairs committee were selected from each of the state's three levels of youth affairs committee. The data collected was analyzed using linear regression and descriptive methods. It was discovered that the community involvement of young leaders is positively influenced by social, political & legal factors.

Keywords: *Political & Legal Factors, Social Factors, Social Media Usage, Community Participation*

Introduction

With the ferocity of active working groups, youth leaders play an important role in community development. Involvement in community life includes a variety of activities, such as electing local officials, establishing forums for discussion, and voting (Burns et al., 2001). Youth participation in the community is important because it helps fill the gaps in the community. Sixteen percent of the world's population is under the age of thirty. Young people's involvement in local communities is a key factor in finding a solution to the world's problems. Many

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opportunities exist for youth to participate in their communities' political, social, and economic aspects.

On the one hand, youth face numerous obstacles when it comes to participating in community activities, such as a lack of supportive policies and peer pressure. Approximately 175 million children in developing countries cannot participate in their communities because of a lack of literacy and nutrition. As a result, some academics have argued that in some countries, the number of youths engaged in community development activities is lower than that of the elderly. Young people are being tapped into for community development through government policies that are effective. Twenty-eight percent of Myanmar's population is under the age of 30, making it ripe for economic growth. For the sake of the nation's reform, the government should implement a youth affairs policy that is both effective and efficient. A study by Derweanna Bah Simpong et al. (2012) examined the influence of determinant factors on Malaysian youth community participation.

This study examines the factors that influence the participation of youth affairs committee members in Mon State in the community in light of the findings from the previous research. Many youth organizations exist in Myanmar, but the government established non-governmental organizations to handle youth affairs. In addition, there was only one national youth affairs committee in Myanmar, while the rest of the youth organizations were regionally based. For Myanmar's national policies on youth, the members of the youth affairs committee played a critical role. Thus, this study examines the research objectives by focusing on the role of youth affairs committee members.

There are five levels of Myanmar Youth Affair Committees: national, division, and state level, district, and township. Based on a 2017 policy, the youth affairs committee was established. Myanmar's young people should be well-developed in all areas, including their physical and mental well-being, as well as their ability to think critically and collaborate with others. Education, health, sport, job creation, economic, political, gender equity and technology, science, and good citizenship are the primary goals of Myanmar's youth affairs policy. In order to harness the energizing potential of Myanmar's youth for the benefit of the community, the country's youth policy was developed in response to the efforts of elected officials, ministers, and other interested parties.

The rationale of the Study
After undergoing a series of political reforms in 2010, Myanmar has been working to create a democratic federal state. Government must investigate and consider the implications of the energetic power of youth in order to successfully implement this reform process over the long term. There are numerous ethnic groups in Myanmar, which contribute to a wide range of problems. Consequently, the ethnic region's youth attitude is a significant factor in regional development.

Youth involvement in society can be enriched by implementing community development activities through community participation (Allaman, 2012). Nations around the world have implemented youth affairs policies in order to better understand the potential of youth as a source of national energy and innovation. Since the presidency of U Thein Sein, the government in Myanmar has been encouraged to implement a youth affairs policy by active youth and other civilian service organizations. A national Myanmar youth forum was held in Yangon Division as a result of this enforcement. The statements made at this forum were crucial to the development of a youth policy. Young people's involvement in community leadership can be increased by effective government policies for young people.

There are numerous reasons why this study should be carried out. For this study, the apparent participation of youth in volunteer works and regional community development programs related to Myanmar's political, economic, and social reform process in recent years was the driving force. Young people have the most formal avenues for getting involved in community development when it comes to the political and legal framework. Despite the importance of a young person's attitude in initiating leadership activities, the opinions of their family, friends, and other peers can have a significant impact. In order for young people to effectively participate in regional development, they must have access to accurate and sufficient information about their community. In order to facilitate the exchange of information among young people, the use of social media is extremely beneficial. As a result, the purpose of this paper is to examine how social factors, social media use, and political and legal factors affect the community participation of Mon State youth affairs committee members.

The objectives of this study are:
To examine the community participation of youth affairs committee members in Mon State.
To analyze the effect of social media usage, social factors and political & legal factors on community participation of youth affairs committee members in Mon State.

Review of Literature and Conceptual Framework

The Theory of Planned Behavior (TPB)
Ajzen developed the theory of planned behaviour (TPB) (1991). According to TPB, one of the most important antecedents of a specific behaviour is an individual's intention to perform that behaviour. Human behaviour can be predicted and explained in large part by looking at social factors, according to Ajzen (1991). Numerous behavioural studies have relied on the TPB to support their research on social media and leadership participation in relation to empirical evidence (Aminu, 2012; Gazzar, 2011; Kahne and Middaugh, 2012; Koe and Majid, 2014). Mohamad et al. (2009) and Pandian (2014) were the only studies to

use the concept of political-legal influence; however, in measuring leadership participation, both studies differ from the present because they used the Lewin leadership theory as well as the Ohio and Michigan leadership theories instead of the TPB. As a result, this research aims to examine the impact on the community of social media use, social factors, and political & legal factors. The primary focus of the theory of planned behaviour is on the individual's goals and actions. As a general rule, there are three factors that influence an individual's decision-making process. Behavioural control and attitude are examples of subjective norms. This is a critical point to make to understand how to apply TBP theory in this study. Public participation in politics and law is influenced by political and legal issues, as well as by people's use of social media. In terms of TPB subjective norms, all of these determining factors are considered together. Participation in local affairs is a common trait among today's youth.

Community Participation

Community participation by youth leaders is defined as actively participating in community development activities (McFarland and Thomas, 2006). On the other hand, a review of the literature uncovered a wide range of views on community participation, with the value of public participation widely acknowledged and the goals of community involvement clearly defined. According to Silong et al. (2008), "community involvement" includes planning and organizing charitable activities, such as volunteering or donating time to a cause, as well as religious or spiritual activities. The following sections describe the links between antecedent factors and community participation.

Social Media Usage and Community Participation

Internet-based tools and services that promote communication and collaboration among people are collectively known as social media. Increasing public awareness of the importance of civic participation through the use of new information and communication technologies (Ahmad et al., 2012). For young people to improve their leadership skills, it is clear that they can get the information they need by utilizing social media. A study by Chang et al. (2014) found that social media can influence various aspects of young people's decision-making. According to Kafai et al. (2012), work done in teams has a positive effect on social awareness and task performance. Young people's participation in their communities is significantly affected by their use of social media, according to previous research.

Social Factors and Community Participation

Various forms of social influence, such as socialization, conformity, peer pressure, leadership, obedience, and persuasion, are examples of social influence. In the presence of resources and opportunities like money, time, expertise, or the

necessary support of others, social attitude and personality traits play an important role in predicting human behaviour (Ajzen, 1991). So that youth can participate in their communities in the future, this promotes the development of social networks that allow people to exchange ideas, information, and inspiration with one another (McFarland and Thomas, 2006). Furthermore, in many developing countries, including Malaysia, social influence is linked to societal voices, such as drug abuse and sexual assault among youths (C.E.C., 2009). Parents and peers could influence a child's behaviour through positive social relationships (Blair et al., 2008; Asikhia, 2009). When it comes to group cohesion and individual strength, Oc and Bashshur (2013) found that followers have a direct impact on the behaviour of leaders. Social factors and youth community participation in Peninsular Malaysia were studied by Derweanna and coworkers (2017). According to the findings of this study, youth community involvement and social factors have a positive relationship.

Political & Legal Factors and Community Participation

Political-legal influences include public policies in the areas of democratization, freedom of expression, gender equality, and minority rights, which are all influenced by public policies (Kuhn, 2012). Many ethnic groups in Myanmar make it difficult for young people to participate in their communities, which could be affected by environmental factors such as political and legal ones. Youth may be able to practice the leadership activities described in previous studies if the political and legal framework is favourable. Political and legal influence on youth leadership activities is acknowledged by Allaman, 2012 (p. 1). These previous works of literature suggest that a robust political and legal framework is necessary to encourage young people to take on leadership roles in community development. In previous studies, it was found that tolerant racial, and ethnic minorities and a multi-party democracy could give young people the opportunity to work with adults and peers and gain the knowledge and resources they need to participate in leadership roles (Ahmad et al., 2012; Powers and Allaman, 2012). Based on previous research, this study acknowledges the importance of political-legal influence in community involvement. Based on these literature works and the various concepts discussed above, the following framework was developed:
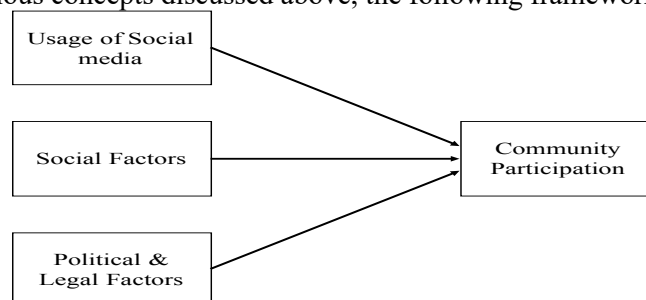
Figure 1: Conceptual Framework **(**Source: Own Compilation, 2020)

In this study, the precedent factors for youth community participation were the use of social media, social factors, and political and legal factors. According to the previous literature review, there are positive relationships between usage of social media, social factors, political and & legal factors and community participation of youth. The majority of Myanmar's youth rely heavily on social media to gather the knowledge and skills necessary to contribute to their community's development. The support of loved ones, friends, and colleagues can go a long way toward increasing an individual's willingness to get involved in their community. The government of Myanmar created a youth affairs policy to harness the power of the next generation for the benefit of the entire country.

Research Design

Political and legal factors, as well as the use of social media, are all examined in this study to see how they impact access to information and the involvement of young people in leadership in Mon state.

Population: This study primarily focused on the members of the Mon state's Youth Affairs Committee. Government representatives and elective youth members make up the majority of the Youth Affairs Committee's membership. Young people were the primary focus of this research. The participants in this study were drawn in equal numbers from each tier of the Mon State Youth Affairs Committee. In the youth affairs committee's constitution, there are three levels: the township, the district, and the state. There are 150 township committee members, 30 district committee members, and 15 state committee members elected at the level of the elective committee. For this study, the sample size was calculated using a formula devised by Yamane (1967). The sample size for this study was determined to be 131 young people based on the calculation results. The data for this study were collected using a simple random sampling method. This study relied on a combination of in-person interviews and online surveys. Mon state's youth affairs committee members were studied using the multiple linear regression method to examine the influence of social media use, social factors, and political and legal factors on their community participation. The descriptive method was also used in this study to investigate the nature of each variable. This study's sampling frame is depicted in Table 1.

Table 1: Sampling Frame

Layer of Youth Affairs Committee	No. of Committee Members	Percentage	Selected Sample size
Township level	150	77%	101
District level	30	15%	20
State Level	15	8%	10
Total	195	100%	131

Source: Survey Data (2020)

Questionnaire Design

This study utilized a five-point Likert scale to elicit participants' thoughts and feelings about each of the investigated variables. Many questions were designed to reflect Myanmar's political, legal, and social context. seven-item Likert scales, adapted from Al-Rahmi and Othman, were used to assess the level of community involvement among the youth (2013). Pandian (2014) argues that four questions are included in each variable such as the use of social media, social factors, and political & legal factors. There were self-assessment questions on the survey, and it was offered in both Myanmari and English. For example, questions such as "I'm always involved in planning and organizing charity activities" and "I'm always involved in planning and organizing campaigns for volunteer work" were used to gather data.

Data analysis

Reliability analysis was carried out on the information collected, which included data on social media use as well as social and political factors, information resources, and the involvement of youth in leadership. This study also utilized descriptive analysis to learn more about the participants' thoughts and feelings about the various variables. Another method employed in this study to examine the impact of political, social and media use on youth leadership participation was multiple linear regression. Each table shows the findings of this investigation. Each variable's standard deviation and Cronbach Alpha value are shown in Table 2 of this research.

Table 2: Mean Value, Standard Deviation & Cronbach Alpha

Variables	Mean Value	Std. Deviation	Cronbach Alpha	Number of Items
Usage of Social Media	4.1	.757	.752	4
Social Factors	3.1	.904	.784	4
Political & Legal Factors	3.6	.794	.668	4

Source: Survey Data (2020)

Table 2 shows that Cronbach Alpha is greater than 0.7, which is considered a good result for the questionnaire's reliability (Sekaran & Bougie, 2016). Involvement in volunteerism and other extracurricular activities is at an all-time high on social media, as evidenced by the 4.1 average usage score. Social factors have a mean value of 3.1, which is slightly above the natural scale and indicates that family, friends, and other peer groups provide valuable suggestions and guidance for youth to practice their leadership activities in their respective communities. In terms of political and legal factors, the average is 3.6, which is

higher than the natural scale, indicating that well-established policies can help to increase the youth's ability to practice leadership activities.

Table 3: Mean Value of Community Participation

Sr.No.	Statement	Mean Value
1	Involved in planning and organizing charity activities.	3.3
2	Involved in planning and organizing sporting activities.	2.6
3	Involved in planning and organizing religious activities.	3.2
4	Involved in planning and organizing campaigns for volunteer works.	3.5
5	Gave ideas to associations for community development.	2.9
6	Involved in decision making of my club/ associations.	3.7
7	Performed the community development project.	3.5
	Overall Mean Value	**3.2**

As shown in Table 3, the average value of each statement was used to gauge the level of community involvement among members of Mon State's youth affairs committees. According to the highest mean value (3.7), the youth are actively involved in the decision-making process of their clubs and associations. The lowest mean value is 2.6, which indicates that youth in the community participate in very few sporting events. A total of 3.2 indicates that youth well-practiced leadership works for community volunteerism, political volunteerism, and other forms of community involvement.

The Youth Affair Committee Members' Community Participation Factors are to be examined.
The linear regression was used to examine the influence of preceding factors on the community participation of youth affairs committee members in Mon state. For this study, political and legal aspects, social factors, and social media use are the independent variables, while community participation is the dependent variable.

The linear regression model for the effect of antecedent factors on community participation is

$$Y_i = b_0 + b_1 X_{1j} + b_2 X_{2j} + b_3 X_{3j} + e_i$$

Whereas : Y_i = mean of community participation
X_{1j} = mean of social media usage
X_{2j} = mean of social factors
X_{3J} = means of political & legal factors

Table 4: Regression Analysis

Model 1	B	Std.Error	Sig.
Constant	.943	.343	.007

(Community participation)			
Social Media Usage	-.020	.077	.793
Social Factors	.441***	.065	.000
Political & Legal Factors	.279***	.077	.000
R Square	.422		
Adjusted R Square	.408		
F Value	30.905		

Source: Survey Data (2020)

Table 4 describes the output of regression analysis. The regression analysis method was applied to examine the effect of social media usage, social factors and political and legal factors on community participation of youth affairs committee members in Mon state. According to this analysis, social and political and legal factors positively affect community participation of youth affairs committee members in Mon State. From the statistical point of view, one unit increase in social, political, and legal factors will enhance the 0.441 and 0.279 level of community participation.

Findings

In this study, there were two main goals. The first was an investigation into the level of community involvement among Mon State youth affairs committee members. Mon State's youth affairs committee members' participation in the community was studied as part of the second objective of this study. Based on these goals, logical conclusions were drawn. The overall average of community participation is 3.2, which is slightly above the natural scale. This shows that young people participate in community service activities, such as charitable work, sports, and volunteer work, on a limited basis. Volunteer campaigns and the decision-making process of their committees and representative organizations were found to be a major part of the work done by the committee members. In Mon State, youth affairs committee members are more likely to participate in community affairs because of the influence of social, political, and legal factors.

In the 99 percent confidence interval, the social factor coefficient (0.441) is statistically significant. At a 95% confidence level, the political and legal factors coefficient (0.279) is also significant. The findings show that respondents are primarily influenced by their family members, friends, and other social groups when it comes to engaging in community development works as volunteerism. Youth are encouraged to get involved in community development projects by their families, friends, teachers, and mentors. This shows that well-designed and formulated policies allow youth to participate in community development activities. The National League for Democracy (NLD) government in Myanmar formulated a youth affairs policy in 2017 that strongly supports valuable opportunities for young people to preserve their rights and engage in community development works.

Discussion and Conclusion

Academic and practical implications are discussed in this section. Social media, societal factors, and political and legal considerations all play a role in this study's findings of the involvement of Mon State's youth affairs committee in community affairs. The theory of planned behaviour was used to build the conceptual framework for this research. Social media use, social factors, and political & legal factors are identified as the most important determinants of young people's willingness to get involved in their community, according to this study. This study should include additional factors under the assumptions of the theory of planned behaviour as additional antecedent factors.

To better understand how social media, societal factors, and political & legal considerations affect young people's willingness to volunteer in their community, this study examines these issues. For the focal Ministry concerned with youth affairs policies, this paper will provide useful information on how young people perceive policy initiatives aimed at them. After studying this study, the Mon state government should carefully analyze the findings so that they can design and implement effective youth affairs policies and programs to benefit the community. Youth affairs committee members in other states and divisions should conduct similar research to gain a deeper understanding of community participation in the future.

As a result of the research, these conclusions and discussions can be drawn. Social factors and political and legal factors are two of three factors that have a strong influence on community participation. Young people's involvement in their communities was bolstered by their families' support as well as their peers' encouragement and support. There are many ways in which a young person's social group can encourage him or her to participate in community development projects, such as volunteering, giving back to the community, and joining student unions. As a result of these organizations' pessimistic outlook on community participation, young people may be reluctant to get involved.

Effective government policies have long been known to significantly impact society's development by providing high-quality public services, enforcing the law, and so on. The public's interest in government policies is also a positive sign for community development projects. When it comes to political advancement and other social issues, youth are more interested in having fun than actually getting things done. The government of every country should therefore develop effective youth policies in order to extract the young people's power for community development.

Due to time and resource constraints, this study has many limitations. This study focuses primarily on the members of Myanmar's Mon State's youth affairs

committee. Additional studies should broaden the scope of this investigation to include people from other states, such as Rakhine, Shan, Kayan Kayar, and so on, as well as members of youth affairs committees. The conceptual framework should be strengthened by including more precedents factors in future research.

Acknowledgements

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Development of Modern Transport System in the Bengal Delta and British Borneo: A Comparative Environmental Perspective, 1850-1963

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Abstract

This paper presents comparative studies of modern transportation systems in the Bengal Delta and British Borneo. To meet the demands of the new modes of resource extraction, the British colonial rulers introduced a new transportation system in both regions and built roads, railways, and navigational routes connecting major commercial and political centers. There has been little research into the historical connections between modern transportation and environmental changes in colonial South Asia and Malaysia. When modern transportation was introduced, environmental consequences were rarely considered. As a result, significant ecological changes and declines were unintentionally caused. The environmental changes brought about by these transportation systems in these two regions were not the same one from the other. For example, railroad construction harmed the plains and waterways in the Bengal Delta, whereas, in British Borneo, rubber plantations for the global market harmed the rainforests.

Introduction

The transport history of the Bengal delta and British Borneo is significant and fascinating because of the diverse geographical features. Both regions' physical environments have been profoundly influenced by the modernization of their economies and the expansion of their transportation networks. Multiple transportation networks are essential to many human endeavours, including agriculture, industry, urbanization, and so on. Natural processes like continental drift and volcanic eruptions have been responsible for most of the planet's environmental change in the past. Environmental changes caused by humans are more visible than those caused by natural forces. Increased resource extraction threatens the ecosystem (Millennium Ecosystem Assessment, 2005). From an environmental perspective, this paper

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compares and contrasts the introduction and development of the modern transport system in the Bengal Delta and British Borneo.

Modern transportation systems were introduced in the Bengal Delta and British Borneo by the British colonial rulers for the purposes of administration, commerce, and military. Traditional water and road transportation could not meet the needs of modern resource extraction, so they built new infrastructure like roads, railroads, and waterways to connect the major commercial and political centers of their respective countries. That modern transportation systems often ignored potential environmental impacts, which eventually led to remarkable ecological changes and declines such as landscape transformation, water body modification, deforestation and climate change is argued in the paper. When it came to environmental impacts, these two transportation systems had little in common despite their shared colonial goal of resource extraction. The railway had a negative impact on the Bengal Delta's plains and waterways. However, the rainforests of British Borneo have been largely obliterated by railway-road construction and the planting of rubber trees for export. A comparative approach is used in this paper to investigate the relationship between colonial South Asia's colonial transport system and environmental change in the Malay World.

Precolonial transport networks
The Bengal Delta
As part of the Mughal empire's Subah Banglah province, the Bengal Delta saw remarkable socio-economic and trade and commercial activity both within and outside its borders prior to British colonization. The Mughal Empire's political, economic, and strategic relations with Bengal depended on a well-developed transportation system. As a result, a well-structured transportation system developed in this area.

Waterway
Many navigable rivers and a large coastal area make the Bengal Delta an important waterway for both the export and import of passengers and goods. People have relied on rivers for commerce and trade since the beginning of time. Trade and commerce can take place on any river, depending on its size and navigability. The Ganga and Brahmaputra rivers, as well as their tributaries, served as the Bengal Delta's primary inland waterways. Throughout the year, the Ganga River was navigable (Munshi, 1980, p. 18). For centuries, the Padma River was the most important link between the Brahmaputra River system and the Meghna and Ganga rivers in the east and west. Prior to the establishment of the British Empire, this river served as one of the primary transportation corridors connecting Dhaka, Patna, and Kolkata (Munshi, 1988).

Railways in Bengal made it possible for people in the region to get around without having to rely on the Brahmaputra River. The importance of the Brahmaputra as a major waterway for trade and commerce increased as the tea and jute industries developed (Saikia, 2019; Goswami, 2010). The Meghna River was the only navigable river up to Tripura throughout the entire year in the nineteenth century (Munshi, 1980). According to Abul Fazl, Bengal's inland waterways had a wide variety of vessels designed for specific purposes, such as warships, freighters transporting both passengers and goods, and fast vessels like the Parao, Patella, and Jalia (Sarkar, 1949, p. 50). Flat-bottomed pinnaces, keelsless Bajras, Bhauliyas, Pansies, Ulak, Patelas, Hulyas, Dinggis, and Palwars were all used for inland navigation, according to Buchanan (Buchanan, 1928, pp. 588-92).

Land Route and Transportation
Roads remained important in precolonial Bengal for commercial and military purposes, as well as for reaching areas that were otherwise inaccessible by water. The Grand Trunk Road, or Badshahi Sarak (Emperor's Highway) from Sonargaon, Bengal, to Rohtas, Punjab, was precolonial South Asia's first great highway (Sarkar, 1987). In the words of Irfan Habib, the following roads and embankments are mentioned: The first road from Dhaka to Sangramgarh to traverse the elevated embankment (in Noakhali District). There is a second road, built-in antiquity, that connects Bagdwar with Kuch Bihar in North Bengal, running from Kamatapur to Ghoraghat via Bhotemari, Dhap, Malang, Pirganj and Vagdvar. The third place from the Rangamati to Kuch Bihar district (Habib, 1982, p. 48).

In the Bengal delta, before the arrival of modern transportation, carts and beasts of burden were frequently used. In the precolonial era, the humped Indian ox was a common mode of transportation (Tavernier, 1925; 1977). Rich people, government officials, and travellers rode in style on these steeds. In order to transport goods from remote areas, caravans were used (Buchanan, 1928; 1939).

The British Borneo
Precolonial British Borneo's precolonial transportation system was frequently depicted in its indigenous nature. An area's natural surroundings play an important role in the development of transportation infrastructure. Sabah, Sarawak, and Brunei, three regional states, heavily relied on their extensive river systems.

Waterway
Internal trade and communication in Sarawak relied heavily on river freight and distribution feeder services. Several major river systems cross Sarawak, including those that originate in the Sarawak-Kalimantan border ranges and those that originate on Sarawak's mid-coast but have matured over time (Kaur, 1995). Rajang is the main

river system in the area. The Belait, Brunei, Pandaruan, Temburong, and Tutong rivers comprise the Brunei river system. The different indigenous communities of British Borneo built and used a variety of boats, including the Pakerangan, Gobangigubang, Sapit, Dapang, and Kompit (Rutter, 1922, pp. 316-17, 348-50).

Land Route and Transportation
The British Borneo's land transportation system was not designed to cope with the region's challenging topography. Wet-swampy conditions downriver made it difficult to travel by land. Second, it was extremely difficult to get inside the tropical rainforest. Although the area was naturally restricted, there were a few paths and jungle tracks that were occupied by fallen tree trunks (Gomes, 1911, p. 148). Third, the mountains and hills served as an obvious physical barrier to transportation (Hatton, 1885, p. 6).

Foraging for forest goods was a common pastime in the jungles of Sabah. Although a road system was constructed in parts of the western region where rivers could not be crossed, these paths were little more than jungle tracks (Gudgeon, 1913, pp. 36-37). Sarawak, the southern part of British Borneo, had a very limited network of land routes prior to colonial rule. Only rivers and the sea served as a means of transport for goods and people between the towns and the rural areas. In the interior of the region, indigenous people built jungle paths that linked the rivers. The Dayaks, for example, constructed batang paths to gain access to interior spaces (Boyle, 1865, p. 57).

The kerbau or buffalo was the primary mode of transportation in British Borneo. In addition to being a means of transportation, the buffalo was also a source of food and currency. They pulled carts, ploughed fields, and hauled their owners around on the job. Other than buffalo, the people of the area relied on local ponies to get around (Kaur, 1994, p. 12).

Development of the Modern Transport System in the British Colonial Time
The Bengal Delta
Road Transport
Before the British colonial era, Bengal had a well-organized and extensive trunk road system. Trunk roads from the precolonial era were considered the most important communication networks in the early British period, despite the country's extensive waterways. Report of the Administrative Committee of 1867-68 stated that a large portion of Imperial communications expenses had been spent on trunk roads (Bhaduri, 1981). The British rulers recognized the importance of feeder roads in the deltaic Bengal when steam navigation and railways were put into operation in parts of the Bengal presidency. They also needed to extend imperial roads and provincial roads already in place (Bhaduri, 1981; Munshi, 1980).

The British government's road-building strategy was laid bare in the Annual Report for the years 1860-61. All districts were to have a single main road running through the center of town as the primary goal of this project. The imperial road was designed with communication in mind. The Lieutenant-Governor had attempted to build a network of local roads to serve as feeders for the railroads, linking the districts' most important cities (The Annual Report on the Administration of the Bengal Presidency, 1860-61, pp. 58-60).

Several important roads in eastern India were mentioned in the Annual Report for the years 1870 to 1871. This is a list that includes three important roads in the Bengal Delta: (a) the Darjeeling Trunk Road connecting Kolkata with Darjeeling through Berhampore, Bhagawangolla, Godagari and Dinajpur; (b) the Jessore Road connecting Kolkata with Faridpur through Bongaon and Jessore; and (c) the Chittagong Trunk Road connecting Daudkandi, Comilla and Chittagong. Annual report on the Bengal Presidency's administration, 1870-1871). The length of metalled and unmetalized roads in the Rajshahi, Dhaka, Chittagong, and Presidency Divisions of Bengal was noted in the Bengal Presidency Administration Annual Report, 1900-01 (See Table 1).

Table 1. Mileage of metalled and unmetalled roads

Name of Division	Total Metalled	Total Unmetalled
Rajshahi	$284\frac{5}{8}$	$5025\frac{1}{4}$
Dhaka	$60\frac{1}{4}$	$1395\frac{3}{4}$
Chittagong	15	$1361\frac{1}{4}$
Presidency	$534\frac{13}{24}$	$4515\frac{1}{4}$

Source: Annual Report on the Administration of Bengal Presidency, 1900-01

The First World War intervened in the pace of the construction of new all-weather roads and the development of others. Because the construction materials were not available in war time. (Munshi, 1980; Bhaduri, 1981). The road development between 1915 and 1926 is described in table 2.

Table 2. The road development between 1915 and 1926

Year	1915-14	1923-24	1924-1925	1925-1926
Surfaced Road Total Mileage	2,583 Miles	3,315	3,332	3,376

Unsurfaced Road Total Mileage	13,530	15,618	15,862	15,886

Source: Bhaduri, S. (1981). *Road Transport in West Bengal and Its Role in Area Development - A Geo-Economic Assessment*, PhD Thesis, University of Calcutta, p.18.

Road Development Projects Special Officer A. J. King was appointed by the Bengal Government in 1934 and ordered to prepare a road plan. A comprehensive report on road development projects for the Bengal government was published by him in 1938. There were approximately 91,936 miles of both metalled and unmetalled roads in the province, according to the report (King Report, 1938, p. 85).

Only after World War I did automobile transportation begin to have a significant impact on Bengal's economy. Commercial vehicles like buses and vans, on the other hand, began to be imported in significant numbers only in the early 1920s. Table 3 depicts the development of automobiles between 1913 and 1947.

Table 3 Motor Vehicles from 1913 to 1947

Year	Private cars	Motor Buses	Taxis	Commercial vehicles	Motorcycles
1913	3199		136		723
1914	3937		322		966
1923	10300		1167	867	2445
1924	12385		1430	1032	2863
1925	14560		949	818	3144
1926	17369		956	760	3482
1940	15876	1974	2245	3055	417
1941	19322	2270	2132	2833	1003
1942	16202	2341	3090	3364	506
1943	13477	1413	1611	4684	854
1944	13746	2541	4111	4871	917
1945	20984	3050	4117	6374	906
1946	13651	3921	4536	7806	1141
1947	17255	4636	4570	3921	1542

Sources: Bhaduri, S. (1981). *Road Transport in West Bengal and Its Role in Area Development - A Geo-Economic Assessment*, PhD Thesis, University of Calcutta, p. 26.

Railway

Although steam locomotives were introduced in England around 1825, Scottish engineer Macdonald Stephenson did not have the idea for an Indian railway until the 1840s. To get a better understanding of the terrain, possible routes, and cost-effectiveness, in 1844 he travelled to India after initially dismissing his first attempt as "wild project" (Mukharjee, 1994, p. 2). It wasn't until 1845 that he submitted his proposal for the first Indian railway system. At an estimated cost of about fifty million pounds, Stephenson outlines a massive outline of 'triangulating India with railway' that would connect Kolkata, Delhi, Mumbai and Madras as well as other major cities in India (Iqbal, 2006; 2010). In 1853, Lord Dalhousie's administration saw the beginning of the Indian Railway's first line between Thana and Bombay (Khosla, 1988, p. 1).

In 1862, the Eastern Bengal Railway (EBR) line was inaugurated from Kolkata to Kushtia near the Ganga to connect Kolkata with Dhaka. Southward, this line was extended to Goalando on the Ganga riverbank in 1871. (Iqbal, 2006; 2010). When the Northern Bengal State Railway was established in 1874, its route from Sara to Sirajganj and beyond was further expanded to include Dinajpur in the western Bengal region and Parbatipur in the eastern Bengal region between 1874 and 1879. It was merged with the EBR in 1887. Except for the Bahadurabad-Dhaka-Narayanganj line, the entire Eastern Bengal Railway was built on the west bank of the Brahmaputra River (Iqbal, 2010, pp. 53-54). Eastern, southern, and northern Bengal were all connected by the Eastern Bengal Railway by 1890-1891, when it had been extended to 783 miles in total. 254 miles were on a wide gauge, 491 miles on a metre gauge, and 37 miles on a 2-foot-2-inch gauge (Munshi, 1980, p.90; 1988). It was EBR's steamers that connected riverside railheads like Narayanganj to Dhaka and other places like Assam. The overnight train service between Kolkata and Goalando, the steamer between Goalando and Narayanganj, and then the train between Narayanganj and Dhaka were regular before India's partition in 1947 (Iqbal, 2006; 2010).

In order to meet the transportation needs of the Assamese tea industry, the Assam-Bengal Railway (ABR) Company was founded in 1892. In 1895, the Chittagong-Comilla section of the Assam-Bengal Railway was completed. About 342 miles of the ABR railroad had been built by 1903. Bengal and Assam Railway (B&A) was formed in 1942 when state railways bought ABR and merged it with the EBR to form a new company (Munshi, 1980, p. 93). In 1938, according to King's Report, there were 14 railways in the Bengal province, with a total length of 3,357 miles, serving the region (King Report, 1938; Bhaduri, 1981). As shown in Table 4, the railway line in the Bengal Delta is divided up by district.

Table 4 The District Railway Line

District	Railways in miles	District	Railways in miles
Jessore	66.0	Rangpur	205.0
Khulna	36.0	Bogra	86.0
Dhaka	118.0	Pabna	69.0
Mymensingh	230.0	Malda	85.0
Faridpur	90.0	24 Parganas	147.0
Chittagong	97.0	Nadia	180.0
Noakhali	48.0	Murshidabad	134.0
Dinajpur	131.0		
Rajshahi	101.0		

Source: King, A. J. (1938). *Comprehensive Report on Road Development Projects in Bengal,* Vol. I, Government of Bengal, Kolkata.

Inland Steam Navigation

There were a few instances of steam navigation of the Ganga in the early nineteenth century, most of which were conducted on an experimental basis. James Johnston, a former Royal Navy officer, started the steamer service in the Bengal delta. Even so, the East India Company established a regular steamer service on the Ganga in 1834 under its direct control (Munshi, 1980; 1988). The East India Company's officials and goods were transported between Kolkata and the country's interior by a few steamers that were in service for long periods of time. As a British-owned private enterprise, the Indian General Steam Navigation Company (IGSN) was established in 1844 to handle regular traffic (Munshi, 1980; 1988). In 1860, the Brahmaputra River had its first regular steamer service. In 1863, the Surma Valley was made accessible to steamboats for the first time. The IGSN Company began to pay more attention to the Brahmaputra and Surma Valley services over time. A second steamer company called the River Steam Navigation Company began operating on the same routes as the IGSN Company in 1862—between Kolkata and Assam. By the 1940s, there were eight steamer companies operating in the Bengal Delta region (Munshi, 1980; 1988).

The British Borneo
Railway
W. C. Cowie, a British North Borneo Company shareholder, was a key player in British Borneo's railway construction. He was convinced that the construction of the railways and the growth of the economy were intertwined. A J. West, a friend of Cowie's, was named railway superintendent after the proposal was selected (Kaur, 1994). On the west coast near Brunei Bay, construction began in 1896 on a railway connecting Sipitang with Tawau at Cowie Harbour. With its fertile land and high

population density, Cowie argued that building a trans-Borneo rail line would make sense (Kaur, 1994; 1998b). To get to Beaufort-Jesselton, which was 57 miles long and finished in 1902, the three lines were built under West's direction. To get to Tenom, which was 30 miles long and finished in 1905, it took 57 miles of line from the Beaufort-Jesselton line and 20 miles of line from Weston. The final stretch of I907 was extended to Melalap, a distance of nine miles (Kaur, 1994; 1998b).

Cowie believed that the construction of railroads would bring prosperity to the area. He died in 1919, but the railway was still underdeveloped, making upgrades necessary to deal with the influx of new passengers. Two Malayan railroad experts were hired by the new Court of Directors to prepare a report on the railway. According to the experts, the Jesselton to Beaufort line should be completely renovated. As a result, 60-pound rails were used to replace a significant portion of the 30-pound rails. Many wooden bridges were demolished and replaced with steel ones. ' Trains and other rolling stock grew in number. By 1923, the railway cost had increased to £800,000. (Kaur, 1994; 1998b). A total of more than a million people travelled in 1962, and a total of 54,864 tonnes of cargo was transported (Colony of North Borneo Annual Report, 1962).

Rail transportation in Sarawak was limited and did not demonstrate its full potential. Charles Brooke, the second white Rajah of the region, built the region's sole a-gauge railway to link the hinterland to Kuching. Sarawak's railroad only ran for ten miles, even though a survey had been carried out in I907 as far as the 24-mile line. The construction of the railway line began in 1911 and was completed in 1915. It was decided to begin road construction while also constructing a rail line, which had disastrous consequences for rail transportation. Finally, the railroad was shut down in 1933, and it lost a total of $1,063,760 over the course of its operation. Later, it was used to transport stone to Kuching from the mines located at the seventh mile (Kaur, 1995). As a result, Brunei's railway history is virtually nonexistent. The Royal Brunei Oil Company was responsible for maintaining the 8-mile-long state railway from Seria to Bada, the country's only water supply station (Colonial Office Report on Brunei, 1949).

Road Transport

Before colonial Sabah, British officials relied on indigenous paths that were the most direct route between two points and linked several river crossings (Bruce, 1924). An extensive network of bridle paths was proposed by British North Borneo Company Governor E. W. Birch in 1902 to connect remote outposts and densely forested areas of Residencies. By 1929, the bridle path's total length was approximately 640 miles long (Kaur, 1994).

I940 saw a road network of 241 miles and bridle paths of 596 miles in Sabah. Four new 149-mile roads were proposed as part of a road development project that began in 1948. (Kaur, 1994, p. 36). This project received a boost in I953 when Roland Turnbull was appointed Governor. There were some 300 miles of roads constructed in Sabah between I881 and 1954. Turnbull did it twice between 1954 and 1957 (Colony of North Borneo Annual Reports, I949-57) (See Table 5)

Table 5 Mileage of Various Type of Roads

Year	Bituminous Surface	Other Metalled	Earth / Gravel	Bridle Paths
1955	209	94	345	593
1956	225	118	359	492
1957	217	148	345	400
1958	217	78	427	389
1959	230	70	463	453
1960	233	80	456	471
1961	238	112	578	471
1962	243	221	590	471

Source: Colony of North Borneo Annual Report, 1962, p. 176.

With the road development scheme, an increasing number of motor vehicles and services functioned in Sabah. The rubber boom in the 1950s also led to a modest rise in the prosperity of the state and the import of a huge number of motor vehicles (Colony of North Borneo Annual Report, 1962). (See Table 6)

Table 6 The Number of Motor Vehicles, Bicycles and Drivers Licensed from 1958 to 1962

Type of Vehicles	1958	1959	1960	1961	1962
Motor Vehicles	5,725	6,964	8,154	9,876	12,450
Bicycles (new)	2,890	3,749	4,173	3,957	2,887
Drivers licensed	8,985	12,326	13,019	15,075	18,434

Source: Colony of North Borneo Annual Report, 1962, p. 178.

In precolonial Sarawak, there were no land networks to speak of. The only means of transportation were the small networks of streets that connected the settlements. Dayaks and other indigenous people built batang (jungle paths) in the remotest parts of the country. White Raja Brookes had no interest in transportation options. The Brookes administration's activities revolved around the waterways of the Great Lakes

region. The authority built short roads connecting various locations in the major localities, but they were not connected to one another. Short-distance roads were also built by the Borneo Company and Sarawak Oilfields to support their operations (Kaur, 1995).

He began implementing a new policy for road and bridle path construction under Vyner Brooke. Due to a lack of funds, the initiative was not successful. Consequently, in 1940, only the Kuching-Serian Road, a forty-mile stretch, was constructed thanks to this policy (Sarawak Gazette, 1922; Kaur, 1995). A British colony, Sarawak, was established in 1946 after the Second World War had ended. Construction and development projects were started under a new administration. A total of 847 miles of road had been built by 1962. Roads maintained by both government and local authorities are shown in Table 7.

Table 7 Road Type and Total Mileage in 1962

Road Type	Mileage			Total Miles
	Width over 12 ft.	Width 12 ft. — 8 ft.	Width under 8 ft.	
Bitumen or Concrete	150	29	1	180
Gravel or Stone	126	160	59	345
Earth	75	198	49	322
TOTAL	351	387	109	847

Source: Sarawak Annual Report, 1962, p. 254.

As the population and traffic in Sarawak grew, so did the demands on the state's motor vehicles. In 1962, the Sarawak Annual Report contained the following information: 3,577 motorcycles, 3,573 private cars, 210 taxis, 1,083 commercial vehicles and 206 buses had been registered by the year's end. (p. 258.)

Brunei became part of the British resident system in 1906, but the country lacked a well-developed road network. Brunei's first permanent resident, M. S. H. McArthur, had begun reforming the country's administration. Brunei's first road was a one-and-a-half-mile loop around the city center. The road that led from the old British Consulate to a square behind Kampung Ayer was built here. In 1924, Brunei became the first country in the world to import automobiles. The number of roads in Brunei had grown to 68 miles by 1934. Road development began in 1936 and finished in 1937, with a total expenditure in excess of $ 67,000. There were 102 roads by the Second World War, and the number of vehicles on the road increased. The British Malayan Petroleum Company built and maintained all of them (Sidhu, 1995, pp. 10-11). More than 122 miles of roads were in use by the end of 1947 (Brunei Annual

Report, 1947). In 1947, Brunei had 354 registered vehicles, and the following year, the number had risen to 627. Brunei's city-to-Seria main road was officially opened to traffic in 1958 (Sidhu, 1995).

Navigation

The primary mode of transportation in Sarawak was still water. For centuries, boats were used to transport goods and people between the coastal and river ports of Kuching and Sibu and between two. Most of these local vessels served as feeders to ocean-going ships. James Brooke operated the Royalist and the Swift on the Kuching-Singapore line. Another steamer, Sir James Brooke, was brought in by the Borneo Company of Sarawak. The Chamber of Commerce of Sarawak established the Singapore and Sarawak Steamship Company in 1875. Non-motorized small hand-paddled native crafts were the primary mode of transportation in the upstream territories. To conduct business, Malay and Chinese boat hawkers transported freight over long distances to rural areas in the interior (Gin, 1995; Kaur, 1998b).

When the North Borneo Chartered Company started its function in Sabah, steamer services with Singapore were irregular. Initially, the Chartered Company planned to develop trade links with the new stations at Sandakan and Kudat and other river ports on the Padas, Papar, and Tempasuk Rivers. By 1890, six steamers sailed between Sabah and Singapore, and two plied to Hong Kong. Behn Meyer and Company, a German-based shipping agent, provided a fortnightly steamer service from Singapore to Labuan, Jesselton, Kudat, and Sandakan. For inland navigation, the Chartered Company introduced launches to communicate between the trading post and the rivers. During the First World War, Behn Meyer and Company stopped their service for the Charted Company. Subsequently, the Chartered Company hired the Straits Steamship Company, a Singapore-based company, to carry a regular weekly steamer service between Singapore and the Sabah. In 1927 a local steamship company, the Sabah Steamship Company, was established to run between smaller ports such as Lahad Datu, Semporna, Tawau, and Usukan and also between the larger ports of Labuan, Sandakan, Jesselton, and Kudat (Kaur, 1998b, p. 86).

Environmental Impact of Modern Transport System

Colonization of the Bengal Delta and British Borneo by the colonial transport system had a profound impact on the water regimes, plain land and forest, wildlife and climate of the region. It was the colonial government that put in place the first modern transportation systems in both regions. The British rulers' motives for introducing

transportation in both regions were similar, but their effects differed, which necessitates further investigation.

The Bengal delta

C. A. Bentley, Bengal's Director of Public Health, noted in 1922 that rain and floodwater were to blame for both the decline of agriculture and the deterioration of public health that had followed it. When embankments were haphazardly constructed in the lower Bengal region in the name of flood prevention and, secondarily, in order to build a rail and road network that covered the region, the rivers' natural drainage system was disrupted, which had disastrous results like agricultural decline and epidemic malaria (Bentley, 1925). Throughout the Raj, medical officers' reports and experts' books provided clear and radical views on how development policies exacerbated environmental deterioration and increased malaria rates (Klein, 2001).

From Kolkata to Goalundo, an EBR line was constructed on the floodplain of the Ganga. The embankment on which the railway line was built at first had almost no channels for water to pass through (Iqbal, 2006; 2010). EBR's catastrophic impact on northern Bengal's water supply was clearly visible. The Chalan beel, a 1547-square-mile body of water, was located in Rajshahi and Pabna districts, for example. There are approximately 47 rivers in northern Bengal that drain into this drainage system, making it a major crossroads for a variety of waterways. Nearly half of the Bengal Delta's drainage was saved and discharged by the beel. It was at the beginning of this century that the beel was surrounded by the EBR line. Enormous embankments were required for the construction of the railways in these low-land areas, obstructing the system's natural drainage (Iqbal, 2006; 2010, pp.130-31).

Floods devastated Bogra and Rajshahi in 1928. Between the Hilli and Nator rail stations, the most flooded area lay on both sides of the EBR. Meanwhile, on August 24, heavy rains fell on Rajshahi, increasing the flood water draining from the upstream districts of Bogra and Dinajpur and flooding the entire northern Bengal region. The floodwater was unable to drain away because of the railway embankment. More than 200 square miles of crops were destroyed, resulting in damage to 1400 square miles of land (Iqbal, 2006; 2010).

Public health in the Bengal Delta was severely impacted by the large number of embankments that were also built for the railway and road during the massive construction project. Several devastating waterborne epidemics, such as malaria, were brought on by it. It was reported in 1878 by the Sanitary Commissioner during the construction of the Jessore and Faridpur roads that an epidemic had occurred during the Grand Trunk Road's construction (Bentey, 1925). During the construction of the

railway between Dhaka and Mymensingh in 1884, an epidemic of malaria was reported. In the Sanitary Report of 1907, the Civil Surgeon stated that a fever outbreak had occurred in Murshidabad. The railway engineers were also blamed for failing to provide any drainage for the pits and hollows along the embankment, according to the report (Bentey, 1925). Malaria became widespread in the Bengal Delta during the first quarter of the twentieth century, heralding the start of a pandemic in Bengal. Every province in India except for Eastern Bengal and Assam saw a decrease in the death rate between 1903 and 1909. (Iqbal, 2010).

Since construction began in the delta, many areas have seen catastrophic changes that can be directly attributed to the railroad construction process. Prior to that time, the water flowed from one location to another, relying on the natural drainage process. On the other hand, railways obliterated this natural water movement process (Bentley, 1925). British rule in India led to large development projects such as railways and irrigation canals, according to Ira Klein in her critical essay. There were only a few studies looking into the potential environmental harm they could cause. Later, when health officials found out about their negative effects on health, the expert's estimated funds for recovery were usually rejected because they were considered too expensive (Klein, 2001).

The British Borneo

Deforestation in Borneo was at an all-time high during the British colonial era. In addition to timber trade, new land was made available for cash crop cultivation, railway, road, and bridle path. British Borneo had a relatively slow expansion of railways and roads until the 1960s. The expansion of transportation infrastructure occurred in such a piecemeal fashion that it had no discernible impact on deforestation or the environment. British Borneo's link to transportation and deforestation can be found in the global expansion of transportation systems and automobiles. It wasn't until the early 1900s that rubber was grown in British Borneo, and it quickly became a major industry. Motor tyres in North America and Europe necessitated a great deal of rubber plantation, much of which was done at the expense of natural forest resources.

Rubber's expansion in Sabah and North Borneo was remarkable. There were 12 rubber companies in the region by 1910, and by 1928, 30 companies issued a total of approximately £4 million in the capital (Kaur, 1994). When rubber cultivation first began in 1902, only 40.5 ha of land was devoted to it; sixty years later, that number had risen to 69607 ha (Kaur, 1998b). As a result of harvesting cash crops or building roads and railways, Sabah's colonial era saw a lot of deforestation (See table 8).

Table 8 Expansion of the Rubber Industry, 1902-1960

Year	Area (ha)	Export (tonnes)	Year	Area (ha)	Export (tonnes)
1902	40.5		1947	50586	15250
1907	1306	2.26	1950	50586	24278
1910	5971	24.75	1955	49451	20422
1915	12564	1067.27	1956	51993	20218
1920	20989	4170.13	1957	54694	20218
1925	28516	5511.09	1958	60279	20523
1933	46993	7906.75	1959	65310	23266
1939	53169	12054	1960	69607	22352
1940	53812	17988			

Source: Kaur, 1994, p.23.

On the western side of the Poak Concession, on an area of about 3,000 acres, the cultivation of Para rubber began in 1902 and was Sarawak's most important cash crop. The Borneo Company Limited of Sarawak made a killing in rubber in 1910, when prices were skyrocketing. In 1912, Sungei Tengah saw the construction of a rubber processing plant (Gin, 1995). While this was happening, rubber farming became extremely popular, and many Western companies invested in the Para rubber farming industry. During the 1930s, the government of Sarawak introduced new legislation that established the government's ownership over any land that was not registered with the government (Kaur, 1998a). Throughout the 1930s and 1940s, Sarawak's rubber industry grew tremendously, with 30000 hectares of land being cultivated by 1930, 97000 hectares by 1940, and 148000 hectares by 1961 (De Jong, 2001).

The establishment of rubber estates and the construction of railway lines in British Borneo brought the indigenous Dusun people and the British rulers to blows over a different environmental issue. Due to both the rubber estate and the railway, Dusun of the Papar region was threatened by both. They witnessed the government or estates evicting them from their homes and land. Numerous Dusun people who lived near the railway were also forced to abandon their beloved orchards, grazing lands, and graveyards (Tze Ken, 2012). In this way, British Borneo's environment and landscape were altered by the railway and rubber plantations.

Conclusion

Briefly summarized, the precolonial or inherited transport system of Bengal Delta and British Borneo was used by British colonial rulers to introduce modern transportation methods. There are a number of surprises in the above discussion. Colonial rulers first used and maintained the roads and rivers they inherited until steamships, motor

vehicles, and trains were developed. When the primitive system could no longer handle the additional extraction of resources, they resorted to this method. Afterwards, both regions were brought up to date with modern transportation. A second difference was that both regions had the same motivation for implementing these new transportation systems, but they differed significantly in terms of their actual design and implementation processes. About fifty years before British Borneo, a modern transportation system was established in the Bengal Delta. The Bengal Delta had larger trafficking networks and a higher volume of people and goods than British Borneo. Although British Borneo had a relatively slow pace of growth until the end of the twentieth century, Bengal had a much faster pace.

It's also worth noting that the British government and even locals in both regions did not take environmental consequences into account during the early colonial periods. European scientists began to take environmental concerns into account after a few decades. Because many British officers involved in the construction of railways and other modes of transportation were aware, they reportedly advised colonial policymakers to take environmental concerns into account. It was an unprecedented ecological decline in the Bengal Delta. Deterioration of the water regime, agrarian structure damage, widespread epidemic morbidity, and worse public health all contributed to an increase in the death toll while also weakening the economic and social system as a whole." These phenomena eventually led to the Great Bengal Famine of 1943, which also claimed the lives of 3 million people in the Bengal region of India (Iqbal, 2010). The British Borneo, on the other hand, was the scene of extensive logging for the purposes of rubber cultivation or infrastructure development. Only deforestation was visible in this area as a sign of ecological destruction.

British rule in the Bengal Delta and British Borneo was built on an inherited precolonial transportation system. With the introduction of modern transportation, these networks were reworked. The regions' geographical layout could be modified as needed. In the Bengal Delta and British Borneo, they altered the topography to build modern railways and roads through the construction of embankments and dams, deforestation, and the cutting of rock or hills.

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Digitalization in the Land Service Delivery: Comparison between Bangladesh and Indonesia

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Abstract

The administration of a country's land system has a major impact on its economy and society. Digital land management has the potential to improve the land administration of developing countries and make it more efficient. The governments of Bangladesh and Indonesia have implemented a digital land management framework in the land system to ensure optimal land development, in particular, to deliver land services efficiently. The land offices of both countries have a variety of obstacles when it comes to delivering digital services. Because of this, it is important to recognize the current use of digitalization and identify the variables influencing digitalization in land service delivery by land offices in order to make informed decisions about their future. Content analysis was applied to gather data for the study, which used a qualitative approach. The correct deployment of digitization in land administration in both nations is being slowed down by a lack of institutional and operational capability and personnel misconduct in service delivery.

Keywords: *Digitalization, Service Delivery, Land Office, Bangladesh, Indonesia*

Introduction

Proper land management is essential to reducing land-related complications in all countries (Hoque, 2016). South and South-East Asian countries can benefit greatly from the use of information and communication technology (ICT) in their land management systems by digitizing them. Negotiation, coordination, networking, and ICT regulation are all important in these countries if land management is to be effectively digitalized (Gessi, 2006). By enabling file and data exchange across government agencies, digital service delivery can reduce inefficiencies in processes and, as a result, errors introduced by manual procedures while also reducing the amount of time necessary to complete transactions. In addition, consumers can now input their information online, considerably enhancing the service level they receive (Lin et al., 2001, cited in Asad, 2013). As a result, digitalization has a favourable impact on improving service delivery efficiency and enhancing customer happiness. Land service modernization is perceived as costly and time-consuming, but the initiative to begin the process is

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the right one to provide proper digital service. The land sector can benefit from digital transformation by using information technology to become more economically mature, thereby contributing to the achievement of long-term development objectives. For underdeveloped countries, a 10% increase in Internet use correlates with an additional 1.35 percent GDP growth, while for rich countries, a 1.19 percent rise (Kusmiarto et al., 2021).

The government of Bangladesh has set up a task force to modernize land registration and management as part of the digitalization process that began in 2008. Among the suggestions, the task force made following its seven-month investigation was the urgent requirement for the digitization of land records, registration, paperwork, and other related data (Islam et al., 2015). It is important to preserve local land records (upazila and zonal land offices) and centralized documentation to make it easier for citizens to obtain necessary documents in their area. The digitization of land records will undoubtedly alter the economic landscape of Bangladesh. There is little public awareness of the progress that has been accomplished, but the premise is that it will curb corruption and minimize land conflicts (Hossain, 2017).

It is not just Bangladesh that has embraced digital change, but Indonesia as well. There are four electronic-based land services provided by the Indonesian government agency [Ministry of Agrarian and Spatial Planning/National Land Agency (ATR/BPN)]: Electronic Mortgages, Land Value Zone Information (ZNT), Land Certificate Check, and Letter of Registration Information (SKPT). At least 72 types of land services are provided by Indonesian land offices, which are categorized into six service categories: First-time land registration services; data maintenance services; land registration and information services; land measurement; land regulation and arrangement; and complaint management services (Kusmiarto et al., 2021).

Citizens have been subjected to abuse, maltreatment, and a general lack of cooperation by land office employees (Billah, 2017). In addition, land governance is plagued by issues such as a lack of institutional and operational capability, a lack of specific norms and regulations, a lack of flexibility on the part of service providers, and a lack of necessary resources and logistical backup. By using their muscular might, the land grabbers control ownership through fraudulent documents and deprive the governments of revenue (Barakat, 2001). In both countries, these issues obstruct the successful digitalization of service delivery and satisfaction for citizens. The study's rationale is that land offices in Bangladesh and Indonesia are providing digital services through the digitization of land paperwork at an accelerated pace. The study's goal is to discover how far the land offices in both countries have progressed toward digitalization and what obstacles remain in the way.

Improved land administration and digital management systems have been on the way to implement by the governments of Bangladesh and Indonesia to improve the quality of land-related services for citizens (Hossain, 2015). All land services must be implemented digitally in both countries to meet the new challenges the world is facing.

Methodology

Following a qualitative approach, this study was carried out. Since the research is conducted in a natural setting, the qualitative technique was employed as the primary method of data collection. The research was based on secondary data obtained from numerous sources, such as journal articles, books, newspapers, dissertations, and grey literature. An internet search yielded relevant data for our study. In addition, due to the newness and shortage of data, the research team turned to 'netnography' to gather information. Both countries' land ministries' websites were browsed heavily for this investigation.

Literature Review

Research on land administration digitization is scarce in many countries. This research is exceptional in the sense that digital land service delivery in Bangladesh and Southeast Asian countries has never been compared. Indonesia's land service delivery has undergone a digital transition, as detailed by Kusmiarto et al. (2021). Indonesia's Digital Governance Assessment Framework (DGRA) has been used to assess if a land office is ready to carry out digital transformation visions. Land offices in Indonesia have been shown to have issues with accuracy, consistency, consistency of data, and completeness of data in their digital land service delivery (Kusmiarto et al., 2021). There were no digital records or information management in Bangladesh's land sector prior to digitization, and all land surveys for more than 100 years were done manually. When it comes to ensuring accountability in the land sector, a manual information management system unintentionally hinders field operations and is a huge obstacle to digitization. For the efficient implementation of digitalization, every land office requires ICT-skilled personnel (Hasan, 2017).

Land records in Bangladesh may be preserved digitally by using an e-Service Center and DLRS to input the *khatian* records and print the information. Some officials and employees, however, lack enthusiasm and are reluctant to use digital services because they fear that they will limit their ability to engage in corruption and irregularities (Hossain, 2015). To counter this, the traditional paper-based land management policies in Indonesia can readily be replicated and falsified. Data harmonization and openness, lightening data access, permanent record management, and, most crucially, a solution that is less expensive and faster have been implemented to increase land ownership by the public (Thamrin et al., 2021).

Before digitalization, people had to spend a lot of time and money to receive land service and to change their land title. There were instances where land mutation took an additional 3 to 4 months or required payment to an intermediary. The land mutation system has to be automated in order to better serve the public (Saif & Hawlader, 2018).

Land administration and information services can benefit greatly from digitalization, which can make land markets and urban and rural economic growth more efficient and effective (Goyal, 2011). With land mutation, a person would have to approach the Upazilla Land Office and confront a variety of difficulties. In this light, land records and land service apps and databases assist service providers and customers alike in delivering and receiving better digitalized services (Nahrin & Rahman, 2009). However, there are numerous institutional restrictions on Bangladesh's land administration and management and service provision. More time, expense and trips were required for service recipients who sought service from multiple offices (Islam et al., 2015). The service seekers would substantially benefit from the automation of registration records, which would provide them with information on registration records (Khan et al. 2009). The mutation process must be automated in order to provide better service to citizens (Subedi, 2016). In order to supply digital services successfully and efficiently, service providers' mindsets must also be altered. However, land and sub-registry offices collude to commit corruption, and officials and employees are engaged (Masum, 2017). People who have paid bribes to them and had land ownership illegally transferred or documented in their names often work together with touts and land sharks (Talukder et al., 2014). The rise in land disputes in the country is attributed to corruption in the land sector. An IT-based solution to land administration's uncoordinated and disaggregated executive process could be best for decreasing corruption and existing difficulties with land services (Hasan, 2017).

A series of extensive and time-consuming procedures are also evident in Indonesia when it comes to delivering land services to citizens, particularly in relation to the land certification system. It takes a long time, and several departments are involved in keeping track of crucial files and documents. This complicated system of procedures boosts the bribery and fraud activities of government personnel in the delivery of services to the public, which the citizen does not realize. As a result, a number of critical issues or problems have been identified, such as a) many irresponsible parties forged documents with the assistance of government officials in order to seize land by force, creating problems for legitimate landowners trying to prove their ownership; b) irresponsible parties also sell land to uneducated parties using fake documents made by bribing officers, resulting in the existence of dual land ownership between two landowners (Thamrin et al., 2021).

Digital Land Management in South East Asian Countries

In land administration, South East Asian countries have implemented a variety of digital services. Land service delivery in Indonesia and Malaysia has been digitalized in a variety of ways. Land administration systems (LAS) in Malaysia have begun using a new 3D technique to account for the increased complexity of land ownership in cities. The Land Administration Domain Model (LADM): ISO 19152:2012 is critical in the development of a 3D-enabled system for Malaysian land administration. Additionally, Malaysia's government agencies benefited from the use of 3D data (Rajabifard et al., 2021). It has also been digitalized so that land titles are more indestructible in Malaysia (Amernudin, 2019). The Land Management Bureau (LMB) in the Philippines has implemented a new digital system to speed up the processing and issue of land titles. For the administration, survey, management, and disposal of A&D and other public lands, LAMS implemented a computerized information system as part of its Land Administration and Management System (LAMS). Land information may be processed quickly and easily with this technology.

System (LAMS) consists of four components: public land application (PLA); inspection, verification, and approval of survey (IVAS); e-survey plan; and client-transaction monitoring (CTM). All land applications are processed and approved by the PLA; it also enables effective storage of data to prevent the issuing of double titles and enhance transparency. The IVAS is designed to keep track of the regional offices' verification and approval of the survey. Digital survey data (DLSD) generated from an e-survey plan is the first step in this process. As an accredited geodetic engineer, you can apply online for e-surveys, which expedite boundary verification. By using the LAMS kiosks in all DENR regional offices, CTM allows clients to maintain track of the status of the survey and their application electronically by text or SMS and on the Internet, reducing the risk of fraud (DENR, 2016).

During the years 1984-2002, the World Bank worked with Thailand's Department of Lands (DOL) to promote the establishment of a national land information system for the provision of electronic land services. The Royal Thai Government's (RTG) e-governance and economic development aims are furthered by this national land information system, which not only promotes the delivery of land services but also enhances the security of property data (Bell, Nettle, & Taylor, 2009).

A comparison between Bangladesh and Indonesia

When comparing the two countries' digital land service delivery, the management and use of digitalization may be seen. The use of digitalization and land management in both countries has been shown to differ.

Land Management in both countries

There are land offices at all levels of government in Bangladesh, which are overseen by a Ministry of Land that oversees all land services. This comprises a wide range of functions, such as maintaining the records of property, selling and purchasing land in various ways, creating the deeds of the property and preserving them, managing land-related issues, updating the land map and information, as well as tax and revenue collection (Choudhury et al., 2011). It is the responsibility of all land offices and officials/staff from the national level down to the local level to sustain land management activities. As a result of their work, the officers and workers at the Land Offices collectively manage land. The land offices provide a wide range of services tailored to the needs of service recipients. The land services include the acquisition of land deeds, the measurement of land, the transfer of ownership, and the resolution of property disputes, among other things. All land-related services must be obtained through a trip to the local land office. This ministry's Land Transfer Registration Office delivers a copy of the land deeds to the property owner. To obtain a land deed, customers must go to that office and submit a request to the appropriate land officer, who must then authorize the document. Before putting up for sale or purchasing a property, a landowner must finalize the transfer of ownership at the local land office. Deed writers work in those offices and give property ownership transfer deeds to the landowners in those offices. Providing land services is complicated by the fact that land management is under the purview of these two ministries, which means that the supply of land services is delayed as a result (Talukder et al., 2014).

Standards for land service have been implemented in Indonesia by the Ministry of ATR/BPN at all three levels of government: regional, provincial, and central offices. Since the passage of Act No. 5 in 1960, the President of Indonesia has delegated authority to the National Land Agency (NLA) to administer two land-related functions: land rights and land usage. All of these land offices provide services to the general public (Andrayani et al., 2015). Land tenure (and cadastre), land valuation, land usage, and land development in a more standardized, multifunctional, and interdependent manner are the four primary characteristics of land management in Indonesia. Property rights are documented through the processes of land tenure and land registration. Data on the value of land rights is gathered by land valuation (land price, transaction price, and mass valuation). It is important to understand that land use and land development planning provide zoning regulations that define the features of a given area or location (Indrajit et al., 2020). Mandatory under the Spatial Management (Planning) Act, Indonesian municipalities are responsible for drafting land use policies and drawing out plans for the development of land in their jurisdictions. Service beneficiaries must also contact other government institutions or officials/partners in that country to obtain the necessary papers. Land and property papers aren't connected to all land offices because of official delays and time limits; thus, services are based on the type of service requested. The Land Office counter for service receivers has also faced a variety of difficulties in presenting the necessary paperwork (Zulkifli et al., 2021).

Utilization of digital system in land office

The land office's institutional and operational capacity determines how effectively the digital system may be utilized. Human resources, ICT tools, powerful network connections, apps, and a land office database are some of the factors that contribute to an organization's operational and institutional capabilities, respectively. First and foremost, in order to deliver digital services, every land office must ensure efficient utilization of ICT tools. With the proper use of ICT, public services can be digitalized by cutting costs and visits while promoting innovation, ease of use and responsiveness. Digital services like mutation and right-recording (E-mutation and E-khatian) are now available through Bangladesh's land offices, giving them an advantage over their competitors. There is a need for a sufficient number of computers, internet access networks, policy action, budget and experienced personnel to promote digitalization. Every land office must, secondly, ensure that it has the right people in place to effectively deliver digital land service. The Upazila land offices in Bangladesh need sufficient human resources that are well-versed in the use of ICT in providing services to citizens. In order to ensure that land offices are properly digitalized, a variety of apps and databases can be used. All of Bangladesh's upazila land offices are participating in various pilot projects under the direction of the country's land ministry to provide digital land services. Once land development tax (LDT) software is completed, citizens can use mobile devices to pay LD tax (Islam et al., 2020).

In addition, a pilot project has been launched to digitalize the mouza map, allowing citizens to view and download their own map. After a landowner's death, an inheritance calculator was made available to determine how much of the land would be passed down through the family. Fourth, the land offices must have a strong network connection in order to provide effective digital land service. It encourages the cops to complete their duties on schedule and ensures that citizens receive the service they expect. The Land Ministry has implemented many digital systems to provide land services to citizens all around the country and save time, cost, and suffering. It's a shame that so many people working in Bangladesh's land offices lack the necessary digital skills to help their fellow citizens. In spite of the fact that land office personnel are better trained and more knowledgeable than their younger counterparts. However, the local level's shortage of qualified personnel at land offices, particularly in rural unions, causes difficulties in providing land services. As a result, individuals in rural union parishads (in English…..) are unable to get effective digitalized services because of the absence of competent labour (Azad, 2017).

Land offices in Indonesia have begun using the Digital Governance Assessment Framework (DGRA), which has allowed them to digitize formerly paper-based documentation. Several initiatives have been launched and are being

mainstreamed to improve the quality of land spatial and textual data. Land offices are now using ICT technologies and databases in order to provide digital land services to service receivers, as detailed in an Activity Diagram in the attachment section of land service standards. Furthermore, all Land Offices follow a standardized input, processing, and output method. There is a Land Office counter where service recipients can submit the necessary paperwork. The land office/counter clerk staff is responsible for ensuring that all documents are in order by comparing them to the applicable regulations. Files are processed rapidly and entered directly into Land Office Computerized System (KKP) without validation or cross-checking against the authenticity of the applicant's documents at their issuing institution if all conditions have been met. The counter clerks, however, frequently return the paperwork to the applicant because it is incomplete, requiring the applicant to resubmit the document before it may be returned to the counter again. There will be proof of receipt of the files for those who requested land service. To put it simply, the service system doesn't check the papers prior to their entry. Input officers must be able to quickly and accurately digitize and enter data from paper-based documents submitted to the Land Office counters. Despite the possibility of human mistakes and poor digitization. It is, therefore possible to have inefficiencies in Indonesia's land offices if the synchronization and consistency of the digitalization process are not controlled.

Challenges in delivering digital service in both countries
When it comes to offering digital services at all land offices, both countries face similar issues. The challenges are:

Delay in forwarding application to a higher authority
Within the Bangladeshi system, local land office officials are required to forward the application of service recipients for desired land services to the higher authority within the stipulated timeframe. Regarding logistical support, they cannot deliver the documents on time due to a lack of high-speed internet connectivity and trained staff members, as well as power outages. As a result of these issues, not only does the delivery of service take longer, but it also agitates service providers. The restrictions on land offices also cause delays in service delivery in Indonesia.

Lack of coordination

The copy of registration and notice of mutation to the upazila land office is not sent on time in Bangladesh by the land transfer registration office (sub-registrar office). In order to prepare for new mutations, the AC land must review all relevant documents and paperwork. This problem prevents service providers from properly digitalizing their services. However, there is a lack of coordination in Indonesian land registration and ownership processes between the Ministry of Agriculture and Spatial Planning, the National Land Agency, and the National Land Center (Aspan et al., 2021).

With time, senior authorities have become accustomed to the manual procedure.

Senior officials in Bangladesh are still used to manual service processes and are uninterested in switching to digital service delivery. In addition, top officials find it tedious to keep up with the latest technological advancements and services. They also forgo training in the land service for mastering ICT. Senior officials in Indonesia are likewise wary of implementing digital land service.

There has been no decrease in corruption

Both countries' land offices have been tainted by corruption. In the supply of digital land services to customers, many employees are looking for kickbacks. Because service recipients aren't informed about how services are delivered, staff members take advantage of this and charge a fee for providing them.

The lack of digital service expertise among service recipients

In both nations, many service recipients have an only rudimentary awareness of the digital land services offered by certain land offices. Consequently, they seek assistance from middlemen and pay a hefty sum for what should be a basic service. Digital land service innovations in both countries can be a bit of a mystery to service recipients.

Apply for a job with the wrong paperwork

In some cases, service providers are unable to provide digital land service in a timely manner due to errors in the application process by service recipients. When requesting necessary services, some customers fail to submit all of the essential documentation, or they submit the wrong documentation entirely. As a result, they will be without land service for an extended period of time. Manual processes and a gulf in information between service recipients in the two countries were to blame for these issues.

Suggestions
In order to better serve customers, land services need to be digitalized. Both countries' service providers struggle to make use of emerging technologies, while customers aren't as aware of the value of on-the-ground support. However, the land office's service delivery has seen a dramatic shift thanks to the implementation of a digital system. Challenges that both countries' land offices must solve in order to improve service delivery through digitalization. In some places of business, the following ideas might be helpful:

All land service delivery offices could be brought under one umbrella in order to remove the delay in digital service delivery. These departments need to work together more closely. As a result, an integrated system between these offices is required so that one office may assist another by giving information about land mutation, registration, and ownership processes.

Delivering efficient digital land service requires solid logistic support, including high-speed internet connectivity, a robust website and homepage, uninterrupted power, and sufficient ICT equipment (computers and laptops with scanners, for example).

All land offices must have enough qualified personnel to provide timely and accurate digital land service at both the local and central levels. It is impossible to provide a high-quality digital land service to citizens if there are not enough trained officials in the land office.

The recipients of the service aren't aware of the Land Office's land service. As a result, it is imperative that both countries' land services be made aware of. As a result, land offices can cut out the intermediaries altogether.

When it comes to digital land service, it's important for people to know what they're getting themselves into. There should be a complaint box in the land office so that service recipients can file a complaint against corrupted actions. Furthermore, there should be a process to address and resolve all complaints honestly. Service providers struggle to meet the needs of all customers due to a lack of qualified staff. For the most part, the service providers don't specialize in any one land service industry. As a result, hiring and developing highly qualified personnel is imperative. In order to acquire the trust of service recipients, service providers should put more effort into maintaining the serial number of applications used in the delivery of land services. A shift in service providers' attitudes can help build customer confidence and satisfaction. Service providers should be approachable, helpful, and cooperative to improve the quality of their interactions with their clients.

An efficient, effective, and high-quality service can only be provided if the Citizen Charter (CC) is properly implemented. As part of the Land Offices' service delivery, there should be an effective Monitoring and Evaluation system in place. It is possible to eliminate delays in service delivery and corruption at the local level land office if the higher authority is properly monitored.

Political representatives can educate their constituents about digital land services while adhering to land office policies. Many Land Office clients' 'elite anxiety' can be alleviated via political engagement. Land office errors can be reduced by using a digitized mouza map of all lands. Service users can lodge complaints about officials using a common web platform. It has the potential to improve the

authenticity with which service providers go about their work. Land laws, rules, and regulations linked to land service should be included in school textbooks to help educate students and the public about these topics.

Conclusion

Corruption must be countered, effective and efficient service delivery must be ensured, and sustainable land management must be ensured in Bangladesh and Indonesia using a digital land management system. As a result, residents in both countries confront a variety of difficulties in obtaining services from the land offices of both countries. The land office and the general public must work together to improve communication and understanding of the digital land service. Both countries' governments should prioritize providing logistical support to all land offices so that land offices at the national and local levels can provide services to the public on time and efficiently while saving money and visits. It's imperative that service providers undergo extensive training in order to alter their behaviour. In both countries, political commitment, provider efficiency, and digitization have a favourable and considerable impact on the level of good governance.

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Readiness and Problems Encountered by Teachers in Quezon Province due to COVID-19: Basis for an intervention scheme

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Abstract

In times of crisis like COVID-19, teachers' readiness for class opening and their response to problems they encounter are critical. This study focuses on Quezon Province teachers' readiness and problems with the upcoming school year 2020-2021 to better understand this issue and develop an intervention plan. A descriptive-quantitative method was applied in the study, and cluster sampling was applied to select the sample. "Ready" was used as a verbal expression, and the overall mean score of 2.85 reflects readiness. There was a positive outlook on the teachers' profession, and they said they were ready to perform their duties and responsibilities under the new normal imposed by the COVID-19 pandemic. Meanwhile, the teachers' difficulties were described as "Not a problem at all" by the overall mean score of 1.74. Teachers expressed concern about the impact and compromise on their time management caused by the reproduction of modules. Even more worrisome was the fact that teachers seemed to be struggling to access online seminars and training because their internet connection wasn't stable or good enough. Teachers may benefit from the intervention plan outlined in this paper in order to address the challenges they are currently facing.

Keywords: *Teachers, Education, Readiness, COVID-19, the Philippines.*

Introduction and Rationale

In the wake of the CoVid-19 pandemic, everything has changed. This calamitous event unleashes a new social and economic crisis around the world. Education is one of the areas affected, as 1.52 billion students and 60.2 million teachers are still unable to get to work because of the shutdown (Sarif (2020). Most governments around the world have temporarily closed educational institutions in an effort to contain the spread of the CoVid-19 pandemic, which presents a challenge for 21st century education (UNESCO, 2020)

The Philippines' Department of Education has developed a framework called the Learning Continuity Plan to ensure that learning is not disrupted (Luz, 2020). On top of everything else, this Learning Continuity Plan emphasizes the framework

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and organization of different departments within the company. School improvement plans (SIP) must incorporate this framework in order to meet the challenges of the new normal. For the Learning Continuity Plan, the Department of Education described its major response and commitment to protecting the health and well-being of students and teachers during COVID-19 while finding ways to keep education going despite the crisis (Eagle News, 2021).

However, Lagua (2020) stated that teachers face challenges in the new normal and must accept these issues upfront. Bintliff (2020) conducted a study on the impact of COVID-19 on teachers' well-being and discovered that a lack of work-life balance had a negative impact on teachers' well-being. Families' ever-shifting needs and demands necessitated teachers to be available around the clock. Teachers, too, had to strike a balance between the demands of their professional lives and the demands of their personal lives. According to the findings of the study, in order to prevent teacher burnout, educators should receive assistance and training on how to strike a work-life balance. Finally, it was strongly recommended that people show teachers grace, flexibility, patience, understanding, and support, all while advocating for greater resources to support teachers' well-being and greater action under the new normal in education.

It is not unusual for people to feel more stressed and anxious in these unprecedented and uncertain times, especially during this time of the COVID-19 pandemic (UNESCO, 2020). They went on to say that teachers require assistance in order to deal with the additional stress and difficulties that come with providing instruction during a time of crisis while also meeting the needs of their students. This research was done in response to COVID-19's educational crisis. Since teachers' ability to provide quality education is critical, it is imperative that they be evaluated. For this reason, researchers in Quezon Province were interested in finding out how well-prepared teachers were for the new school year, as well as what kinds of issues they faced. They also sought out an intervention plan that could help them.

Literature Review

This section presents the related literature that helped conceptualize ideas for the present study. We used a thematic organization of ideas which is considered comprehensive, scholarly, systematic and easy to utilize (Aque, 2016).

Teachers' Readiness: The Department of Education prepared a framework called the Learning Continuity Plan to help teachers adjust to the new normal (Luz, 2020). This Learning Continuity Plan (LCP) focuses on the framework and structure the regional office provides to the school divisions. It was also pointed out that the school division's role was to work with their schools to operationalize this framework into school improvement plans (SIPs), which would help them deal with any problems that might arise under the new normal. A major response

and a commitment by the Department of Education to safeguarding the health, safety, and well-being of students, teachers, and staff during COVID-19 while also figuring out ways to keep education going despite the crisis is the Learning Continuity Plan. This Learning Continuity Plan, according to the Department of Education, will be based on the local COVID-19 situation as well as the availability of certain learning platforms (Eagle News, 2021).

As for teachers' readiness for the new normal, Alea, et al. (2020) studied the teachers' willingness to switch to distance learning education despite the threat of COVID-19; however, they were hindered by the lack of facilities, equipment and capacity-building for distance learning education. A majority of educators believe that they can adapt their teaching methods if their institutions provide them with the necessary resources. The principals were generally supportive of teachers' readiness in utilizing the digital devices available, with many countries reaching 90 percent or higher (Moreno and Gortazar, 2020). Most school leaders are confident in their teachers' pedagogical abilities and in the resources, they have at their disposal for incorporating digital learning into the classroom, even when students are not in the building.

On the other hand, according to Brooks and Grajek (2020), despite their expertise as educators, teachers are reluctant to use online teaching for various reasons. Faculty members who are averse to teaching online do so because they believe it hinders their students' ability to learn effectively. Only 21% of professors agree that online learning can help students learn effectively, despite the overwhelming evidence showing the efficacy of online learning. Universities should take advantage of this opportunity to inform their faculty about the benefits of online teaching and learning, as well as to provide them with assistance as they make the transition to online instruction. It is important for institutions to be prepared for possible opposition and backlash. If they are successful, institutions may be able to persuade faculty members who are still skeptical that online classrooms actually help students learn.

The proposed revision of the Philippine school calendar (Malipot, 2020), has the support of a teachers' group, who notes that it would give authorities more leeway in determining when classes should resume in an emergency like the COVID-19 pandemic. "The reality is, we are not prepared, or perhaps we need a little more time to prepare," said Teachers' Dignity Coalition National Chairperson Benjo Basas. Despite the pandemic issues, he said that teachers are always ready to do their jobs. As he has previously stated, as long as the safety of school personnel and students is ensured, these dedicated teachers will gladly comply as they are patiently performing a variety of tasks, both virtual and physical, during the Community Quarantine period.

Things That Go Wrong: Rubio (2020) brought up the issue of the Department of Education's tardiness in delivering modules to teachers. Because teachers are

having a hard time waiting for these modules, senator Francis Tolentino pleaded with the Department of Education to push back the start of classes. Because the department is not ready, he said, forcing schools to open right away would be counterproductive to education.

Teachers are afraid to distribute the new normal education modules after three public school teachers in Cebu City were infected with COVID-19 by a parent (Umil, 2020). Teachers' union chief Raymond Basilio expressed his concern over the situation, pointing out that the Department of Education has admitted there is no budget for the hospitalization of teachers who become sick with the virus. Basilio said this leaves public school teachers on their own and forced to rely on one another for support during this crisis. In addition, he said that teachers are frontline workers and deserve the same level of protection.

A study by Kurtz (2020) found that teachers had some issues during the pandemic. He claimed that students' and teachers' morale is low because online instruction is already being used in some schools around the world. According to teachers and district leaders, student and teacher morale declined significantly between March 25 and April 8 (as reported by teachers and school administrators). According to the teachers and district leaders surveyed in March, the morale of 61 percent of students and 56 percent of teachers was lower than it was before the pandemic.

Teachers' use of social media platforms to communicate with students is also a challenge. Teachers and students are most likely to communicate via email. As well as text-based communication, many people also use video conferencing and other types of online communication platforms. A growing number of districts are prohibiting the use of Zoom for school-related business because of concerns about student data privacy and security. Most educators, on the other hand, haven't run into any issues so far. A paltry 16 percent of educators and district administrators claim that their school has been "Zoombombed" via Zoom or a similar video conferencing platform. A higher percentage of students in low-income areas are absent from class, as is the case for over a fifth of all students. At least 21 percent of teachers' students are essentially "truant" during coronavirus closures, according to their reports (not logging in, not making contact, etc.) Most of the students come from low-income families in districts where the percentages are the highest. Only 12 percent of students in districts with a quarter or less of their students living in poverty are not taking advantage of remote learning.

Schools don't yet have a clear strategy in place if the crisis worsens. For this year's school year, the coronavirus pandemic is likely to persist or recur. Few district leaders, however, have a clear strategy for what to do if this happens. Many people say they've at least begun to think about the possibility.

Teachers must accept that there will be problems with the new normal (Lagua 2020). According to him, teachers of the future should embrace and master new

technology that can help them create a more engaging learning environment for today's students. New users will have a steep learning curve when it comes to meeting apps like Zoom and Google Meet. While the teacher may be able to adapt, there are non-controllable elements that cannot be ignored due to slow and intermittent Wi-Fi internet in the Philippines. Because of the pandemic's effect on the economy, some families may not have the resources to purchase the technology and internet speed necessary for smooth interconnection in order to help them better understand and further their studies.

According to Asquire Philippines (2020), the Internet in the Philippines is notoriously slow, unreliable, and costly. They noted that the Philippines came in at 82, beating out Guatemala, Costa Rica, and Albania, while Israel was crowned the country with the cheapest Internet. As if that wasn't bad enough, the Philippines ranks 77th on the list of the world's slowest and most unstable Internet connections, while its Asian neighbours Singapore and other Asian countries such as Nepal, Bangladesh, India, Pakistan, and Indonesia are all in the bottom five spots.

As CNN Philippines' Annalyn Sevilla, the Department of Education's Undersecretary and spokesperson, noted, the Internet connectivity issue is an issue beyond DepEd's control (Malipot, 2020). Additionally, the Undersecretary stated that the Internet problem is not just a problem in the Philippines but a global issue. In spite of this, she insisted that the DepEd teaching and non-teaching staff have to do something and come up with a solution for this problem.

Synthesis

Despite the unexpected pandemic that COVID-19 sparked, the aforementioned authorities emphasized the importance of teachers being ready for anything (Luz, 2020; Eagle News, 2021) detailed the Department of Education's efforts to prepare teachers for the new normal through the use of the Learning Continuity Plan. Moreno and Gortazar (2020) found that school principals are confident and optimistic about the readiness of teachers in the new normal. It was recommended that teachers educate themselves on the efficacy of online learning (Brooks and Grajek, 2020). While this is going on, Malipot (2020) has reaffirmed that teachers are still advocating for a revised schedule for the start of the school year because there are still details to be worked out.

The new normal is causing a variety of issues for teachers (Rubio, 2020; Umil, 2020; Kurtz, 2020). These issues include the delayed distribution of modules to teachers, fears of infection during the distribution and retrieval of modules, and difficulties with social media platforms. Slow internet connections have been shown to negatively impact the ability of Filipinos, including teachers, to carry out their day-to-day tasks (Lagua, 2020; Asquire Philippines, 2020; Malipot, 2020).

Teachers, who, despite the COVID-19 pandemic, play an important role in providing high-quality instruction, must also have their issues addressed if they are to reach their full potential. It is, therefore, possible to use and build upon the findings of this study in order to identify teachers' readiness and devise a plan of action for dealing with their problems.
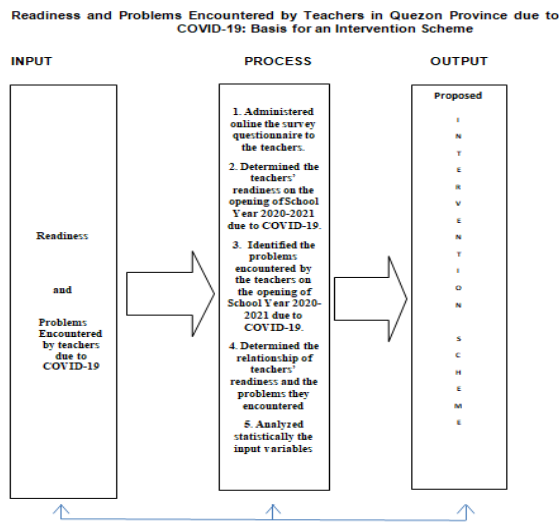

Figure 1. The Research Paradigm.

The research paradigm that guided this study is seen in Figure 1. The researcher uses the input, process and output approach. The input box speaks about the readiness of the teachers and the problems they encountered due to COVID-19. The researchers in Quezon province collected data by administering a survey questionnaire to the province's teachers (online). They also observed and analyzed the collected data to arrive at their findings and recommendations, which are all detailed in the process box. Finally, the study's proposed intervention plan for teachers' problems was presented in the final output box.

Research Questions

This research aimed to determine teachers' readiness and problems encountered by Quezon Province on the opening of School Year 2020-2021 and propose an intervention scheme. Specifically, this research sought to answer the following specific questions:
1. What is the level of the teachers' readiness for the opening of School Year 2020-2021 due to COVID-19?
2. What are the problems encountered by the teachers on the opening of School Year 2020-2021 due to COVID-19?

3. Is there a significant relationship between the teachers' readiness and the problems they encountered on the opening of School Year 2020-2021 due to COVID-19?

4. Based on the findings of this research, what Intervention Scheme may be designed for the teachers in Quezon Province?

Scope and Limitation

This research was limited to all public elementary teachers in the First Congressional District in the Division of Quezon. Its main concern was determining the teachers' readiness and the problems they encountered on the opening of School Year 2020-2021 due to COVID-19 and providing an intervention scheme.

Research Methodology

Sampling

This research study employed Cluster Sampling; this particular process was the most suited to the researchers since cluster sampling is the process wherein the researchers divide a population into smaller groups known as clusters (Thomas, 2020). Also, cluster sampling is a method of probability sampling that is often used to study large populations, particularly those that are widely geographically dispersed. Hence, the First Congressional District in the Division of Quezon was chosen as the sample from the population since the researchers are currently working in the said congressional district, which involves all public elementary teachers. There were 2,593 elementary teachers (according to Research and Planning Office) in the said congressional district. In connection with this, the researchers used Slovin's formula to get a sample from the total population. Therefore, there were 347 teachers who represented the population of the teachers.

Data Collection

Research Instrument. The researchers adopted the instrument constructed by Borreo (2020) that served as the main tool in the present study, which was answered through an online survey. It was a 20-item survey questionnaire that covered items to determine the teachers' readiness (10) and the problems they encountered (10) on the opening of School Year 2020-2021 due to COVID-19.

Procedures for data collection. The researchers sought first permission from the Schools Division Superintendent before determining the teachers' readiness and the problems they encountered at the opening of School Year 2020-2021 due to COVID-19. After securing all the necessary communication with respective authorities, the researchers used the advantage of an online survey to answer the questionnaire from the respondents. The data gathered were treated and analyzed using statistical tools.

Ethical Issues

The researchers sought approval first from the Schools Division Superintendent, stating the areas and data they needed with permission from the participants before answering the questionnaire. Meanwhile, the researchers guaranteed that all the answers and responses of the teacher-respondents have remained confidential since the researchers did not name or involved their names, nor the institution they were in to secure their confidentiality and anonymity.

Plan for Data Analysis

This research study employed the Quantitative-Qualitative Method of Research or Mixed Method. Creswell (2006) stated that mixed methods research involves both collecting and analyzing quantitative and qualitative data. Meanwhile, in order to interpret and analyze the data collected from the teacher-respondents, the following statistical tools were used:

Slovin's Formula. This was used to get the sample from the total population of teachers.
The formula is:

$n = N / (1 + Ne^2)$
Where:
n = Number of samples,
N = Total population and
e = Error tolerance (level)

Pearson Product Moment Correlation (Pearson r). This was used in determining the relationship between the teachers' readiness and the problems they encountered on the opening of School Year 2020-2021 due to COVID-19. This Pearson r finds the degree of association of two sets of variables.
The formula is:

$$rxy = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{[N\sum X2 - (\sum X)2][N\sum Y2 - (\sum Y)2]}}$$

Where: rxy= correlation between X and Y
        X = sum of test X
        Y = sum of test Y
        XY = sum of the product of X and Y
        N = number of cases
        X2 = sum of squared X scores
        Y2 = sum of squared Y scores

Weighted Mean. This was used in analyzing the level of the teachers' readiness as well as the problems they encountered on the opening of School Year 2020-2021 due to COVID-19. This is an average calculated by taking into account not only the frequencies of the values of a variable but also another factor such as the variance; the formula is:

$$WM = \frac{\sum x}{N}$$

Where:

WM = Weighted Mean

$\sum x$ = summation of weighted frequencies

N = number of cases

To interpret the results of the teachers' readiness on the opening of School Year 2020-2021 due to COVID-19, the scale below was used:

3.26-4.00	Highly Ready
2.51-3.25	Ready
1.76-2.50	Slightly Ready
1.00-1.75	Not Ready

Meanwhile, to interpret the problems encountered by the teachers on the opening of School Year 2020-2021 due to COVID-19, the scale below was used:

3.26-4.00	Problem is Very Serious
2.51-3.25	Problem is Serious
1.76-2.50	Problem is Slightly Serious
1.00-1.75	Not a Problem at All

Results And Discussion

This section covers the results and discussion concerning the readiness and problems encountered among teachers in Quezon Province and the proposed Intervention Scheme. The discussion's order follows the Statement of the Problem arrangement. Specific Question No. 1. What is the teachers' readiness level for the opening of School Year 2020-2021 due to COVID-19?

	Indicators	Weighted Mean	Verbal Interpretation	Rank
1	The teacher is well-informed and ready to the unpacking of Most Essential Learning Competencies (MELCs)	2.77	Ready	10
2	The teacher is ready for the various tasks, duties and responsibilities under the new normal in education.	2.85	Ready	4.5
3	The teacher is ready to engage and establish a good relationship with the parents of the learners	3.03	Ready	1
4	The teacher is ready mentally, socially and physically for the	2.92	Ready	2

	distribution and retrieval of the modules			
5	The teacher is ready for various school preparations, reports, and requirements to be submitted under the new normal (e.g. Weekly Home Learning Plan, worksheets and other supplementary learning materials)	2.87	Ready	3
6	The teacher is ready with the different guidelines and policies to be given by the Department of education under the new normal	2.85	Ready	4.5
7	The teacher is ready to assess and evaluate the pupil's performance under the new normal in education	2.82	Ready	7
8	The teacher is prepared from classroom teaching to a modular way of learning	2.82	Ready	7
9	The teacher is ready on how to budget his/her time well whether it is professional or personal activities	2.78	Ready	9
10	The teacher is ready for the tasks that need to be prioritized and submitted that are new due to this global pandemic	2.82	Ready	7
	Average Weighted Mean	2.85	Ready	

Table 1 presents the weighted means, verbal interpretations and ranks on the readiness of teachers in Quezon Province on the opening of School Year 2020-2021. As shown above, all these ten categories had verbal interpretations as "Ready". "The teacher is ready to engage and establish a good relationship with the parents of the learners" ranked 1 with a weighted mean of 3.03. "The teacher is ready mentally, socially and physically to the distribution and retrieval of the modules" ranked 2 with a weighted mean of 2.92. "The teacher is ready to various school preparations, reports and requirements to be submitted under the new normal (e.g. Weekly Home Learning Plan, worksheets and other supplementary learning materials)" ranked 3 with a weighted mean of 2.87.

Meanwhile, two categories had a weighted mean of 2.85, these were "The teacher is ready towards the various tasks, duties and responsibilities under the new normal in education" and "The teacher is ready with the different guidelines and policies to be given by the Department of education under the new normal" which both ranked 4.5. Ranked 7 were "The teacher is ready to assess and evaluate the pupil's performance under the new normal in education", "The teacher is ready from classroom teaching to a modular way of learning," and "The teacher is ready to the tasks that need to be prioritized and submitted that are new due to this global pandemic" with a weighted mean of 2.82. Ranked nine is "The teacher is ready on how to budget his/her time well whether it is professional or personal activities," which had a weighted mean of 2.78. While "The teacher is well-informed and ready to the unpacking of Most Essential Learning Competencies (MELCs)." ranked 10 with a weighted mean of 2.77. In general, the teachers' readiness in Quezon Province had an average weighted mean score of 2.85, which is interpreted as "Ready."

As disclosed, all the indicators were interpreted as "ready". This may mean that despite this pandemic, teachers are always ready in doing their duties and responsibilities. This finding is supported by Malipot (2020), as he cited the Teachers' Dignity Coalition National Chairperson, Mr. Benjo Basas claimed that despite of the pandemic issues and concerns, he said that teachers are always ready and able to adjust and adopt things just to do their duties and responsibilities. He added that, as he has said in the past, as long as the safety of school personnel and learners is ensured, these dedicated teachers will gladly comply as they are patiently doing different virtual and physical tasks even during the Community Quarantine period.

As a whole, the readiness of teachers in Quezon Province on the opening of School Year 2020-2021 is verbally interpreted as "Ready "as reflected by the overall mean of 2.85. This means that these teachers are always ready to perform their duties and responsibilities despite of the CoVid-19 pandemic.

Specific Question No.2 What are the problems encountered by the teachers on the opening of School Year 2020-2021 due to COVID-19?

	Indicators	Weighted Mean	Verbal Interpretation	Rank
1	There is no solid/well-founded plan of action initiated by the school head in ensuring the health and safety of teachers in the distribution of modules and to perform their duties in the new normal set-up.	1.21	Not A Problem At All	9

2	The school has no proper coordination and communication with the parents and other stakeholders regarding the new normal set-up.	1.18	Not A Problem At All	10
3	Lack of proper training and orientation regarding the utilization and execution of MELC.	1.45	Not A Problem At All	8
4	The teacher's internet connection is not stable and not good enough to subscribe to online seminars and training initiated by the Department of Education	2.55	Problem is Serious	2
5	The teachers are at risk to be infected in the distribution of modules to the learners since there are no supplies of PPEs, alcohol and face masks from the Department of Education.	1.55	Not A Problem At All	6
6	Some parents did not enroll their children this School Year 2020-2021 because of the fear of the virus (COVID-19).	1.72	Not A Problem At All	4
7	The School Year 2020-2021 has already started, but some modules are still not printed.	1.74	Not A Problem At All	3
8	Reproduction of modules affects and compromises the teacher's time management	2.78	Problem is Serious	1
9	The teacher is still confused on how to evaluate properly and effectively the learnings and outputs of the learners under Modular Distance Learning	1.68	Not A Problem At All	5
10	There are limited ways and time to conduct physical monitoring of the learner's outputs due to the COVID-19 pandemic.	1.52	Not A Problem At All	7
	Average Weighted Mean	1.74	Not A Problem At All	

Table 2 presents the weighted means, verbal interpretations and ranks of the problems encountered by the teachers on the opening of School Year 2020-2021. As indicated in the table above, among ten categories, two of them had verbal interpretations as "Problem is Serious". Rank 1 is "Reproduction of modules affects and compromises the teacher's time management." with a weighted mean of 2.78. "The teacher's internet connection is not stable and not good enough to subscribe to online seminars and training initiated by the Department of Education" ranked 2 with a weighted mean of 2.55

On the other hand, eight categories had verbal interpretations as "Not A Problem At All"; these were "The School Year 2020-2021 had started already, but some modules are still not complete." ranked 3 with a weighted mean of 1.74. "Some parents did not enroll their child this School Year 2020-2021 because of the fear of the virus (COVID-19)." ranked 4 with a weighted mean of 1.72. "The teacher is still confused on how to evaluate properly and effectively the learnings and outputs of the learners under Modular Distance Learning" ranked 5 with a weighted mean of 1.68. "The teachers are at risk to be infected in the distribution of modules to the learners since there are no supplies of PPEs, alcohol and face masks from the Department of Education" ranked 6 with a weighted mean of 1.55. "There are limited ways and time to conduct physical monitoring of the learner's outputs due to COVID-19 pandemic" ranked 7 with a weighted mean of 1.52.

Ranked 8 is "Lack of proper training and orientation regarding the utilization and execution of MELC" had a weighted mean of 1.45. "There is no solid/well-founded plan of actions initiated by the school head in ensuring the health and safety of teachers in the distribution of modules and to perform their duties in the new normal set-up." ranked 9 with a weighted mean of 1.21. Ranked 10 is "The school has no proper coordination and communication to the parents and other stakeholders regarding the new normal set-up." with a weighted mean of 1.18 In general, the problems encountered by teachers on the opening of School Year 2020-2021 had a weighted mean of 1.74 and verbally interpreted as "Not A Problem At All".

Based on the data gathered, two indicators out of ten were found to be serious problems for the teachers on the opening of classes this School Year 2020-2021. Reproduction of modules affects and compromises the teacher's time management, and the teacher's internet connection is not stable and not good enough to subscribe to online seminars/training initiated by the Department of Education.

The findings of the study are justifiable since, in an interview last May 2020 in CNN Philippines, the Undersecretary of the Department of Education, Mr. Diosdado San Antonio, stressed that the preparation and printing of the printed modules are still in the process despite the school year is about to come since schools today brace for major changes due to COVID-19 pandemic. While

Asquire Philippines (2020), stressed that the Internet in the Philippines is slow, unstable and expensive. They noted that the Philippines lands at 82, besting only a few countries such as Guatemala, Costa Rica, and Albania, while Israel wins the round as the country with the most affordable Internet. Meanwhile, the Philippines chugs along at 77, placing it among the countries with the slowest and least stable Internet, while Asian neighbour Singapore takes the top spot, and other Asian countries such as Nepal, Bangladesh, India, Pakistan, and Indonesia occupy the five bottom slots in this category.

As a whole, the problems encountered by teachers on the opening of School Year 2020-2021 is verbally interpreted as "Not A Problem At All, "as reflected by the overall mean of 1.74. This means that the problems encountered by the teachers were generally interpreted as Not A Problem at all. Still, two problems were found to be serious problems, such as the reproduction of modules affecting and compromising the teacher's time management and the teacher's internet connection is not stable and not good enough to subscribe to online seminars and training initiated by the Department of Education.

Specific Question No.3 Is there a significant relationship between the teachers' readiness and the problems they encountered on the opening of School Year 2020-2021 due to COVID-19?

Table 3 Correlations between Readiness and Problems Encountered by the Teachers

Scores Paired	Coefficient of Correlation r	Level of Significance	Interpretation	Decision
Teachers' Readiness Vs Problems Encountered	0.49	0.05	With Significant Relationship	Reject Ho

Scale: Range of Values
$\pm\ 0.90 - 1.00$ Very high correlation; very dependable relationship
$\pm\ 0.70 - 0.89$ High correlation; marked relationship
$\pm\ 0.40 - 0.69$ Moderate correlation; substantial relationship
$\pm\ 0.20 - 0.39$ Low correlation; definite but small relationship
Less than $\pm\ 0.20$ Negligible correlation

The computed coefficient correlation or r-value was 0.49, which signified a considerable moderate correlation. Therefore, the teachers' readiness registered a relationship with the problems they encountered. Hence, the findings rejected the null hypothesis. This only means that there is a significant relationship between

the teachers' adjustment with the problems they encountered on the opening of School Year 2020-2021. Specific Question No. 4. Based on the findings of this research, what Intervention Scheme may be designed for the teachers in Quezon Province?

The Proposed Intervention Scheme

Introduction

This Intervention Scheme was inspired by DepEd Order No. 9 s.2015, also known as "Instituting Measures to increase Engage Time-On-Task and Ensuring Compliance Therewith," which aims to elevate the quality of education by increasing the number of hours in each task in giving instructions and reducing the non-teaching duties of teachers so they can utilize their time well in teaching. However, Cox (2017), said that time in this fast-paced world could be a very difficult task. He also mentioned that a teacher's work is a never-ending task where a teacher needs to balance his daily tasks goals and not to mention overwhelming paperwork. This was supported by the Teacher's Dignity Coalition (2020), who lamented the difficulty that teachers have to face in printing modules under the new normal in education which affects the time that should be allotted to other teaching ancillaries.

Meanwhile, Malipot (2020) noted the Department of Education's Undersecretary and spokesperson Annalyn Sevilla, in a CNN Philippines interview, stressed that the Internet connectivity problem is an issue that is beyond DepEd's control. The Undersecretary also added that the Internet problem is not just a problem in the Philippines, but it's also a problem globally. However, she stressed that the DepEd teaching and non-teaching personnel have to do something and have an alternative to addressing this issue. This is very evident since Asquire Philippines (2020), stressed that the Internet in the Philippines is slow, unstable and expensive. They noted that the Philippines lands at 82, besting only a few countries such as Guatemala, Costa Rica, and Albania while Israel wins the round as the country with the most affordable Internet. Meanwhile, the Philippines chugs along at 77, placing it among the countries with the slowest and least stable Internet, while Asian neighbour Singapore takes the top spot, and other Asian countries such as Nepal, Bangladesh, India, Pakistan, and Indonesia occupy the five bottom slots in this category.

In this regard, based on the findings, the reproduction of modules affects and compromises the teacher's time management. The teacher's internet connection is not stable and not good enough to subscribe to online seminars and training initiated by the Department of Education were the most pressing problems of the teachers in Quezon Province. The findings also imply the necessity for innovative program seminars, in-service trainings and fora that will aid the teachers in uplifting their time management practices and participation in virtual trainings and

workshops. After the assessment and identification of their problems/constraints, the intervention scheme has been designed. Finally, the successful implementation of this proposed intervention scheme needs the strong cooperation and support of the Officials from the DepEd Quezon to facilitate and realize this Intervention Scheme for teachers in Quezon Province.

General Objective

This Intervention Scheme is designed to upgrade the quality of time management practices and virtual participation in trainings and seminars among teachers in Quezon Province.

Specific Problem	Specific Objective	Activities and Strategies	Persons Involved	Time Frame	Budget and Source	Expected Output
1. Reproduction of modules affects and compromises the teacher's time	To purchase tablets for the learners under modular distance learning	The DepEd Quezon Office may consider in purchasing tablets for the e-modules for the learners where soft copies of these modules may be installed on these tablets quarterly.	SDO personnel	Year-Round	2 Million Dugtong Dunong Fund Drive c/o SGOD	Teachers who have more time in preparing and doing their primary functions.
		Orient and train the teachers and parents on the proper use of this learning gadget (tablet) as a tool in using the learner's e-modules.	SDO personnel, teachers, parents	Year-Round	50,000 c/o SGOD	
	To centralize the printing of the modules in partnership with the	The DepEd Quezon may draw programs to lessen the burden of the teachers by making proposals through a MOA to every LGUs in the Division of Quezon to centralize the printing/reproduction of modules. Hence, teachers will claim the hard copies of these modules to their Barangay Hall/Office.	DepEd Quezon Personnel, LGUs	Year-Round	3 Million Special Education Fund (Provincial Govt of Quezon)	Teachers with sufficient time in innovating their teaching pedagogy apart from the reproduction/printing of their

	Local Government Units	The DepEd Quezon may conduct a virtual training/workshop to capacitate the teachers in managing their time well under the new normal in education.				learner's modules.
	To improve the time management practices among teachers in the reproduction of their modules and other teaching and non-teaching tasks.		DepEd Quezon personnel, teachers		50,000.00 HRDD Fund	Knowledgeable teachers who are able to manage their well, most especially teachers in the reproduction of their modules and other teaching and non-teaching tasks.

| 2. The teacher's internet connection is not stable and not good enough to subscribe to online seminars and training initiated by the Department of Education | To devise ways and alternatives to attending virtual seminars and trainings initiated by the Department of Education. | The DepEd Quezon may adopt the program to be launched by the DepEd Central Office, EdTech Unit in using DepEd Commons later this year to supplement and back up the resources/training/webinars to be conducted by placing courseware in the system, which will allow the teachers for offline use. | DepEd Quezon Personnel | November 2021 | 300,000.00

HRDD Fund/SEF | A more convenient and hassle-free experience by DepEd Quezon teachers in attending virtual seminars and training |
| | | The EdTech Unit of DepEd Quezon may send a copy of the video recorded to each school's email to be used for the teachers' seminars and workshops ahead of time to be downloaded by the school's ICT ahead of the said workshops/training. | DepEd Quezon's EdTech Unit, School's ICT Coordinator | November 2021 | 100, 000

HRDD Fund/SEF | A more convenient and hassle-free experience by DepEd Quezon teachers in attending virtual seminars and training |

Monitoring and Evaluation

The Schools Division Office of DepEd Quezon, together with the EdTech Unit, will structure a team to implement the proposed Intervention Scheme. In connection to this, the monitoring team will be using monitoring tools which will be developed by the said team and will serve as the engine to supervise and evaluate the sequence and process of the implementation of the proposed intervention scheme.

Summary, Conclusions, and recommendations

This chapter presents the summary of the findings, conclusions, and recommendations. The Summary of Findings follows the order of the Statement of the Problem in Chapter 1.

Teachers' Assessment of their Readiness

The teachers evaluated their readiness as "Ready," as reflected by the overall mean of 2.85.

Problems Encountered by the Teachers
The problems encountered by the teachers in Quezon Province were interpreted as "Not a Problem at All" with an overall mean of 1.74. On the other hand, two problems were identified as "Problem is Serious", which were "Reproduction of modules affects and compromises the teacher's time management" and "The teacher's internet connection is not stable and not good enough to subscribe to online seminars/trainings initiated by the

Department of Education
Relationship of Teachers' Readiness with the Problems They Encountered
The computed coefficient correlation or r-value was 0.49 which signified a considerable moderate correlation. Therefore, the teachers' readiness registered a relationship with the problems they encountered.

Conclusions

The following conclusions have been derived based on the foregoing findings: 1. Teachers in Quezon Province have a positive outlook and work values on their teaching profession as they claimed that they were ready to perform their duties and responsibilities under the new normal due to COVID-19.
2. Most of the teachers' problems were considered not a problem at all. The reproduction of modules affects and compromises the teacher's time management, and the teacher's internet connection is not stable and not good enough to subscribe to online seminars and training initiated by the Department of Education, which were considered by the teachers as serious problems.
3. The teachers' readiness registered a relationship with the problems they encountered, as reflected in the computed coefficient correlation or r-value of 0.49, which signified a considerable moderate correlation. Hence, the findings rejected the null hypothesis. Therefore, one can determine that even though the teachers feel they are ready to perform their duties and responsibilities, there are still problems that they feel need to be addressed due to the COVID-19 pandemic.

Recommendations
In the light of the aforementioned findings and conclusions, the following are hereby recommended:
The DepEd Quezon needs to Plan and implements more programs and activities that would intensify the teacher's time management practices, especially in printing out the modules and other teaching devices since the teacher-respondents rated it as their highest-ranked item among the problems they encountered under the new normal.
Establish a regular monitoring system of the school to gather first-hand information on the needs and priorities to be done in terms of intensifying the time

management practices to heighten their teaching proficiency. Draw programs and initiate a dialogue with the LGUs of Quezon Province to the Internet Providers (Smart, Globe, PLDT) to upgrade their services, especially since most workers and students are now in need of quality service in using the Internet under the new normal.

2. The teachers should:

Create a daily routine plan to help them monitor and budget their time in accomplishing their varied curricular and extra-curricular tasks. Equally important tasks should be planned and prioritized in terms of need.

3. For the Future Researchers

Conduct an in-depth investigation on the adjustment, problems encountered and coping mechanisms among parents, students, and teachers and how collective leadership might support and address the challenges faced by the institution under the new normal in education.

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BOOK REVIEW

The Post-Pandemic World and Global Politics
AKM Ahsan Ullah and Jannatul Ferdous (Springer: Singapore, 2022)[1]
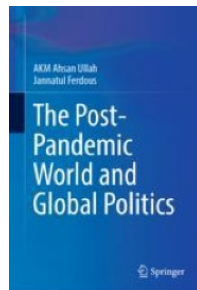
The very title of the book itself invites attention not only of the readers but also those who just have a glimpse of it as we know the entire globe has seen the quick spread of Corona Virus, its icy touch, post effect and the local and global politics centring around it that still reigns. And the curiosity holds my attention and impels me to read some of the chapters of the book thoroughly while other chapters received less reading. The book contains five chapters under the heading (i) The Pandemic and Global Politics (ii) Underlying Conceptual Approach: An Era or a Crisis? (iii) Politicization of Pandemic and the Ramifications (iv) Pandemic, Predictions and Propagation and (v) Choosing to End the Pandemic: Conclusions and discussions, respectively. I see it as a living document of the world's global health, hygiene, and education situation that experienced a quite unexpected and demurred face when COVID-19 shook all the continents. The authors of the book say that the primary goal of this book is to help readers make sense of unpleasant events and build a discourse that leads to a future that we all desire. The Covid-19 pandemic has had a profound effect on people's lives across the globe, touching every aspect of society, and the book tends to record this evidence as documents. It has had a significant impact on domestic politics, affecting most countries' governance and political systems, suspending legislative activity, isolating or killing politicians, rescheduling elections and prohibiting protests due to fears of the virus spreading. However, several governments exploited the outbreak as an excuse to prohibit political activities. As a result, the pandemic has spawned broader political debates regarding the relative merits of democracy and autocracy, as well as how governments respond to crises. The book reveals how assumptions regarding the origins, consequences, and reactions to the COVID-19 outbreak are addressed via the prism of politics and the diverse perspectives of experts in this field. It aims to generate recommendations for more research into critical components of global politics in the COVID-19 era as it develops and advances from and for scholars studying global politics. Hence this group of readers must have enough food for thought spreading in the pages.

Pandemic preparations and responses have been impacted by politics since it was a public health and political crisis. Nevertheless, a connection between global health issues and political issues is still being established. There have been many system-level

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connections between governments and health epidemics and infectious diseases since the eighteenth century. The majority of the world powers seemed to be concerned about the origin of the virus. Some politicians instigate conspiracy theories and disseminate fake information regarding the virus's origins. Such speculative assertions may serve only to divert attention away from researchers and policymakers working to contain the virus spread, and that objective might be political. Politicizing the epidemic has resulted in the emergence of anti-vaxxers. Vaccine refusal is a significant factor in the continued rise in COVID-19 infections. The bulk of these folks belongs to the right-wing political parties. Despite health professionals' urge that vaccination is an issue of public health, not politics, they continue to say COVID-19 is a scam.

Zoom has abruptly occupied the position of our traditional way of communication in the nations and across the globe during COVID-19, did not escape the notice of the writers as keen observers. They say Zoom achieved a daily meeting participants peak of over 300 million, up from 10 million in December 2019. Their annual field meeting minutes estimate has more than doubled, from 100 billion in late January to more than two trillion in April 2020. The global crisis brought on by the coronavirus outbreak has driven us even more into a digital environment, and behavioural alterations are likely to have long-term effects when the economy recovers. However, not everyone is prepared to embrace a digital lifestyle. UNCTAD investigates how certain people profit more than others from a technologically advanced world and found that the coronavirus outbreak has accelerated the usage of digital solutions, tools, and services, hastening the global shift to a digital economy. It has, however, showing the wide disparity between the connected and the unconnected. Emily and her colleagues in their study found that some 21% of homebound children's parents fear they won't be unable to complete their schoolwork because there is no computer at home, or because they would be forced to use public Wi-Fi because they do not have a reliable internet connection at home (22%). Low-income parents have additional concerns about their children's education. When their children's schools close, many low-income parents worry that their children will be forced to complete schoolwork using only their cell phones. Forty percent of parents worry that their children will be forced to use public Wi-Fi because their home internet connection is unreliable. We notice here that zoom has appeared as a positive aspect in the field of communication, health, technology and education; the authors have also noticed the digital divide created by it.

In page 75, the book describes the fact that during a global crisis, the governments of various nations stifle the voice of the press to hide the actual message at the cost of citizens' suffering and death. The governments of these nations think it to be a credit not to let the outside work know about the magnanimity of the crisis. Human Rights Council expressed grave concern over new policies blocking and punishing the free flow of information. People have died due to governments lying, concealing facts, detaining journalists, failing to notify the public about the magnetite of the threat, and criminalizing individuals with the pretence of spreading false information. People have

suffered because some governments would prefer to avoid criticism than allow people to share information, learn about the outbreak and understand what officials are or are not doing to protect them. I think the book will serve as a warning signal for the future generation, governments, politicians and the global community about what really happens inside a country and what the governments do in response to a big crisis.

Another important fact has been uttered in this book to remind humans how helpless they are before the mightiness of God. Humans are just helpless toys at the forces of nature. Still, the complicated web of political games developed by humans does not stop. People are dying, and we appear to be so helpless and powerless to stop the continuous crisis. We are so tiny as compared to the might of the virus. Lockdowns shut down facilities and forced large segments of the workforce to work from home. It comes to the books through the lines "The COVID-19 pandemic is caused by one kind of Coronavirus for which science and technology found no immediate cure and this virus has already had a tremendous impact worldwide and has altered human history, it has influenced worldwide collaboration making it a focal point of global politics. The definition of a superpower has evolved as they appear impotent in the face of the Virus. All of this has fuelled fears of a new Cold War, with China and the US playing prominent roles this time. The last cold war was centred on the USSR and the United States, but today COVID-19 seems to be changing the course of international politics. As a reader or reviewer, this utterance has impressed me.

A virus is an excellent equalizer since no country is immune to it, even if not everyone is equally exposed to or damaged by it. Because the connection is only as strong as its weakest link, the crisis would focus on efficiently assisting the most vulnerable individual and countries. Because of our interdependence, if the vulnerable are endangered, everyone is endangered. The book's stories begin with the advent of COVID-19 and stretch until the outbreak of Russia and Ukraine wars. COVID may have infected Russian troops stationed near the border or participated in military manoeuvres in Belarus. Ukraine's health ministry has reported 43,778 new cases since the outbreak began, the most in a single day since the outbreak began. There were almost 4,000 increases over the previous day. Russia has also been heavily affected by the Omicron variety, with 168,201 new infections, which is an all-time high on February 25th, 2022. Global politics has replaced the global pandemic in news headlines. Not all of our concerns about the global politics-pandemic nexus have been answered by this book, but it does highlight how politicians may explain away the reality and hence tend to perpetuate the pandemic-the authors clandestinely declare the limitation of the book through this statement that I appreciate. Being an individual attached to education, I had some more appetite and expectations to see at least one chapter dedicated to education as this sector has seen tremendous loss, and the developing world is struggling to get out of it. I like to conclude with the lines - COVID-19 outbreak will have far-reaching consequences for the planet. Our domestic and international responses will determine

whether we can learn from this catastrophe and establish a more sustainable and long-term globalization policy.

Reviewed by Masum Billah