JOURNAL OF THE MYANMAR ACADEMY OF ARTS AND SCIENCE

Economics, Tourism and Law

Vol. XIX, No.8, January, 2023

Myanmar Academy of Arts and Science

Journal of the Myanmar Academy of Arts and Science

Vol. XIX, No.8

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EFFECT OF BLUE OCEAN LEADERSHIP AND INTER-ORGANIZATIONAL COLLABORATION OF YANGON CITY DEVELOPMENT COMMITTEE MEMBERS ON CITY PERFORMANCE OF YANGON, MYANMAR*

Myint Myint Kyi[1]

Abstract

This paper aims to analyse the effect of blue ocean leadership and inter-organizational collaboration of Yangon City Development Committee (YCDC) members on improvement of Yangon city performance during 2019 and 2020. Data from 65 randomly selected members are anslysed. From analysis, it can be concluded that YCDC committee members have been practicing blue ocean leadership since they take responsibilities after 2019 YCDC election. Among the three aspects of blue ocean leadership, only firsthand discovery has positive effect on city performance of Yangon, Myanmar. The committee members have been emphasizing more on finding the gaps and problems at the source. They are wandering around the city and they are gathering information about real issues. This firsthand discovery approach affects directly on city performance. However, they do not have enough time for their subordinates to provide the feeling of ease, feeling of confidant, and feeling of not fearing for initiatives to participate in this change process. They also have no time to assign tasks by matching with individual strengths and weaknesses of their subordinates. Their subordinates have to conduct the collaboration with outside associations and organizations for accomplishments of some city development projects. However, due to different structures, processes and contexts of different collaborating organizations, the inter-organizational collaboration between YEDC and other organizations is not significantly supporting to city performance.

Key Terms: *Yangon City Development Committee, Blue Ocean Leadership, Inter-organizational Collaboration, City Performance*

List of Abbreviation

YCDC	Yangon City Development Committee
BOL	Blue Ocean Leadership

Introduction

The election for second term of Yangon City Development Committee was held on 31st March 2019. The first term election was held on 27th December 2014. For the second term, the election procedures were changed due to the new YCDC law: the 2018 YCDC new law replaced the 1922 city of Rangoon municipal act and supplemented the 2013 YCDC law (Htet, 2019). This reform in YCDC committees' elections was developed to closer to the international standards, and also intended to be more democratic: precedence for country's democracy (Htet, 2019).

On the Election Day to select second term YCDC committees' members, the eligible voters (over 18 year old Myanmar citizens) selected the YCDC committees' members for both city level and township level through the new polling system. The voters wanted committee members to practice new styles and innovative ways during the second term of YCDC committees because

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* Best Paper Award Winning Paper in Management Studies (2020)

they expected Yangon city's performance to be developed in all aspects such as city transport, city roads, drainage system, cleanliness, esthetics, infrastructure and so on.

To implement the projects and action plans for Yangon city development, the YCDC committee members need to collaborate with various associations and Ministries such as Ministry of Natural Resources and Environmental Conservation, Ministry of Planning and Finance, Central Department of Small and Medium Enterprises Development, Yangon Region Investment Committee, Ministry of Social Welfare, Relief and Resettlement, Ministry of Construction, and so on. The Yangon city performance would be depending on the committee members' innovative ideas and new styles as well as their effective collaboration with relevant associations and Ministries.

1.1 Rationale of the Study

The living standards and life styles of a nation's citizens can be changed positively with the improvement of country performance. In Myanmar, the starting point would be development of city performance that will lead eventually to country performance. The 2019 YCDC election for second term of YCDC committees intended to appoint the members who are capable to contribute effectively to Yangon city performance. Election was held with new procedures in line with the new YCDC law (2019). The Yangon Regional Government allocated Kyat 2 billion to organize the poll (Htet, 2019).

Improvements in public sector performance in developing countries can be seen obviously as the results from government officials and political leaders apply the new and innovative ways to solve the barriers to the development of public services especially in cities (Global Knowledge and Research Hub Malaysia, 2018). This point will also be true for improvement of Yangon city performance in Myanmar. Without visionary trait, innovative ideas, and creative thinking, YCDC committee members will follow the typical ways and will practice the old styles, which would not be effective to city development. Thus, the elected members must practice the new styles, new ways with new behavior different from the typical styles or old ways.

YCDC committee members need to focus on the capabilities, attitudes and behavior of their subordinates, they also need to keep track on the ultimate goal of city performance improvement. Thus, they have to be ready to accept the new ways and ideas for real change within the city. If they are visionary on consequence of their actions as well as proactive to future trends, city performance will be significantly improved. However, the effort of YCDC alone may not be effective due to the lack of support from relating associations and ministries. Thus, inter-organizational collaboration may also be crucial for city development. However, in Myanmar, for Yangon city development, it is not sure the new leadership is influencing or inter-organizational collaboration is influencing or both are influencing on city performance.

Blue-ocean leadership would be required for high commitment of YCDC members because the blue-ocean leaders' intention is to build humanness (Kim & Mauborgne, 2017) within the committee. In other words, blue-ocean leadership aims to change members by reducing their fear, upgrading confidence, and providing more freedom to show to exploit their creativity. Thus, blue-ocean leadership is not all about change.

To change the members' attitude and action, leaders will support to their subordinates to get the feeling of ease, confident, and getting chance to exploit their imagination. Thus, for high

commitment to city good performance, YCDC committee members need to practice blue-ocean leadership. However, blue-ocean leadership alone would not be enough for improvement of city performance. Members' inter-organizational collaboration may also be crucial for city performance. YCDC committee members need to collaborate with other associations' or teams' or ministries' members for effective implementation of city development projects.

Committee members' shift to blue-ocean leadership and support to their inter-organizational collaboration would be leading to good city performance regarding city's esthetic, health issue, water supply, wastewater treatment, solid-waste treatment, land utilization system, building permit system, city road quality, development tax system, and drainage system. This research analyses the effect of blue ocean leadership and inter-organizational collaboration on city performance of Yangon, Myanmar.

1.2 Research Questions

(1) Are the YCDC committee members leading with new style over their subordinates?

(2) How do YCDC committee members do to collaborate with other associations and ministries for better results on city performance?

(3) How do the leadership style and inter-organizational collaboration of YCDC committee members affect on the city performance of Yangon?

1.3 Research Objective

(1) To analyse the effect of blue ocean leadership and inter-organizational collaboration of YCDC committee members on city performance of Yangon.

1.4 Research Design

(a) Sampling Procedure

On 31st March 2019, eligible voters selected the 6 members for city level development committee and 3 members for each of 33 township-level development committees. Thus they elected 105 members: 6 for city level and 99 for township level committees. This paper focuses on 99 township-level development-committee members. To identify the sample size (n) from population (N), the formula of Yamane and Taro (1967) is used.

Formula: $\frac{N}{1+N \times e^2}$

Formula: $\frac{99}{1+99 \times .05^2}$ = 79 (Here; Margin of error is 0.05)

In this study, as the sample, the 79 members are randomly selected from 99 township-level committee members (The list of 99 members is the sampling frame for this study).

(b) Data Collection

Primary data are collected from randomly selected 79 YCDC committee members. The questionnaires (with Myanmar version) were distributed to them on 15th July 2020 and collected on 24th July 2020 at Yangon City Town Hall. The complete responses are received from only 65 sampled members.

(c) Questionnaire Design

The structured questionnaire consists of 3 main parts: (A) Blue Ocean Leadership, (B) Inter-Organizational Collaboration, and (C) City Performance (2019-2020). Part (A) consists of 3 sub-variables: atomization (measured with 7 question items), firsthand discovery (measured with 3 items) and fair process (measured with 4 items). Part (B) consists of 8 sub-variables: commitment (measured with 4 items), time (measured with 3 items), resource (measured with 3 items), emergent communication (measured with 4 items), trust (measured with 3 items), shared goal (measured with 3 items), defined process (measured with 4 items), and collective identity (measured with 4 items).

Part (C) is to measure the city performance with 10 question items. All question items are with Likert-type 5-point scale. From totally wrong to totally right for question items of Part (A) Blue Ocean Leadership and Part (B) Inter-organizational collaboration, and for Part (C): City Performance (growth rate during 2019-2020), from very low to very high.

(d) Data Analysis

Descriptive and analytical methods are applied. Descriptive analysis is to present the blue ocean leadership and inter-organizational collaboration of YCDC committee members, and for city performance with mean values. As analytical method, multiple linear regression analysis is conducted to analyse the effect of blue ocean leadership and inter-organizational collaboration on city performance of Yangon.

Literature Review

This research focuses on the relationships of three variables: blue ocean leadership, inter-organizational collaboration, and city performance.

2.1 Concepts of Blue Ocean Leadership

(a) Blue Ocean Leadership

Kim & Mauborgne (2014) stated that the blue ocean leadership (BOL) is a new style of leadership creating organization engagement of the formerly disengaged employee by altering the organization leadership profile. They also presented BOL as the efficient style to upgrade leadership capabilities that maximize the existing hidden talent and effort of subordinates towards organization's superior performance. Thus, blue ocean leaders can attract subordinates to pay attention to the new leadership practices and can also keep their effort track onto the way to organization's mission.

Zakaria, Idris, & Ismail (2017) pointed that ledaership practices are acts and activities of leaders showing their commitment, devoting time, sacrificing the personal interest so that subordinates noticed the new style of their leaders and they will engage in this transformation process. Thus, BOL focuses more on actions and activities of leaders rather focusing on the traits and values which are considered in traditional leadership styles.

Kim & Mauborgne (2017) explained that BOL is the process of building humanness intending more engagement from subordinates in organization's performance. Thus, with BOL,

subordinates (in this case, YCDC members) will be more engaged at every step of change process even though they do not have trust and confidence on their capabilities and they do not fully understand the change process. This willingness is resulted from the actions of blue ocean leaders. Leaders with BOL will support them to change without feeling of difficulty, stress, and fear. In short, BOL is leadership for real change with subordinates' feeling of ease, confident and fearless.

(b) Elements of Blue Ocean Leadership

Jian, Yin, & Awang (2020) presented the 13 elements of blue ocean leadership with three variables: focus (7 items), visionery (3 items) and idealized influence (3 items). Focus of blue ocean leaders is on the development of their subordinates: their committed effort is to nurture the subordinates by booadening their perspectives. Visionary is the capability of leader to set the proactive strategies to respond to the changes, to cope with the opportunities and to overcome the threats of changing trends. Idealized influence is building trust with subordinates, sharing experience and knowledge within team, leading with heart and compassion and to provide the opportunities to subordinats to show their talents and competencies. Kim & Mauborgne (2017) presented the three elements (atomization, firsthand discovery, and fair process of BOL: these three elements are same conceptually as the three variables mentioned above.

(i) Atomization

Kim & Mauborgne (2017) stated that leaders with BOL act atomization: breaking down the large task into small pieces of tasks. They expect from their subordinates the small improvement at a time instead of hoping large improvement of radical change. They expect incremental change of subordinates' ability and capability. Thus, they let their subordinates to perform step by step with reasonable pace. Their subordinates will be sure that they can perform the assigned tasks so that they will be motivated for step by step change.

(ii) Firsthand Discovery

Leaders with BOL will create the sense of urgency of subordinates by letting them to discover the causes and driving forces to change or to step into next level. By letting them to see the real scene or real results, they will convince that the old practices, actions or behavior are not anymore effective. They can also understand their weaknesses to participate in the change process. Then, they will try to improve their capabilities through leaders' support.

(iii) Fair Process

Leaders with BOL understand their subordinates' strengths and weaknesses individually. They valued their individual subordinates' intellect and emotional qualities. They can inspire them for voluntary cooperation into change process. Leaders will show right reinforcement: good rewards for good effort and less rewards for less effort.

(c) Blue Ocean Leadership and Performance

Zakaria, Idris, & Ismail (2017) presented that the blue ocean leadership provides a totally new approach as employees' views are taken into consideration in developing new leadership profile which can be implemented anytime with low cost and can provide high impact result. Thus,

the employee engagement is the outcome of blue ocean leadership, and the employee engageemnt will lead to high performance of the organization. In other words, the new leadership profile will be shared among subordinates and it will motivate them to strive for organiozational excellence. Hanafi, Daud, & Baharin (2018) stated that the relationship between the blue ocean leadership style and emotional intelligence as well as pointed out the leadership role of accurate attributions where each attribution can lead to enhancing leader effectiveness. Alam & Islam (2017) observed that the blue ocean strategy has positive efefct on organizational performance.

2.2 Concepts of Inter-organizational Collaboration

(a) Inter-organizational Collaboration

Mizrahi, Rosenthal, & Ivery (2013) stated that there are multiple reasons for the need to do interorganizational collaboration: service integration, attitude or behavior changes, strategic partnership, problem solving, political action or social change. They also pointed out government may need to collaborate with private and non-profit organizations for combined services to provide to public. The process of resolving complex problems in an interactive manner can be defined as collaboration (Gray, 1989). Thomson, Perry, & Miller (2009) stated that collaboration is achieved through adaptive to each other, rather than optimizing strategies which undermines the success of collaboration. Collaboration is the work of members to solve problems together and the work toward the shared goal after its development and with shared responsibility for the solution (Rummel & Spada, 2005).

Collaboration is adaptive and it is a process consists of external environmental effects such as political-legal, socio-cultural, economic, ecological, technological and other forces (Emerson, Nabatchi, & Balogh, 2011). Since the collaboration is a small interactive group that may be started around a problem or issue, group members may either identify or not identify with the group (Hogg, Cooper-Shaw, & Holsworth, 1993).

(b) Elements of Inter-organizational Collaboration

Thomson, Perry, & Miller (2009) described the five key dimensions of inter-organizational collaboration: governance, administration, organizational autonomy, mutuality and norms. Building successful collaboration includes understanding the role of conversations that develop social capital and build a collective identity and moving members through joint and private construction of information and knowledge (Hardy, Lawrence, & Grant, 2005). If the group member identify himself or herself with the group, the individual engagement in the group will increase, their behavior will toward common goal. Social capital is collectively owned by the group members and is an accessible resource for them (Kramer, 2006).

Greer (2017) presented the two categories of elements of inter-organizational collaboration: initial elements and emergent elements; the initial elements are committed members, time and resources; and the emergent elements are communication, trust, shared vision or goal, defined process and collective identity (Fayard & DeSanctis, 2010). The first initial element: members' commitment means members' active participation in collaboration, their accountability, their enthusiasm for task accomplishment, and willingness to collaborate with others. The second element: time element means devoting time to start the collaboration, to build relationship and to

get consensus in decision-making. The third initial element: resource means putting the resources from both parties and utilizing these resources effectively.

The emergent element: communication means giving constructive suggestions, open and honest discussion in meetings, listening to the conflicting views of both sides, and trying hard to solve the conflicts of parties with pursuit of common goal. Trust means building strong trust, collaborating with mutual trust, and trust on capabilities each other. Shared goal means collaborating for common goal, setting goal together, and trying together for common goal. Defined process means compliance of procedures to goal, making effective decision, identifying the cases for which members must meet, removing traditional boundaries restricting effective collaboration. Collective identity means strengthening the joint ability, receiving the better results, good reputation from collaboration, and member satisfaction and happiness from collaboration.

(c) Inter-organizational Collaboration and Performance

Gray (1989) and Gray & Wood (1991) explained that collaborative alliances can solve the organizational and societal problems such as resource dependence and political, institutional, and other cross-boundary challenges. An outcome of a successful collaboration is joint identification of optimum solution for the complex problem which can affect on both organizations. The results come out from the learning each other crossing the organizational boundaries and new social formation: some results transcend the collaboration itself (Fenwick, 2012). Inter-organizational collaboration brings benefits for social development projects (Lundstrom, 2011).

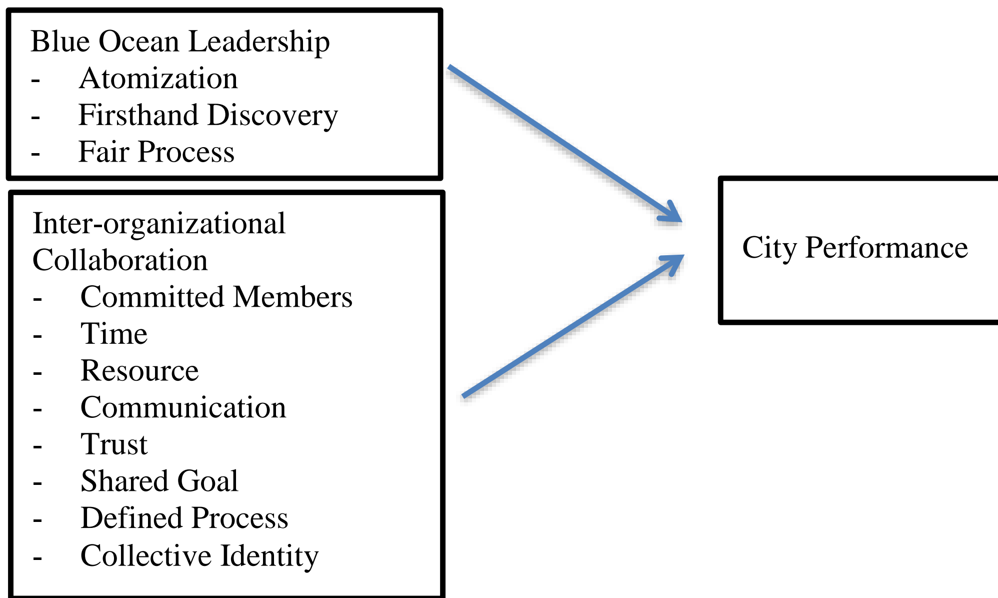
2.3 City Performance Measures

The World Bank Group (2009) explored the criteria to measure the public service performance: services, regulations, infrastructure, and policies. In this research the Yangon city performance is assessed with esthetic quality, health issue, and water supply, land utilization system, system of issuing construction permit, wastewater treatment, solid waste management, city roads quality, development tax collection system, and drainage system.

2.3 Conceptual Framework

Considering the concept and elements of BOL develops the conceptual framework of the study. BOL is building the humanness within the organization. Its elements are automation, firsthand discovery, and fair process. Although previous researchers (e.g., Alam & Islam, 2017) examined this effect on organizational performance, this study based on the assumption of the public-service organization's performance represents the performance of public service. YCDC is the public service organization. Thus, to analyse the effect of BOL of YCDC committee members, the result should be Yangon city performance, rather the organization's performance.

The inter-organizational collaborations of members with other collaborative associations would have the impact on city performance. Lundstrom (2011) presented that the inter-organizational collaboration is effective for implementation of social development projects. This finding is also based to develop the conceptual framework of the study.



Source: Developed for this Study (2020)

Figure 1 Conceptual Model of the Study

In this study, the objective "to analyse the effect of blue ocean leadership and inter-organizational collaboration on city performance of Yangon" is reached by testing the relationships of the variables shown in the conceptual framework. The blue ocean leadership consists of 3 elements, and the inter-organizational collaboration consists of 8 elements. The city performance variable has no sub variables. The city performance is measured with 10 items such as esthetic, health issue, water supply, wastewater treatment, solid-waste treatment, land utilization system, building permit system, city road quality, development tax system, and drainage system.

Findings and Discussions

This section covers the findings relating to analysis on research objective.

3.1 Data Reliability

The Cronbach's Alpha values of the variables used in this study are shown in Table (1).

Table 1 Reliability Test Results

Sr. No.	Variables	No. of Items	Cronbach's Alpha
1	Atomization	7	0.802
2	Firsthand Discovery	3	0.634
3	Fair Process	4	0.653
4	Committed Members	4	0.807
5	Time	3	0.720
6	Resource	3	0.654
7	Communication	4	0.770
8	Trust	3	0.746
9	Shared Goal	3	0.742
10	Defined Process	4	0.636
11	Collective Identity	4	0.688
12	City Performance	10	0.790

Source: Survey Data, 2020

The Cronbvach's Alpha values of all variables except visionary and defined process are greater than or equal or near to 0.7. Thus, the data consistency is reliable. However, the data consistency of visionary and defined process variables is questionable: the Cronbach's Alpha values are between 6 and 7 (just at the acceptable level).

3.2 Descriptive Analysis

The YCDC committee members' blue ocean leadership can be seen with Table (2). This Table shows the results from descriptive analysis on the responses of 65 respondents.

Table 2 Blue Ocean Leadership of YCDC Committee Members (2020)

Sr. No.	Factors	Mean Value
1	Atomization	3.24
2	Firsthand Discovery	3.94
3	Fair Process	3.42

Source: Survey Data, 2020

The YCDC committee members cannot break the huge task into small tasks for releasing the workload pressure on subordinates because of staff shortage by comparing with projects urgently needed to implement for reducing city's problems. The mean value of first element (atomization) is 3.24. Leaders cannot let subordinates to try to improve step by step. Because of the time constraint to accomplish various projects within short period, they have to put heavy pressure on their subordinates. They are also putting much effort to transform the city into developed new city. However, they are wandering around the city, they are trying to transform the grassroots' living standard by improving the city performance. The mean value of the second element (firsthand discovery) is 3.94 (nearly 4.0).

Table 3 Inter-organizational Collaboration of YCDC Committee Members (2020)

Sr. No.	Factors	Mean Value
1	Committed Members	3.78
2	Time	3.66
3	Resource	3.71
4	Communication	4.11
5	Trust	4.51
6	Shared Value	3.80
7	Defined Process	2.65
8	Collective Identity	2.91

Source: Survey Data, 2020

As shown in Table (3), most of the YCDC committee members have been conducting the collaboration with other organizations although their capacity to define the process to collaborate is relatively low. They have committed members to participate in collaboration with other organizations, their subordinates invest time and resources to solve the barriers to improvement through collaboration with other organizations. They also persuade the members of other organizations to put the resources and time in the collaborative tasks by building mutual trust. The committee members try to meet the members from other organizations for defined tasks of collaboration. Although it is difficult for them to define collaborative process clearly, they try to share common goals with collaborative members.

YCDC committee members need to collaborate with other organizations for development of Yangon city as well as for wellbeing of city people (e.g., collaboration with KBZ bank for KBZ pay which public can use for YCDC bills). YCDC also collaborates with some ministries and committees such as ministry of natural resources and environmental conservation, ministry of construction, ministry of home affairs, Yangon region investment committee, Asian Development Bank, World Bank and so on.

The YCDC committee members are actively collaborating with other organizations, they are accountable for joint effort effectiveness, they are trying for achievement of common goal for both sides, they devote time for good relationship with other organizations, they are trying to put resources from both sides for common goal accomplishment, they show the mutual respect with other organizations' members, they elicit the openness and friendliness from other members, they are replacing the old ways with new ways for effective collaboration, and they are expecting the larger benefit from collaboration. However, they cannot make joint decision and management. Thus, the collaboration process is not the flawless process.

Table 4 City Performance of Yangon (2019-2020)

Sr. No.	Factors	Mean Value
1	City Performance	3.76

Source: Survey Data, 2020

YCDC committee members believe that the city performance of Yangon has been improving during 2019 and 2020. They responded that they put much effort in implementation of development projects for esthetic quality, fighting health attack (e.g., COVID 19 pandemic), water supply, wastewater treatment, solid-waste treatment, road quality and drainage system. However, they perceive that their activities are not too effective in implementation of some projects such as land utilization system, building permit system, and development tax system.

3.3 Multiple Linear Regression Analysis

To reach the research objective, the multiple linear regression analysis is conducted with city performance, as dependent variable and blue ocean leadership and inter-organizational collaboration are independent variables.

Table 5 Effect of BOL and Inter-organizational Collaboration on City Performance of Yangon

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig**	**VIF**
	B	**Std. Error**				
Constant	1.136	1.072		.060	.295	
Blue Ocean Leadership	0.535**	0.206	0.373	2.597	.013	1.009
Inter-organizational Collaboration	0.037	0.182	0.030	0.206	.838	1.009
R						0.479
R Square						0.342
F Value						12.473**

Source: Survey Data, 2020 ** Significant at 5% level

From statistical analysis, it can be seen that the blue ocean leadership of YCDC committee members is significantly affecting on the city performance. The inert-organizational collaboration has no effect on city performance. It seems that the effort of YCDC committee members may be isolative affecting on city performance. Their collaboration with other organizations may not be significantly supportive to city development projects and plans.

To find the effect of the elements (atomization, firsthand discovery and fair process) on city performance, multiple linear regression analysis is conducted again by placing these elements as independent variables and city performance as the dependent variable. The results are shown in Table (6).

Table 6 Effect of Elements of BOL on City Performance of Yangon

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig	VIF
	B	Std. Error				
Constant	4.136	1.872		2.209	.055	
Atomization	1.537	1.006	0.675	1.528	.211	1.000
Firsthand Discovery	2.436**	2.182	1.116	0.206	.034	1.000
Fair Process	0.091	0.774	0.218	0.118	.421	1.000
R						0.377
R Square						0.142
F Value						11.771**

Source: Survey Data, 2020 ** Significant at 5% level

From analysis on effect of the elements of BOL on city performance, only the firsthand discovery has significant positive effect on city performance. The YCDC committee members are going to the real places (city's townships) and wandering around the city. They discover the problem areas or areas for improvement on roads, in markets, on streets, within wards, and so on. They find the ways to solve these problems. They understand that they are elected by public for transformation the city to be developed. Thus, their firsthand discovery is leading to improvement of city performance especially for the esthetic of the city, improvement of road networks, and improvement of drainage, solid waste treatment, and waste-water treatment.

It is not easy for them to practice atomization because of time constraint and resource constraint. They have the pressure to show improvements within short time period because city people demand various transformation activities and results from committee members. Moreover, they cannot practice the fair process. Even though they know the individual strengths and weaknesses, they do not have the authority either to reduce workload of some subordinates or put more workload over some subordinates. They have to assign tasks equally if their subordinates are at the same position. They also do not have enough time to involve in their teams to understand the individual strengths and weaknesses of team members.

Conclusion

From this research, it is found that most of the YCDC committee members have been practicing the blue ocean leadership (BOL). However, they are focusing on only one aspect of BOL: firsthand discovery. Since the public elects them, they have been committing to the development of Yangon city. They have been devoting much of their time for improvement of city performance. They observe obviously the various aspects to be transformed: for water supply, for wastewater treatment, for solid-waste treatment, for city's esthetic, and for road network quality. They have been gathering information about the needs to be transformed. However, some issues are beyond their capacity and their control: the land utilization system, development tax system, construction permit system and so on. They have to emphasize on issues they can urgently

transform within their capacity. For improvement of Yangon city performance (in other words, the improvement of YCDC's performance), they need to collaborate with other organizations, ministries and associations. However, these collaborations are not supportive to city development. Different organizations have to focus on own issues. The structure and processes are also different each other. Thus, it is not easy to gain consensus decision, common goal, and mutual benefits. At present, only the firsthand discovery (understanding the real situations) of committee members is effective for YCDC's performance improvement.

Suggestions

By considering the findings of this research, YCDC committee members should emphasize on the development of their subordinates. Both solving urgent problem and nurturing the subordinates for better performance are equally important. The committee members should give hands to subordinates to walk step by step. They also need to devote time for trying to provide the feeling of involvement to their subordinates. They should build close relationship with their subordinates so that they can understand the individual differences, individual strengths and weaknesses. Although the members and their subordinates have the firsthand experience of city's problems and areas for improvements, they are lack in automation and fair process. Thus, committee members should try for real change by providing the confidence, feeling of not fearing, and felling of ease to participate in this change process. Committee members should try for incremental change instead of radical change. Moreover, they should try for matching the subordinates' capabilities with work assignments.

Acknowledgement

I would like to express my deepest gratitude to Professor Dr. Tin Win, Rector of Yangon University of Economics for his support and encouragement to submit this research paper to Myanmar Academy of Arts Sciences. I also would like to convey my deepest thanks to Dr. Nilar Myint Htoo, Pro-rector of Yangon University of Economics for sharing information of deadlines to submit this paper and support me to submit the paper in time. My profound thanks also go to respondents (YCDC committee members) of YCDC committees for their participation in the survey. Without their participation, this work cannot be completed in time.

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EVALUATING THE DRIVERS OF GREEN CONSUMPTION BEHAVIOR

Nu Nu Lwin[1]

Abstract

This paper aims to examine the drivers of behavioral intention for green consumption and to determine the effects of behavioral intention on actual behavior in green consumption of the consumers. The research is conducted based on consumers who shop in supermarkets and shopping centers located in six townships in Yangon downtown area with the constructs of the Theory of Planned Behavior. The results of the study reveal that consumer's behavioral intention in green consumption is affected by consumer's attitude, subjective norms, and perceived behavioral control. Moreover, the findings of the research suggest that consumer's self-identity with green consumerism contribute to the prediction of their behavioral intention. The results show the direct relationships between behavioral intention and actual green consumption behavior. This study provides the implications for policy makers and green marketers of to design appropriate policies and strategies to improve the consumers' purchases and usages on green products and service through the measures of stimulating favorable attitudes toward green products, enforcing subjective norms, enhancing perceived behavior control, and promoting self-identity of green consumption.

Keywords – *Green consumption, attitude, subjective norm, perceived behavioural control, behavioural intention, self-identity.*

Introduction

In recent decades, environmental problems have been prevalent and well-publicized issues since people lived anywhere on the earth has been affected by at least in the form of weather changes and more severely increasing frequency of epidemics and natural disasters. Accordingly, the general public are increasingly paying more attention on environmental protection and adopting environmental conservation measures in their daily life consumption.

Green consumption is widely recognized as an important remedy for environmental problems nowadays. Green consumption refers to a social movement and an attitude and/or behavior of consumers addressing environmental problems through the adoption of environment-friendly behaviors, such as the use of organic products and clean and renewable energy without, or minimum, pollution.

Schlegelmilch, Bohlen & Diamantopoulos (1996) argued that as the responses to environmental problems, consumers search for environment-friendly alternatives to the products they usually buy, rather than decrease their consumption. Moreover, McDougall (1993) asserted that environmental destruction is primarily caused by over-consumption. Williams (2007) among others, criticized the green movements as light-greens and pointed out that such movements as buying eco-friendly products from clothing and cars to vacation packages cannot avert the environmental problems when the cumulative effect of increasing consumption remains enormous and hazardous.

For realization of green consumption movement, three actions of R: Reduce, Reuse and Recycle have been increasingly voiced as eco-friendly behavior (Kates, 2000). In fact, green consumption can be done through two practices: green buying and reduced consumption. For green buying, consumers look for the products that have less environmental impact than conventional products. In reduced consumption, consumers buy less, avoid impulse purchases, and repair the items if it is possible when it breaks instead of buying new ones. However, scholars pointed out that green buying leads to the behavior of buying multiple greens and thereby cannot realize the

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goal of green consumption. For instance, if a cell phone breaks, instead of buying a new sustainably produced cell phone (green buying), the old one can be repaired and used as long as possible (reduced consumption). Therefore, this contradiction makes the interest of this research that how consumers can be educated, persuaded, and enforced to practice green consumption behavior for the sake of environmental protection and conservation. These tasks can be done by knowledge of attitude, value, and behavioral change of consumers in order to deal with environmental problems effectively.

The research on green consumption has increasingly attracted the attention of researchers while Theory of Planned Behavior (TPB) is an extensively used theory in purchase intention for green consumption behavior from a psychological perspective. Theory of Planned Behavior postulate that actual behavior of a consumer can be predicted by his/her behavioral intention, which is, in turn, influenced by three factors: attitude, subjective norm, and perceived behavioral control of the consumer (Ajzen, 1991). Later, researches demonstrated that the individual self-identity has also impacted on behavioral intention towards certain behavior. It means that consumer behavioral intention is seen to be adjusted when an issue becomes important to their self-identity (Sparks & Shepherd, 1992; Grinberg & Holmberg 1990).

Although several empirical studies have been conducted on green consumption behavior, there is still a gap in studying green consumption through theory of planned behavior (TPB) in the context of Myanmar. Therefore, this paper aims to explore the drivers of green consumption behavior through empirical study on consumers in Yangon.

To reach the research aim, two research objectives are specified as the analytical frame of this study.

1. To evaluate the drivers of behavioral intention for green consumption; and
2. To analyze the effects of behavioral intention on actual behavior in green consumption of the consumers.

Through identifying the drivers of behavioral intention and actual behavior in green consumption, *this paper supposes to* be a knowledge-base for designing policies and strategies that stimulated consumer awareness, promoted their favorable attitudes, realigned subjective norm, assured perceived behavioral control and enforced self-identity in green consumption.

Literature Review

Unprecedented environmental problems including resource depletion, climate change, and frequent occurrence and wide-spread of epidemics have menaced health and well-being of consumers everywhere. As a result, consumers are becoming more sensitive to environmental issues and growing environmental consciousness that leads to change in their attitudes, preferences and behaviors in searching, buying, and using products and services.

Green Consumption

Green consumption refers to an environmentally responsible behavior of consumers minimized the negative impact of consumption on the environment in their purchases, usage and disposal (Pagiaslis & Krontalis, 2014; Sheng, Xie, Gong & Pan, 2019). In early days, buying green products in daily consumption has been widely accepted as an effective way to solve the environmental problems. However, contemporarily, green consumption has been considered from sustainability point of view and shifted focus to the sustainable consumption. Thus, it is now associated with the attempts to lower the level of consumption of specific materials, commodities, and energies. From green consumption perspectives, consumers need to refrain from the

consumption of specific products that impaired environmental sustainability while they have to practice 3 Rs: reduce, reuse, and recycle even in the using green products.

Green consumption is considered as a comprehensive concept that covers various usage and application of numerous products and services such as organic foods, organic clothing, organic skincare products, reusable shopping bags, electric vehicles, energy efficient household appliances, and organic hotels. Therefore, consumption behavior may be varied with different categories of green products. Several researchers conducted the studies on behavioral differences in different green products. Zhang, Fan, Zhang & Zhang (2019) extended the Theory of Planned Behavior to examine the different effects of cognitive factors between utilitarian green products and hedonic green products. However, the empirical results show that there is no significant different between different product categories. Accordingly, this paper examines the green consumption behavior based on the general class of green products.

Understanding human behaviour is a complex endeavor and difficult to explain why ones behave in certain ways that differed from others. The widely used and well-known tools to examine the human behavior is Theory of Planned Behavior (TPB) proposed by Ajzen (1991). According to the TPB, behavioral intention is a main predictor of actual behavior whereas behavioral intention is influenced by attitude, subjective norm, and perceived behavior control. TPB is an extensively used in examination of behavioral intention in green consumption, in terms of the effect of attitude, subjective norms, and perceived behavior control of the consumers (Tanner & Kast, 2003; Hsu, Chang & Yansritakul, 2017) and proved that almost all constructs of TPB are significantly and positively related to purchase intention for green products.

Attitude

Attitude is a person’s mood, opinion, and /or disposition. Attitude can be a positive or negative evaluation of an object, action, issue, or person (Hoyer & Macinnis, 2003). According to TPB, more positive attitude towards a particular behavior, more likely to perform that behavior (Ajzen, 1991). Attitudes are formed as a combination of people's beliefs about the particular behavior (green consumption) and their evaluations of behavioral outcomes (impacts of green consumption). Various empirical studies have illustrated the positive impact of attitude on purchase intention for green products (Bamberg & Möser, 2007; Hartmann & Apaolaza-Ibáñez, 2012; Sreen, Purbey, & Sadarangani, 2018).

Subjective Norm

Subjective norm indicates the perceived social pressure that encourages one to engage in a specific behavior (Fishbein & Ajzen, 1975). Subjective norm is supposed to be a combination of people's perceptions that important others think they should or should not perform the behavior in question and their motivation to comply with others' wishes. Thus, it is the result of interplay between the extent of social pressure and his/her compliance motivation (Ajzen, 1991). The majority of empirical studies demonstrated the effects of subjective norms on intention for buying a green product, visiting a green hotel, using electric car and other pro-environmental behaviors (Thøgersen, 2006; Wu & Man, 2011; Moons & De Pelsmacker, 2012; Yadav & Pathak, 2017).

Perceived Behavioral Control

Perceived behavioral control (PBC) refers to an individual's perception of the ease or difficulty in performing particular behavior (Ajzen, 2002). More specifically, it can be defined as the degree of difficulty experienced by an individual in maintaining rationality while performing a specific behavior (Fishbein & Ajzen, 1975). In TPB model, Ajzen (1991) supposes that PBC positively affects the behavioral intentions and actual behaviour. Several empirical studies suppose

that PBC has a positive and significant effect on sustainable consumption behaviors, purchase intention for eco-friendly products and green apparel products (Wang, Liu & Yu, 2014; Bong & Jin, 2017; Camila & Ptrick, 2019).

Behavioral Intention

Intention indicates the extent to which a person is likely to perform a given behavior or action. Behavioral intention refers to a situation where consumer tends to buy a certain product in certain condition (Fishbein & Ajzen, 1975). Ajzen & Fishbein (1980) argued that behavioral intention is the most important and the best predictor of the behaviour. Accordingly, several empirical studies conducted the analyses and their findings indicated that behavioral intention is a predictor of actual behavior in green consumption (*Chan, 1999;* Elena & Eva, 2007; Mostafa, 2007; Yu, Yu & Chao, 2017).

To improve the predictive ability, previous researchers extended the TPB by inclusion of social impression, environmental consciousness, environmental ethics and beliefs (Chen & Hung, 2003), self-identity and prior behavior (Granberg & Holmberg, 1990; Sparks & Shepherd, 1992) and ethical obligation (Dean, Raats, & Shepherd, 2012). Among them, this study includes self-identity as a predictor of behavioral intention which is in line with the findings of Sparks and Shepherd (1992) as they supposed that self-identity has larger explanatory power than other TPB variables in behavioral intention of green consumption.

Self-Identity

Recent studies highlighted that self-identity contributes to the prediction of behavioral intentions independently from the attitudes towards the behavior. Sparks & Shepherd (1992) asserted that self-identity contributes to behavioral intention over and above the contribution made by the other TPB variables. Self-Identity can be conceptualized as stable and prominent aspects of one's self-perception, especially in relation to social context. The more prominent the self-identity is, the higher the possibility that the person will behave with that identity. For instance, someone who strongly perceive himself as a green consumer is more likely to take every opportunity to behave in accordance with the green consumerism (Sparks & Shepherd, 1992).

Thus, based on the findings of various empirical studies, this paper proposes consumers attitudes, subjective norms, perceived behavioral control, and self-identity as the predictors of behavioral intention and actual behavior in green consumption.

Empirical Analysis

Methodology and Data

In this study, green consumption is examined as generic behavior and the questionnaires are designed to uncover the degree of green orientation of consumers in searching, buying and using products and services. The survey is conducted based on 400 customers who shop at 20 supermarkets and shopping centers located in six townships in Yangon downtown area, namely Botahtaung, Kyauktada, Lanmadaw, Latha, Pabedan, and Pazundaung townships (Yangon Directory, 2020). The sample size is specified as 377 by using Raosoft sample size calculator and the respondents are selected with systematic sampling methods due to unknown population of the shoppers. The data are collected from 400 respondents which consists of 20 customers each from 20 supermarkets and shopping centers during February 2020.

The questionnaire for attitude, subjective norms, and perceived behavioral control are designed with 11-item scale *adapted from Sreen et al., (2018). The attitude is measured with individual's preference for green products and services over conventional* ones. The subjective

norm is identified through the extent of influence of other important person on his/her decision. The measures of perceived behavioral control are developed to examine an individual's ability to put extra effort to get the green product, perceived confidence and perceived control over his/her decision to buy and use products and services. The questionnaire for self-identity is designed with 3-item scale adapted from Rex, Lobo, & Leckie (2015). Three-item scale for behavioral intention and 4-item scale for actual behavior questionnaires are adapted from Emekci (2019). The questionnaire items of each construct are developed as self-administered questions using 5-point Likert Scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Data Analysis

Data analyses are conducted by using SPSS 22.0 software. Firstly, the reliability of the collected data is investigated with Cronbach's α value and then, the extent of consumers' green consumption behavior is evaluated with their mean values. Finally, the multiple regression analysis and simple linear regression are conducted to identify the drivers of behavioral intention and actual behavior in green consumption of the consumers.

Empirical Results

Out of 392 questionnaires fully filled for the purpose of the analysis, 386 valid questionnaires are used for analysis. Regarding demographic profile, about 58 percent of the respondents are female while around 60 percent of the respondents have at least graduate-level education achievement. Almost 63 percent of respondents earned less than Kyat 600,000 per month (Table 1).

Table 1 Demographic Profile of Respondents

Sr. No.	Demographics Variables	Frequency	Percentage
1	**Gender:** Male	161	41.7
	Female	225	58.3
2	**Education**: High Scholl	59	15.3
	Undergraduate	98	25.4
	Graduate	207	53.6
	Post-Graduate	22	5.7
3	**Income (Kyats):**		
	Less than 3 lakhs per month	120	31.1
	Between 3-6 lakhs per month	121	31.3
	Between 6-9 lakhs per month	77	20.0
	9 lakhs & above per month	68	17.6

Source: Survey Data (February, 2020)

The mean value, standard deviation and Cronbach's α of each variable are described in Table 2. All variables measuring green consumption behavior including consumer's attitude, subjective norm, perceived behavioral control, self-identity, behavioral intention, and actual behavior can be considered reliable as the value of Cronbach's α more than 0.70 criterion.

Table 2 Results of Reliabilty Test

Variables	No. of Items	Cronbach's α
Attitude	4	.820
Subjective Norm	3	.847
Perceived Behavioral Control	4	.831
Self-Identity	3	.849
Behavioral Intention	3	.819
Actual Behavior	4	.837

Source: Survey Data (February, 2020)

Table 3 Descriptive Statistics

Variables	Mean	Std. Div.
Attitude	4.28	.70
Subjective Norm	3.79	.75
Perceived Behavioral Control	4.02	.57
Self-Identity	4.36	.68
Behavioral Intention	4.04	.78
Actual Behavior	3.89	.75

Source: Survey Data (February, 2020)

As presented in Table 3, the mean values of consumers' behavioral intention and actual behavior are around 4.0, thus, it is safe to conclude that consumers have green consumption behavior and they have intention and attempt to reduce environmental problems in their daily life consumption. To examine the drivers of behavioral intention for green consumption, the mean value of behavioral intention is regressed with the mean values of attitude, subjective norm, perceived behavioral control and self-identity of consumer. Then, to evaluate the effects of behavioral intention on actual behavior in green consumption, the man value of actual behavior is regressed with the mean value of behavioral intention of the consumers. The results of the regression analysis are presented in Table 4.

The values of adjusted R-square indicate that regression models can moderately explain the variation of dependent variables.[1] Since the F-Statistics are significant at 1 percent level in both models, it can conclude that both models are valid. The coefficients of all explanatory variables: attitude, subjective norm, perceived behavioral control and self-identity are show positive effects on behavioral intention at 1 percent significant level in the first model. In the second model, the coefficient of behavioral intention also has highly significant positive impact on actual behavior.

Table 4 The Drivers of Behavioral Intention & Actual Behavior in Green Consumption

	Behavioral Intention				***Actual Behavior***		
	B	**SE**	**β**	**VIF**	**B**	**SE**	**β**
Attitude	.468**	.054	.417	1.905			
Subjective Norm	.143**	.043	.138	1.404			
Perceived Behavioral Control	.222**	.066	.161	1.904			
Self-Identity	.217**	.048	.187	1.430			
Behavioral Intention					.508**	.041	.532
R^2	.538				.283		
Adj. R^2	.533				.281		
F-Statistics	110.793**				151.779**		

Source: Survey Data (June, 2020)

Note: ** Significant at 1% level, * Significant at 5% level

[1] In social science predicting human behavior, according to Gary (1986), the low R-square value does not imply that the model is not fit and conclusions can be done based on the significance of coefficient regardless of R-square value.

According to the results, all proposed variables: customer's attitude, subjective norms, perceived behavioral control and self-identity play important roles as the drivers of consumers' behavioral intention on green consumption. According to the values of standardized coefficient, customer's attitude and self-identity are major explanatory variables of customer's behavioral intention whereas the remaining two variables also significantly contributes to the intention for green consumption.

Conclusion

General Discussion

This study aims to identify the drivers of behavioral intention and actual behavior based on the constructs of Theory of Planned Behavior and additional variable, self-identity. The results reveal that consumer's behavioral intention in green consumption is affected by all dimensions of TPB, customer's attitude, subjective norms, and perceived behavioral control. Moreover, the findings of the research highlight the contribution of consumers' self-identity to the prediction of their behavioral intention. In addition, the results highlight the direct relationships of behavioral intention and actual behavior in in green consumption.

Based on the findings, it reveals that consumers who concerns about environmental protection and conservation and have favorable attitudes towards green movements have more intention to practice green consumption. Moreover, the results prove that subjective norm of consumers also supports their behavioral intention. It advocates that marketers need to implement the measures that to be seen as doing the right things for society by people who are important to targeted customers and who influence on their decisions. Furthermore, the significant impact of perceived behavioral control highlights that a desired behavior cannot be realized if unless consumers feel confident on their possession of necessary skills, resources, and opportunity to successfully adopt the intended behavior. Among the proposed variables, self-identity is the second largest predictor of behavioral intention. It suggests that when a behavioral issue becomes important to an individual, it becomes part of their self-identity, and they form a desire to behave accordingly. This finding shed the light on importance of marketing practices that embrace the consumers' feeling of green consumption as a part of their self-identity and having an obligation to engage in such practices.

Implications

The findings of this study have implications for both academic and practical implications. The findings contribute the existing research on the application of TPB to predict the green consumption behavior. This study also provides empirical evidence that consumers with a higher level of self-identity to green consumption are more willing to behave as a green consumer.

This study offers an insight for policymakers and marketers to attract the attention of people toward environment protection and arouse the purchase intention for green products and services. It provides an implication that policy makers could design relevant environmental protection policies and regulations to promote green consumption of citizens, thereby to endorse environmental protection measures. Moreover, this study provides the evidences that marketers can design appropriate strategies to improve the consumers' purchases and usages of green products and services through the measures of stimulating favorable attitudes, enforcing subjective norms, enhancing perceived behavior control, and promoting self-identity of green consumption behavior. By implementing these measures, it is expected that green consumption and environmental protection behavior of citizen are advantageous to the environmental protection of the whole society.

Acknowledgment

I would like to express my earnest gratitude and appreciation to Dr. Tin Win, Rector of Yangon University of Economics for giving me an opportunity to submit this research paper to twentieth Conference of Myanmar Academy of Arts and Science (MAAS). I wish to extend my sincere thanks to Pro-rector Dr. Nilar Myint Htoo and all my colleagues for their support and encouragement to complete this study successfully. I am also deeply grateful to all respondents in this research and sharing their ideas, perceptions, and experience for the accomplishment of this research work.

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INFORMATION SYSTEM DEVELOPMENT OF HOTELS IN MANDALAY

Kyi Kyi Thant[1]

Abstract

The study intends to identify the information system development, to analyze the effects of information system development on customer satisfaction and operational productivity, and to examine the effects of customer satisfaction and operational productivity on profitability of hotels in Mandalay. To conduct this study, the primary data was collected from thirty-six hotels selected by using simple random sampling method. In March 2019, one respondent who can represent each hotel was asked with structured questionnaire prepared with five-point Likert scale. The secondary data related to the number of hotels located in Mandalay was acquired from the Ministry of Hotels and Tourism. Descriptive statistics is used for identifying the information system development of hotels in Mandalay. It is found that hotels in Mandalay are implementing information system development to many extents. Besides, multiple linear regression analysis is applied for analysis and it is found that marketing, accounting, and human resource information system developments show the negative and significant effect but integrated information system development indicates the positive and significant effect on customer satisfaction. The accounting information system development reveals the negative and significant effect; however, the integrated information system development proves the positive and significant effect on operational productivity. Finally, it is apparent that customer satisfaction describes the positive and significant effect but operational productivity shows the insignificant effect on profitability of hotels in Mandalay.

Keywords: information system development, customer satisfaction, operational productivity, profitability

Introduction

In the continuously changing business world, businesses apply proactive and reactive approaches in order to cope with the challenges and grasp the opportunities occurred in the market. They alter their business strategies by analyzing internal conditions so that they have to meet the requirements of key stakeholders who can influence businesses in some ways. To fulfill their expectations satisfactorily, business managers need to search for the accurate information which is a major resource for making strategic decisions. Accurate and timely information is crucial for making decisions correctly and providing quick responsiveness to the market. Thus, businesses have been recognizing the importance of information and they develop their information systems which are applied in their business process and functions.

Information is mostly required for conducting relationship marketing in hotels through communicating with existing customers to increase customer engagement. With the aid of information technology, hotels develop information systems so that the operations can be run smoothly. Besides, the software developing companies and software developers are supportive to hotels for using hotel management system effectively. As incorporating essential information is crucial for providing services to customers, responding competitors, and communicating with suppliers, information system is required to be systematic. Correspondingly, it is necessitated to initiate using information system and make changes the existing information system for improvement of operations.

To meet customer requirements satisfactorily and competitively, marketers need to inquire accurate information of customers. Offering personalized services to customers can be differentiated comparatively and these can persuade customers to purchase their services and stay loyal. Acquiring customer information exactly is critical for hotels so that they can increase service productivity and reduce extra costs consequently. As the technology is constantly changing, hotels

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are necessary to choose appropriate technology and create information systems to control the whole organization. The systems are required to be updated to cope with the changing conditions of external environments today.

Rationale of the Study

As Mandalay is a place for commercialization and tourist attraction in Myanmar, 226 hotels are situated (Ministry of Hotels and Tourism, 2019) for fulfilling market requirements. The hotels endeavor to keep or reach a position in the market through the use of business strategies in line with the internal and external conditions. They have to look for information concerning with potentials, existing customers, competitors, and suppliers which are included in the service supply chain process. Then, they need to analyze this information in order to create reports which are supportive to decision makers at different management levels respectively. Acquiring the exact information is fruitful for hotels to improve their customer relationship management so that customers become loyal. Besides, they need to inform customers how they are creating additional value such as making online reservation, online enquiry, and online cancellation for customer convenience. Nowadays, information technology can be used as a tool to achieve recognition from potential customers, and to maintain existing customers and attract them to share good experience of using services to the prospective customers. Accordingly, information systems are required to be developed for hotels to deal with a large amount of information.

In the hotel industry, transferring information from one employee to another, one department to other, and the hotel to external stakeholders is required to be effective. The interruption in the linkage among parties might disturb service operation process. Through the process, sharing information among different parties such as customers, tour agencies, travel agencies, employees are compulsory for providing hotel services. Hotels mostly have to deal with the customer complaints occurring due to lack of information and cooperation among employees or departments. From the management viewpoint, the accurate and timely information is supportive for making decisions to respond quickly to the market conditions. To be compatible with the increasing demand of customers and to encounter with high competition among hotels, information systems have to be developed. Thus, the information system development is of particular importance for hotels to achieve their objectives.

Objectives of the Study

The objectives of the study are

(1) to identify the information system development of hotels,

(2) to analyze the effects of information system development on customer satisfaction and operational productivity of hotels, and

(3) to examine the effects of customer satisfaction and operational productivity on profitability of hotels in Mandalay.

Scope of the Study

The study is mainly concerned with identifying information system development, analyzing the effects of information system development on customer satisfaction and operational productivity, and examining the effects of customer satisfaction and operational productivity on profitability. The primary data was collected from 36 hotels in Mandalay with structured questionnaires using five-point Likert scale during March 2019 and the secondary data was collected from the Ministry of Hotels and Tourism.

Research Methods of the Study

To collect the primary data, 36 hotels were selected by using simple random sampling method. The sample represents 15% of total population because there are 226 hotels situated in Mandalay (Ministry of Hotels and Tourism, 2019). Internal consistency is tested by conducting reliability analysis and descriptive statistics was used to calculate the mean values and standard deviations of variables. In addition, multiple regression analysis was applied to prove the effects of information system development on customer satisfaction and operational productivity. Variance Inflation Factor (VIF) is calculated to check the multicollinearity in a set of variables included in the multiple regression analysis.

Literature Review

Hotels have adopted mobile reservation systems (Wang et al., 2016) and mobile interactive technology is offered during customer stay (Zhu & Morosan, 2014). Kaya and Azaltun (2012) highlighted that the internet is used to integrate parties included in the supply chain process of hotels which are crucial for providing better customer service. Ham et al. (2005) discussed the importance of information resources and information technology in the lodging industry and they are crucial for management decisions. Information system and information technology are outsourced for improving services (Ko et al., 2016) and reducing costs for hotels (Espino-Rodriguez & Gil-Padilla, 2005). Applying information technology is supportive for hotels to attain sustainable competitive advantage (Koutroumanis, 2011).

Gilbert et al. (1999) explained that the development of internet is an opportunity to be grasped as a marketing tool for hotels and the hotel industry. Marketing activities are implemented through internet and web with the rapid development of technology nowadays (Khemthong & Roberts, 2006). Information technology is required to do marketing activities and it is of vital importance for sustaining competitive advantage of service organizations (Colgate, 1998). Sääksjärvi et al. (1993) suggested that marketing work processes need to be integrated innovatively by using information system. The marketing information system comprises "the data bank, the model bank, the measurement statistics bank, and the system user interface" (Assmus, 1977). Marketing information system provides benefits of flexibility with market, immediate customer responsiveness, and functional effectiveness (Gounaris et al., 2007).

To improve the quality of information, the accounting systems are computerized and updated in business organizations (Bawab, 2017). Accounting information system is oriented for obtaining and keeping data and information concerning with the matters which have financial impact on organizations (Salehi et al., 2010). Soudani (2012) proved that accounting information system is useful and indicates the significant effect on organizational performance. Nowadays, accountants are demanded to execute accounting information system so that the process is faster than before (Weli, 2015). Mitchell et al. (1997) highlighted the importance of accounting information system development for businesses.

Hotels focus on developing information system and technology for the improvement of employee productivity as well (Siguaw et al., 2000). Computer software for developing human resource information system is available for assisting human resource decisions in practice (Kovach & Cathcart, 1999). Human resource professionals are empowered with the use of information technology for capturing the value of work (Normalini et al., 2012). As human resource information system provides the exact information concerning with profile, punctuality, performance, and compensation, it is helpful for the effectiveness of human resource management activities (Karikari et al., 2015) and profitability of a business (Nawaz, 2013).

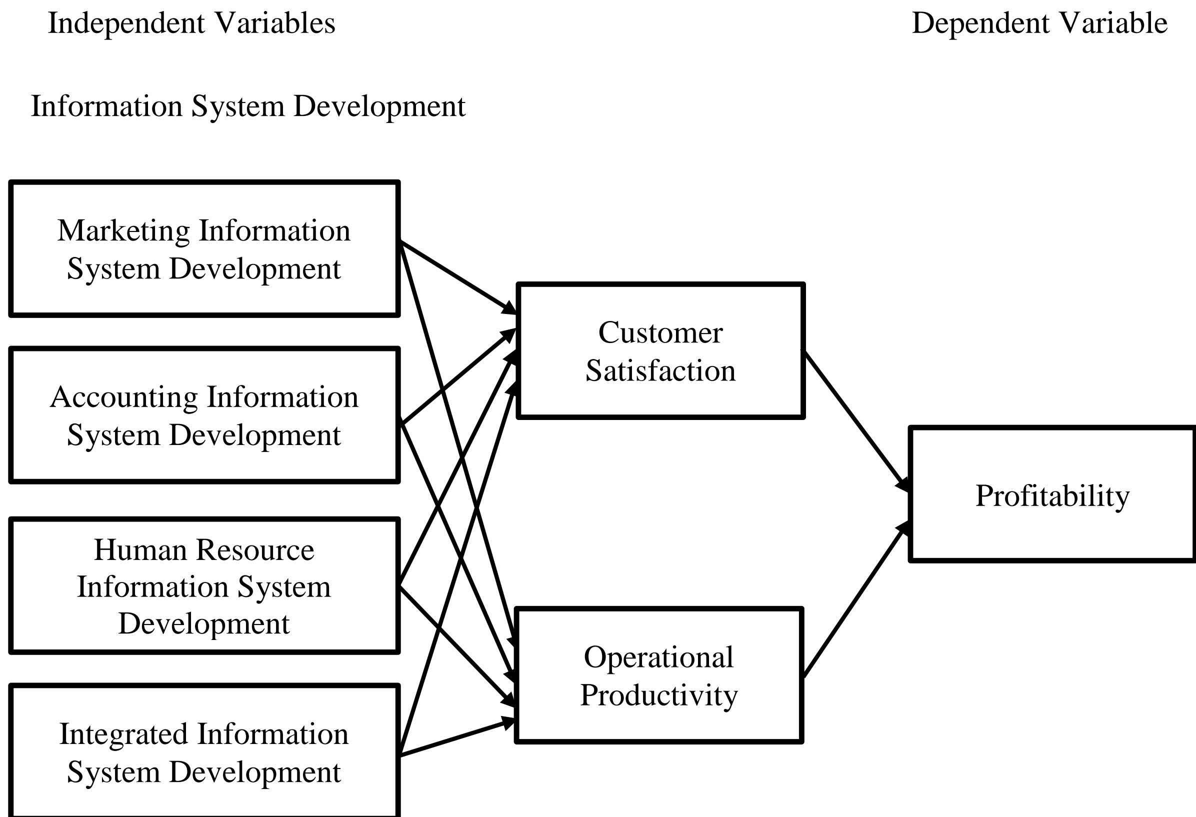
Osama (2011) indicated that room reservation should be integrated with accounting information system and thus it is required to eliminate unnecessary works and work process. The application of information and communication technology is increasing and web-based system and computer are supportive for integrating information throughout the service supply chain process (Šerić & Gil-Saura, 2011). Integrating different systems and developing new applications are done through the use of advanced technology in businesses. For example, the hotel reservation system is integrated with front office system, customer relationship management system and supply chain management system (Xiang et al., 2004).

Law and Jogaratnam (2005) pinpointed that information technology is applied in hotels to improve customer service and increase operational effectiveness. Developing new information system is a kind of deliberate organizational change and it has impact on the organization as a whole. Due to heavy investment in information systems, the outcomes of "operational excellence; new products, services, and business models; customer and supplier intimacy, improved decision making; competitive advantage; and survival" are achieved ((Laudon & Laudon, 2018, p.42). Customer satisfaction and operational productivity are used as measurements of organizational performance (Sirrirak et al., 2011).

The intent of using and developing information systems fostering to provide customer services is to increase customer satisfaction through the fulfillment of customer expectations (Grigoroudis & Siskos, 2010). Similarly, Law and Jogaratnam (2005) revealed that customer satisfaction can be improved by applying information technology in hotels. Efficient use of online system is supportive to the significant increment of customer satisfaction in service organization (Vetrievel et al., 2020). As hotels can provide better customer service by promoting information and communication technology in their operations, the accelerated utilization is driven in the hotel industry (Quarshie & Amennumey, 2018).

Embracing and making development of information technology in the hotel industry changes the ways to operate businesses to fulfill the present and possible demands of customers and markets (Law et al., 2013). Data management and property management system are advantageous for developing plans and policies in hotels towards the enhancement of accomplishing business activities and functions internally (Moyeenudin, 2018). Using information technology in hotels provides the experience of increasing operational effectiveness by handling daily operational difficulties (Law & Jogaratnam, 2005). The evidence provided by Bere and Naicker (2014) highlighted the positive and significant impact of using information systems on productivity.

Customer satisfaction shows the significant effect on customer loyalty and profitability of service organizations (Hallowell, 1996). Theories and empirical studies firmly indicate the relationship between customer satisfaction and business performance (Yeung & Ennew, 2011). Vuorinen et al. (1998) discussed that productivity in the service sector needs to be measured with quantity and quality items and proved the relationship with profitability of businesses. Jacobs et al. (2016) advocate that operational productivity is crucial for improving financial performance and eliminating risk.



Source: Own Compilation Based on Previous Studies

Figure 1 Conceptual Framework of the Study

To analyze the effects of information system development on customer satisfaction and operational productivity, marketing information system development, accounting information system development, human resource information system development, and integrated information system development are used as independent variables and customer satisfaction and operational productivity are used as dependent variables. To examine the effects of customer satisfaction and operational productivity on profitability, the customer satisfaction and operational productivity are applied as independent variables and profitability is applied as dependent variable.

Findings

To identify the information system development of hotels, the respondent perception is indicated with the mean values and standard deviations. In addition, the number of items and the Alpha values are depicted to check the internal consistency among variables. As illustrated in Table (1), the Alpha values for all variables are above 0.8 which shows high internal consistency.

Table 1 Reliability Test

Sr.	Variables	Items	Alpha
1	Marketing information system development	5	0.855
3	Accounting information system development	5	0.813
3	Human resource information system development	5	0.852
4	Integrated information system development	5	0.915
5	Customer satisfaction	5	0.842
6	Operational productivity	4	0.833
7	Profitability	4	0.843

Source: Survey Data (March 2019)

The mean value explains the average perception of hotel managers on information system development of hotels in Mandalay and the standard deviation illustrates how much deviates from the mean values. Besides, the mean values and standard deviations for customer satisfaction, operational productivity, and profitability are described in order to realize the performance of hotels.

Table 2 Descriptive Statistics

Sr.	Variables	Mean	SD
1	Marketing information system development	3.36	1.158
3	Accounting information system development	4.16	1.027
3	Human resource information system development	3.00	1.171
4	Integrated information system development	3.51	1.325
5	Customer satisfaction	3.88	0.609
6	Operational productivity	3.40	0.932
7	Profitability	3.47	0.779

Source: Survey Data (March 2019)

To identify the information system development of hotels in Mandalay, marketing information system development, accounting information system development, human resource information system development, and integrated information system development are asked with the agreement level using five-point Likert scale. The standard deviation of each information system development describes above one, it can be deduced that the extent of implementing the development of information system is not similar among hotels included in the sample. As depicted in Table (2), the emphasis on each information system development is different in hotels, Mandalay.

(i) Marketing Information System Development

The finding indicates that the marketing information system development of hotels is above the neutral level. Through the utilization of information technology, they develop marketing information system in order to share information related to the availability of new services and new products through their web page or other platforms. They use the auto reply system for routine

matters but sometimes reply uncommon customer enquiries through interaction with customers. To be responsive to customers immediately, they need to appoint employees who specialize in giving quick feedback and tracing customer information. At present, most hotels probably assign the receptionists to do such tasks and thus this system is not largely developed.

(ii) Accounting Information System Development

Among the information system developments, accounting information system development indicates the maximum mean value which explains focusing largely on it so that internal audit can easily be conducted and it seems to be conscious financial issues in hotels. The hotels do not have difficulties to change or develop the existing accounting software when they have experience in using any accounting software. Thus, it is found that the hotels in Mandalay are developing accounting information systems to control financial conditions which are primarily interested by business owners.

(iii) Human Resource Information System Development

Human resource information system development shows the minimum mean value and it is at the neutral level. It can be inferred that many hotels are using traditional human resource management system without using information technology in practice. To be familiar with the new information system, the hotels need to give effective training to employees so that they can apply confidently. When they consider priorities for immediate execution, time and financial investment hinder the plan for development of such system and thus human resource management information system is developed to some extent.

(iv) Integrated Information System Development

The integration among different parties using information technology is crucial for hotels to provide customized services effectively, however, its mean value shows above the neutral level. In practice, it is difficult to acquire the involvement of every staff in utilizing information system during the service chain process. The initial investment is quite large and the attitude of every party needs to be changed. Therefore, the development of integrated information system can be made to some extent by hotels in Mandalay.

It is prominent that the information system developments of hotels are at and above the neutral according to their mean values. It is thus needed to make additional developments in information systems because of current and future demands in the market.

Table 3 Multiple Regression Analysis of Information System Development and Customer Satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
Constant	4.623	0.372				
Marketing information system development	-0.197***	0.067	-0.374	-2.924	0.006	1.276
Accounting information system development	-0.145*	0.077	-0.245	-1.897	0.067	1.303
Human resource information system development	-0.205***	0.063	-0.395	-3.272	0.003	1.136
Integrated information system development	0.323***	0.056	0.703	5.804	0.000	1.147
R square	0.603					
Adjusted R square	0.552					
F	11.771***					

Note: *** and * show statistical significant at 1% and 10% levels respectively.
Dependent Variable: Customer Satisfaction
Source: Survey Data (March 2019)

Investigating the effects of information system development on customer satisfaction is conducted and the result is described in Table (3). It is found that there is no multicollinearity according to the Variance Inflation Factor (VIF) as shown in the table. The adjusted R square is 0.552 and the predictors have explained 55.2% of the variance in the dependent variable of customer satisfaction. The value of F-test, the overall significance of the model, indicates significance at 1 percent level. According to the multiple regression results, customer satisfaction is 4.623 even if hotels in Mandalay do not develop information system.

The result shows that marketing information system development describes the negative effect on customer satisfaction at 1 percent significant level because the unstandardized coefficient for marketing information system development is -0.197 and p-value is 0.006. It explains that the more the hotels develop marketing information systems, the less the customers are satisfied. When the hotels increase the development of marketing information system by one unit, it tends to decrease customer satisfaction by 0.197 while holding other variables constant.

In addition, accounting information system development also shows the negative effect on customer satisfaction at 10 percent significant level because the unstandardized coefficient for accounting information system development is -0.145 and p-value is 0.067. It infers that the higher the hotels develop accounting information systems, the lower the customers are satisfied. When the hotels increase the development of accounting information system by one unit, it tends to decrease customer satisfaction by 0.145 while holding other variables constant.

Likewise, human resource information system development depicts the negative effect on customer satisfaction at 1 percent significant level because the unstandardized coefficient for human resource information system development is -0.205 and p-value is 0.003. It can be deduced that the greater the hotels develop human resource information systems, the lower the customers are satisfied. When the hotels increase the development of human resource information system by one unit, it tends to decrease customer satisfaction by 0.205 while holding other variables constant.

However, integrated information system development delineates the positive effect on customer satisfaction at 1 percent significant level because the unstandardized coefficient for integrated information system development is 0.323 and p-value is 0.000. It explains that the more the hotels develop integrated information systems, the more the customers are satisfied. When the hotels increase the development of integrated information system by one unit, it tends to increase customer satisfaction by 0.323 while holding other variables constant.

Table 4 Multiple Regression Analysis of Information System Development and Operational Productivity

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
Constant	3.679	0.731				
Marketing information system development	0.009	0.132	0.012	0.071	0.944	1.276
Accounting information system development	-0.396**	0.151	-0.436	-2.629	0.013	1.303
Human resource information system development	0.148	0.123	0.186	1.203	0.238	1.136
Integrated information system development	0.253**	0.109	0.360	2.314	0.027	1.147
R square	0.346					
Adjusted R square	0.261					
F	4.094***					

Note: *** and ** shows statistical significant at 1% and 5% levels respectively.
Dependent Variable: Operational Productivity
Source: Survey Data (March 2019)

Examining the effects of information system development on operational productivity is conducted and the result is described in Table (4). It is found that there is no multicollinearity according to the Variance Inflation Factor (VIF) as shown in the table. The adjusted R square is 0.261 and the predictors have explained 26.1% of the variance in the dependent variable of operational productivity. The value of F-test, the overall significance of the model, indicates significant at 1 percent level. According to the multiple regression results, operational productivity is 3.679 even if hotels in Mandalay do not implement the information system development.

The result shows that the insignificant effect of marketing information system development on operational productivity because the unstandardized coefficient for marketing information system development is 0.009 and p-value is 0.944. It can be assumed that the effect of marketing information system development is not apparent currently. In the long-run, it probably has significant effect on operational productivity because marketing is one of business functions supporting the whole operation of a hotel.

The result shows that accounting information system development describes the negative effect on operational productivity at 5 percent significant level because the unstandardized coefficient for accounting information system development is -0.396 and p-value is 0.013. It explains that the more the hotels develop accounting information systems, the less the operational productivity is obtained. When the hotels increase the development of accounting information system by one unit, it tends to decrease operational productivity by 0.396 while holding other variables constant.

The result shows that the insignificant effect of human resource information system development on operational productivity because the unstandardized coefficient for human resource information system development is 0.148 and p-value is 0.238. It can be assumed that the effect of human resource information system development is not apparent currently as it is rarely introduced in all hotels. This development might have some effects on employee absenteeism, employee satisfaction, and employee motivation at present. In the long-run, it probably has significant effect on operational productivity because human resource function is one business function which is helpful to provide customer services satisfactorily in some ways.

Integrated information system development indicates the positive effect on operational productivity at 5 percent significant level because the unstandardized coefficient for integrated information system development is 0.253 and p-value is 0.027. It explains that the more the hotels develop integrated information systems, the more the customers are satisfied. When the hotels increase the development of integrated information system by one unit, it tends to increase operational productivity by 0.253 while holding other variables constant.

Table 5 Multiple Regression Analysis of Customer Satisfaction, Operational Productivity, and Profitability

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
Constant	0.923	0.761				
Customer satisfaction	0.578**	0.212	0.452	2.271	0.010	1.228
Operational productivity	0.091	0.139	0.108	0.652	0.519	1.228
R square	0.258					
Adjusted R square	0.213					
F	5.745***					

Note: *** and ** show statistical significant at 1% and 5% levels respectively.
Dependent Variable: Profitability
Source: Survey Data (March 2019)

Examining the effects of customer satisfaction and operational productivity on profitability of hotels is analyzed and the result is described in Table (5). It is found that there is no multicollinearity according to the Variance Inflation Factor (VIF) as shown in the table. The adjusted R square is 0.213 and the predictors have explained 21.3% of the variance in the dependent variable of profitability. The value of F-test, the overall significance of the model, indicates significant at 1 percent level. According to the multiple regression results, customer satisfaction is 0.923 even if hotels in Mandalay do not attain customer satisfaction and do not have operational productivity.

Customer satisfaction indicates the positive effect on profitability of hotels at 5 percent significant level because the unstandardized coefficient for customer satisfaction is 0.578 and p-value is 0.010. It explains that the more the hotels achieve customer satisfaction, the more the profitability is attained. One unit increase in customer satisfaction tends to increase profitability by 0.578 while holding other variables constant.

However, operational productivity does not show any significant effect on profitability of hotels in Mandalay because the unstandardized coefficient for operational productivity is 0.091 and p-value is 0.519. Focusing on enhancing operational productivity might reduce costs, however, it probably infringes the quality of customer service. As a consequence, customers feel indifferent quality of services and it hinders customer retention and positive word-of-mouth. It can also be assumed that operational productivity might not be related directly to profitability but it might be indirectly related to profitability. Because of operational productivity, hotels can provide better services to customers and they can create customer satisfaction consequently. Thus, its effects might go to profitability through customer satisfaction.

Discussion

In examining the information system development, it is found that hotels make information system development to many extents so that they can cope with the changing needs of market. The finding indicates that the accounting information system development is widely conducted by hotels in Mandalay because the accounting software is available cheaply in the market. As it can be operated without the help of technicians, the usage rate is increasing at present. Thus, the development of accounting information system indicates the maximum mean value. The human resource information system development shows the minimum mean value. Hotels emphasize only the compulsory systems due to the financial constraint. Using human resource data and information traditionally is supposed to be convenient for human resource management. Changing this information system drives the hotels to offer training to employees, to persuade them to accept it, and to spend additional cost for switching.

The results of the analysis illustrate the negative and significant effects of marketing information system development, accounting information system development, and human resource information system development on customer satisfaction in this study. Continuously developing marketing information system makes customers feel complicated and frustrated. Especially senior citizens are not used to marketing information system and they are not willing to access this system. Understandability of customers might be disturbed by the complexity of the system. Thus, the result of the study reveals the negative effect of marketing information system development on customer satisfaction. In addition, employees have to be familiar with new software and application when accounting information systems are developed all the times. It is impossible to provide services satisfactorily if employees do not have enough skills for using accounting software and application. Changes from the old version to the new one take time to be user friendly, and hence errors may occur during transition period. Thus, the negative effect of accounting information system development on customer satisfaction is found in this study.

Although human resource information system development is supposed to have positive effect on customer satisfaction, the negative effect is found in this study. When employees concern greatly with human resource functions, they lessen their concentration on their work related activities. Thus, human resource information system using information technology makes employees feel complicated and cannot provide services to customers completely. Besides, cooperation among different departments and integration of information are necessitated for managing the whole operation of hotels. The study highlights the positive effect of integrated information system development on customer satisfaction. Integration through the service supply chain process is of vital importance to create customized services. When hotels fulfill unmet needs and expectations, customers will feel satisfied with their services.

Analyzing the effects of information system development on operational productivity provides the useful insights to the hotel industry. The findings describe the insignificant effects of marketing information system development and human resource information system development on operational productivity. The negative and significant effect of accounting information system is different from assumptions but the positive and significant effect of integrated information system is as expected. Although increasing awareness of customers on marketing information system implemented by hotels, they are reluctant to start involving it. It is not efficient in operations when customers accept this system slowly and they do not appreciate it largely. Their participation cannot be attained and employees need to be involved in the operations of hotels. Due to the ignorance of customers, the role of marketing information system development is not apparent for achieving operational productivity.

Additionally, accounting information system is important for providing accurate financial information to customers and financial reports to decision makers. However, new accounting software and application come out increasingly and it may motivate hotels to run them. Moving data and information from one application to another might have difficulties which may hurt the ongoing operation process. Therefore, the result shows the negative and significant effect of accounting information system development on operational productivity. Nowadays, human resource information system can be accessed through using advanced information technology. However, its development does not play an important role for increasing operational productivity. As employees are end users of this system, they feel complicated to access the functions of new system. Their conscious and unconscious mind might be influenced by accessing this new system and they might feel anxiety of making errors. Thus, it does not show significant effect of human resource information system development on operational productivity. Besides, integration of information from different employees and different departments is crucial for accomplishing the fulfillment of customer requirements. As hotels have to provide 24 hour service to customers, employees are assigned to day shifts and night shifts. In such a situation, integration among employees is required to transfer one's job to another. As customers assess the whole service quality, the departments have to cooperate each other. Accordingly, the positive effect of integrated information system development on operational productivity is significant.

As the result of customer satisfaction and operational productivity, profitability of hotels is analyzed in this study. It is necessary to achieve customer satisfaction by fulfilling customer needs and requirements in every business. Satisfied customers tend to be loyal customers and advertiser through their positive-word-of mouth to potentialities. Without incurring the advertisement costs, more new customers can be attracted to visit the hotels. The result spotlights the positive and significant effect of customer satisfaction on profitability of hotels in Mandalay. Accomplishment of organizational goals and objectives in an effective and efficient manner is pivotal for hotels. However, operational productivity is not supportive to increase profitability of hotels. It can be deduced that efficiency only is not enough to promote the level of profitability according to the

findings which is the insignificant effect of operational productivity on profitability of hotels in Mandalay.

Conclusion

The study highlights the effects of information system development on customer satisfaction and operational productivity. As the marketing information system development, accounting information system development, and human resource information system development shows the negative effects on customer satisfaction, these need to be handled carefully. Changing one system to another causes system errors, human errors, transaction errors, processing errors due to unfamiliarity. It is suggested that the hotels should analyze the strengths and weaknesses of the existing system and they should decide to change or develop the existing one later on. When they make improvements in marketing information system, accounting information system, and human resource information system, appropriate training programs should be provided to employees to be familiar with the new system. Besides, customers should be informed in advance so that they are adaptable with the new systems early. The positive and significant effect of integrated information system development reveals its essentiality for hotels in Mandalay. Thus, they should search new technologies and ways to make integrated information system development continuously.

In examining the effects of information system development on operational productivity, the study indicates the insignificant effects of marketing information system development and human resource information system development. Customers might not recognize current marketing information system development conducted by hotels in Mandalay and might not access this system. In the long-run, it might play significant role in improving operational productivity much. It is recommended that the hotels should inform how they are implementing marketing information system so that customers can adapt them. Similarly, human resource information system development does not show significant effect on operational productivity and the hotels are not implementing largely the development of this system. However, this development probably contributes to managing human resources who are the main players of hotels and it is supportive to managing the operations. It is suggested that the hotels should initiate with a few functions of human resource information system development. The negative and significant effect of accounting information system development pinpoints the necessity for careful selection of new accounting information system. Nowadays, hotel managers or owners might want employees to test some accounting softwares which are freely available. Shifting from the old to new system makes the operations interrupted and thus it is recommended that they should consider thoroughly before moving to the new one. Additionally, the positive and significant effect of integrated information system development spotlights its importance. Thus, it is advocated that new software and application which are supportive for integrated information system should be investigated. Then, the existing system should always be upgraded by discussing with the technicians.

The investigation on the effects of customer satisfaction and operational productivity on profitability of hotels is conducted and the result describes the positive and significant effect of customer satisfaction. As customers are the key stakeholders of hotels, they should examine customer needs and wants. Through improving customer value based on customer requirements, profitability will be high in hotels, Mandalay. Thus, it is recommended that customer information should be inquired so that they are directly persuaded by hotels. Operational productivity does not show any significant effect although it can be assumed that it can reduce cost and increase profit. Prioritizing operational productivity causes hotels to reduce resource utilization for running its operations and providing services to customers. It seems to be beneficial during the short-term but the comparatively indifferent feeling of acquiring services which cannot persuade customers to

return the hotels next time. Consequently, the hotels are insecure to create loyal customers who can contribute the improvement of profitability. Thus, the hotels need to check whether emphasizing efficiency hurts the effectiveness of their organizations. They are required to reconsider the implementation of activities for increasing operational productivity through analyzing the tangible and intangible consequences. It is suggested to prioritize not only efficiency but also effectiveness of hotels in Mandalay to foster the positive strategic impact.

Limitations and Needs for Further Research

The study focuses on information system development and its outcomes but it does not analyze the driving forces. Technological and social changes can be investigated as the driving forces for information system development. In addition, information system development is classified into four: marketing, accounting, human resources, and integrated information system developments. There are specific kinds of information system development in hotel industry such as reservation system, customer relationship management system, and supply chain management system.

In this study, operational productivity and profitability of hotels are measured with respondent perception using five-point Likert scale. If they are measured with financial data, the specific implications might be provided. In addition, using both financial and non-financial measures might give different results. Thus, further studies should measure with financial and non-financial data to represent these completely.

As the sample represents only 15 percent of total population, further research should enlarge the sample size to generalize the findings. The study is based on hotels in Mandalay, the generalization on information system development is limited. According to Myanmar Tourism Statistics (2019), there are 1,984 hotels located in Myanmar. The study scope can be extended to generalize the information system development of hotels in Myanmar so that the implications for the whole industry can be provided.

Acknowledgements

My deep gratitude goes to Professor Dr. Tun Aung, Rector of the Meiktila University of Economics for his enthusiastic encouragement. My grateful thanks are also extended to Professor Dr. Thida Kyu, Pro Rector of the Meiktila University of Economics for her appreciation on my research work. My sincere appreciation also goes to Professor Dr. Khine Mar Hlaing, Head of the Department of Management Studies, Meiktila University of Economics for her constructive comments and valuable suggestions. I am indebted to the respondents as representatives of hotels for their contribution in answering my questionnaires which are critical to my whole research.

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KNOWLEDGE AND PRACTICE ON SOLID WASTE DISPOSAL OF HOUSEHOLDS IN SHWE PYI THAR TOWNSHIP, YANGON REGION*

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Abstract

The environment offers the provision for survival of human beings, animals, and plants. Worldwide efforts are being made to increase awareness of environmental protection. Improper solid waste disposal is one of the major causes of environmental degradation, pollution, and the outbreak of diseases. Waste management is a cross-cutting issue that touches on various aspects of social and economic development, and extensively related to global challenges such as public health, climate change, resource efficiency, sustainable production and consumption, and so on. In Myanmar, considerable challenges concerning waste management have been faced as a result of increasing income and consumption, urban population growth, and lack of effective waste treatment and disposal options. Hence, this study aims to determine the knowledge and practice of solid waste disposal among households in Shwe Pyi Thar Township. Two-stage sampling was used in data collection and the Chi-square test and binary logistic regression model were applied in the data analysis. The findings of the study revealed that a significant association between gender, education, income, and knowledge on solid waste disposal, while only education and income have a significant association with practice on solid waste disposal. Furthermore, the respondents with high knowledge have a practice towards solid waste disposal of the municipal system. Without community participation, it is not possible to improve the solid waste disposal system, and the people's awareness of their important role in strengthening the waste management system is also necessary.

Keywords: Solid waste disposal, Knowledge, Practice, Chi-square test, Logistic regression

Introduction

Solid waste is the unsolicited or unusable solid things generated from combined residential, industrial, and commercial activities. Management of solid waste reduces sore laminates' adverse impacts on the environment and human health and supports economic development and improves quality of life. The amount of solid waste has been increasing rapidly and its composition has been changing due to rising urbanization and change in lifestyle and food habits. There has been arisen in the amount of waste being generated daily by each household with an increase in the global population and the rising demand for food and other essentials. If the households' waste management and disposal are improperly done, it can cause serious impacts on health and problems to the surrounding environment. (Kiran et al., 2015)

World Bank's (2012) estimated that there was 5,616 tons/day, with per capita waste generation totaling 0.44 kg/capita/day solid waste generation in Myanmar. This figure was expected to reach about 21,012 tons/day with 0.85kg/capita/day by 2025 (Hoornweg and Bhada, 2012). Waste in Myanmar generates from several waste streams, such as households, commercial and business establishments, institutions, public areas, hotels, restaurants, hospitals, and industries. In Myanmar, due to industrialization and urbanization, which have accompanied economic growth, together with gradual shifts in consumption and production patterns have precipitated immense challenges in managing waste generation from all of these various sectors.

Significant waste management becomes a big problem because of rapid urbanization and industrialization. In Myanmar, Yangon Region is the major business center and consists of 44

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townships. According to the 2014 Population and Housing Census, the population of the Yangon Region is 7.355 million and it is 14.29% of the total population of Myanmar. Its average population density is 5363.6 per square kilometer. Due to its largest population, the demand for proper solid waste management is much higher compared to the other regions. Generally, 1,690 tons of daily municipal waste is generated from the households, commercial centers, institutions, industries, health care, garden, street sweeping, whereas the waste from demolition and workshop (oil, sewage) are not included with a rate of 0.396 kg per capita per day in Yangon city. In the composition of the solid waste generation, 76 % is organic, 10 % is plastic, 4 % is textiles and papers and 10 % is wood, rubber, leathers, metals, glasses, crockery, and stones. (IGES, 2014)

Furthermore, The Control of pollution and Cleansing Department (PCCD), in charge of solid waste management for Yangon City, cannot run by their revenue because of the fees they charge for the services are quite low and are not enough to finance for all the officers and labors, thus it has to depend on the regional government's subsidy. (AIT, 2015)

In Myanmar, people primarily dispose of their waste to the dust bins provided by Yangon City Development Committee (YCDC) and to the brick tanks near the sidewalk. According to Initial Graphics Exchange Specification (IGES, 2014) people are disposing of their waste in 3472 dust bins and 617 brick bins every day. There are specific times to allocate for waste disposal from brick 6:00 to 10:00 am and 6:00 to 11:00 pm. However, the neighborhood can dispose of their waste to the dust bin at any time. The problem is that there is no single transfer station for solid waste management in Yangon. Thus, recyclable and non-recyclable waste in between the sources of the waste and final dumping sites cannot be filtered from the waste.

Although the relevant department and ministry have written laws and regulations, there is some weakness in enforcing them. Not only that, there has not been a proper solid waste as well as the leachate management and also all six final dumping sites in Yangon are open. To extend the public awareness of solid waste management in the community in Yangon, the SWM2 project (Environmental protection and sustainable development: building local capacities on solid waste management in Myanmar) has been initiated composting and producing fertilizer project in Shwe Pyi Thar Township since 2014. It has four activities: distributing calendars, training, awareness campaign, and Lan Thant (clean street) pilot project Asian Institute of Technology (AIT, 2015). However, the community's participation, coordination, and cooperation concerning the systematic solid waste disposal are still needed to be strong.

Nowadays, there exists no precise and consistent data on the total waste generation in the country. There is no concrete data that show the waste disposal management of the local population for possible intervention. People's involvement to improve solid waste disposal systems is essential and their roles are significant. Hence, this study was undertaken to assess the knowledge and practice of the community towards waste disposal, to explore the determinants of knowledge and practice on the solid waste disposal among households and to evaluate the association between the knowledge and practice on solid waste disposal among household in the urban area of Shwe Pyi Thar Township, Yangon Region which can play an important role in the management of solid waste in the study area.

Methodology

Method

The knowledge and practice of households towards solid waste disposal were analyzed by descriptive methods. Besides, the Pearson chi-square test was used to examine the association between socioeconomic and demographic characteristics and knowledge, and practice towards solid waste disposal. Furthermore, the binary logistic regression analysis is applied to explore the determinants of knowledge and practice towards the solid waste disposal of the households.

Study Design and Study Area

The design of the study was a cross-sectional descriptive study upon knowledge and practice of solid waste disposal among households in the urban area of Shwe Pyi Thar Township. A sample survey is conducted during the second week of November 2019 with permission from wards and township administrative authorities. Shwe Pyi Thar Township is situated in the northern part of the Yangon Region and included in one of the six townships where the final waste dumping site for the entire city existed. According to the 2014 Population and Housing Census, the total population in the urban area of Shwe Pyi Thar Township is 279,795 and the total number of households is 58,511. There are 23 wards in the urban area of Shwe Pyi Thar Township.

Study Population and Sample Size Determination

The target population was persons aged 18 years and above residing in the urban area of the township and the study population was those who were from the randomly selected households of the selected wards. Exclusion criteria were persons under 18 years of age, very ill persons and persons unwilling to participate in the study. From the selected sample households, household head, or someone from this household were interviewed by the face-to-face method using a structured questionnaire.

The two-stage sampling design was used in the survey. Among 23 wards in the urban area of Shwe Pyi Thar Township, a sample of 4 wards was selected by simple random sampling in the first stage. In the second stage, the sample households were proportionately chosen from the sample wards selected in the first stage by simple random sampling. Using Cochran's (1977) formula, the sample was determined with the confidence interval of 95%, degree of precision of 8%, and the estimated prevalence rate of 50% since there was no prior study in this area. The minimum sample size was obtained as 150. Assume that the response rate is 93%. Therefore, the required minimum sample size was 162 households. The required sample from each sample ward was allocated as follows:

Table 1 Sample size allocation

Sample ward number	Total no. of households	No. of sample households
2	636	19
3	1,010	30
12	2029	61
20	1,746	52
Total	5,421	162

Source: Township administrative office (2019)

Results

Socio-economic and Demographic Characteristics of the Respondents

Among the sample respondents, more than half (88) were female (54%), most of the respondents (97) were older than 30 years (60%) and the majority (129) have high school and above educational level (80%). Most of the respondents (125) reported that they are currently employed (77%). Concerning migration, 104 respondents have been migrated to Shwe Pyi Thar Township more than 5 years ago (64%). More than three-fourth (77%) of respondents had monthly income 200000 kyats and above. More than half (88) of the respondents are Bamar (55%) followed by Kayin with 51 respondents (31%) and only 21 are others (13%) which include Danu, Kachin, Kaya, Mon, Rahkine, Shan, Lahu, Lisu, Palaung, Pa O, and Wa.

Knowledge of Solid Waste Disposal of Households

Regarding knowledge level of respondents about waste disposal were assessed by 5 points including (i) Available Kinds of Disposal System (ii) Color and Type of Bag for Waste defined by Municipality (iii) Knowledge on Payment of Tax for Waste and Cleaning Services (iv) Learning How to Dispose Waste in School/from Parents (v) Methods of waste disposal that cause the minimum pollution to the environment. There were 15 questions. Among respondents, the maximum score of 15 and a minimum of 3 were obtained for knowledge on solid waste disposal. Respondents who got 7 and above scores are considered as high knowledge level and those had less than 7 scores are considered as low knowledge level on solid waste disposal. Knowledge of solid waste disposal of sample households is found as follows.

Table 2 Knowledge level of the respondents

Knowledge level	No. of respondents	Percent
Low	71	44
High	91	56
Total	162	100

Source: Survey data (2019)

According to Table (2), it is found that 56 % of the respondents have a high level of knowledge and 44% of those have a low level of knowledge concerning solid waste disposal.

The result of the Pearson chi-square test was shown in Table (3). It was observed that education level, monthly income, and race of the respondents have a significant association with their knowledge of solid waste disposal.

Table 3 Results for association between socio-economic and demographic characteristics and the level of knowledge on solid waste disposal

Socio-economic and Demographic Characteristics	Knowledge level		χ^2	P-value
	Low	High		
Gender				
Male	30	44		
Female	41	47	0.60	0.439
Age				
Below 30	29	35		
30 years and above	42	56	0.09	0.758
Education level				
Below high school	29	4		
High school and above	42	87	32.66***	0.000
Employment status				
Unemployed	14	22		
Employed	57	69	0.46	0.498
Migration period				
Below 5 years	27	30		
5 years and above	44	61	0.45	0.503
Monthly Income				
Below 200,000 kyats	12	24		
200,000 kyats and above	59	67	2.07**	0.015
Race				
Others	9	12		
Kayin	16	36		
Burma	46	43	5.84*	0.054

*, **, *** represent 10%, 5% and 1% level of significant respectively.

Source: Survey data (2019)

The binary logistic regression model was applied to discover the determinants of knowledge on solid waste disposal of respondents since the knowledge level (dependent variable) is dichotomous (high and low) and high level is considered as a reference category. As shown in Table (4), it was observed that respondent is female, their high school and above education level and monthly income of 200,000 kyats and above have a significant association with their knowledge on solid waste disposal.

Table 4 Results of binary logistic regression analysis of knowledge on solid waste disposal

Dependent Variable (Knowledge)						
Independent variables	**Coefficients**	**Odds Ratio**	**z**	**P-value**	**95% Confidence Interval**	
					Lower	**Upper**
Constant	-1.23	0.29	-1.29	0.198	0.045	1.901
Gender						
Male (ref)						
Female	-1.02	0.36**	-2.43	0.015	0.159	0.822
Age						
Below 30 (ref)						
30 years and above	0.31	1.36	0.77	0.441	0.619	3.002
Education level						
Below high school (ref)						
High school and above	3.44	31.2***	5.26	0.000	8.652	112.497
Employment status						
Unemployed (ref)						
Employed	-0.10	0.90	-0.21	0.836	0.342	2.381
Migration period						
Below 5 years (ref)						
5 years and above	0.25	1.29	0.61	0.541	0.572	2.904
Monthly Income						
Below 200,000 kyats (ref)						
200,000 kyats and above	-0.99	0.37*	-1.88	0.060	0.130	1.044
Race						
Others (ref)						
Kayin	0.45	1.56	0.68	0.500	0.427	5.735
Burma	-0.65	0.52	-1.08	0.279	0.163	1.689

*, **, *** represent 10%, 5% and 1% levels of significance respectively.

Source: Survey data (2019)

According to Table (4), it can be said that female respondents are 0.64 times less likely to have high knowledge of solid waste disposal than males since the odds ratio is 0.36 and statistically significant at 5% level. Again, it is found that respondents with high school and above are about 31 times more likely to have high knowledge on solid waste disposal than their education is below high school level since the odds ratio is 31.2 and statistically significant at 1% level. Furthermore, it is observed that the respondents with a monthly income of 200,000 kyats and above are 0.63 times less likely to have high knowledge on solid waste disposal than those with below 200,000 kyats of monthly income since the odds ratio is 0.37 and statistically significant at 10% level.

Practices on Solid Waste Disposal of Households

There are 5 kinds of solid waste disposal by respondents' households such as door to door waste collection by municipal, garbage bin/tank, and garbage truck provided by municipal, private garbage trolley, and others. Practice on solid waste disposal of sample households in Shwe Pyi Thar Township is found as follows.

Table 5 Kinds of solid waste disposal practice

Practice	No. of respondents	Percent
Door to door waste collection by municipal	16	10
Garbage bin / tank by municipal	91	56
Truck by municipal	19	12
Private garbage trolley	33	20
Others	3	2
Total	162	100

Source: Survey data (2019)

Table (5) shows that 65% of the respondents practice on a garbage bin/tank provided by municipal, 12% of the respondents practice on a truck provided by municipal and 10% of the respondents practice on the door to door waste collection by municipal for their solid waste disposal. Nearly 2% of respondents have the practice of throwing in the street or into the ditch in lack of availability of trash bin nearby. Therefore, most (78 %) of the respondents practice on the municipal system whereas only 20% of the respondents practice on the private system for their solid waste disposal.

The result of the Pearson chi-square test was shown in Table (6). It was observed that the education level and monthly income of the respondents have a significant association with their practice on solid waste disposal.

Table 6 Results for association between socio-economic and demographic characteristics and practice on solid waste disposal

Socio-economic and Demographic Characteristics	Practice		χ^2	P-value
	Municipal system	Private system		
Gender				
Male	57	17		
Female	69	19	0.04	0.833
Age				
Below 30	49	15		
30 years and above	77	21	0.09	0.764
Education level				
Below high school	16	17		
High school and above	110	19	20.57***	0.000
Employment status				
Unemployed	30	6		
Employed	96	30	0.83	0.363
Migration period				
Below 5 years	45	12		
5 years and above	81	24	0.07	0.792
Monthly Income				
Below 200,000 kyats	32	4		
200,000 kyats and above	94	32	3.31*	0.069
Race				
Others	15	6		
Kayin	42	10		
Burma	69	20	0.76	0.683

*, **, *** represent 10%, 5% and 1% levels of significance respectively.

Source: Survey data (2019)

The binary logistic regression model was applied to investigate the determinants of practice on solid waste disposal of respondents since practice (dependent variable) is dichotomous (municipal and private systems) and practice on municipal is considered as a reference category. The municipal system which includes door to door waste collection provided by municipal and garbage bin/tank provided by municipal garbage truck provided while the private system includes private garbage trolley provided and others. As shown in Table (6), it was observed that respondent's high school and above education level and monthly income of 200,000 kyats and above have a significant association with their practice on solid waste disposal.

Table 7 Results of binary logistic regression analysis of practice on solid waste disposal

Dependent Variable (Practice)						
Independent variables	**Coefficients**	**Odds Ratio**	**z**	**P-value**	**95% Confidence Interval**	
					Lower	**Upper**
Constant	0.77	2.16	0.79	0.427	0.322	14.465
Gender						
Male (ref)						
Female	-0.46	0.63	-1.00	0.319	0.255	1.561
Age						
Below 30 (ref)						
30 years and above	0.62	1.86	1.35	0.177	0.754	4.596
Education level						
Below high school (ref)						
High school and above	2.28	9.78***	4.51	0.000	3.626	26.355
Employment status						
Unemployed (ref)						
Employed	-0.48	0.62	-0.80	0.422	0.193	1.991
Migration period						
Below 5 years (ref)						
5 years and above	-0.34	0.71	-0.68	0.495	0.272	1.877
Monthly Income						
Below 200,000 kyats (ref)						
200,000 kyats and above	-1.27	0.28**	-1.98	0.048	0.079	0.987
Race						
Others (ref)						
Kayin	0.50	1.65	0.70	0.482	0.407	6.704
Burma	0.42	1.52	0.65	0.518	0.424	5.479

*, **, *** represent 10%, 5% and 1% levels of significance respectively

Source: Survey data (2019)

According to Table (7), it is observed that respondents with high school and above are about 10 times more likely to practice the municipal system of solid waste disposal than their education is below high school level since the odds ratio is 9.78 and statistically significant at 1% level. Moreover, it is observed that the respondents with a monthly income of 200,000 kyats and above are 0.72 times less likely to practice the municipal system of solid waste disposal than those with below 200,000 kyats of monthly income since the odds ratio is 0.28 and statistically significant at 5% level.

Association between Knowledge and Practice on Solid Waste Disposal of Households

Pearson chi-square test was used to explore the association between the knowledge level and practice on solid waste disposal of respondents. As shown in Table (8), it was found that the association between respondents' knowledge level and practice on solid waste disposal is statistically significant at 1% level.

Table 8 Results for association between knowledge and the practice on solid waste disposal

Knowledge level	Practice on waste disposal		χ^2	P-value
	Municipal system	Private system		
Low	47	24	9.81***	0.002
High	79	12		

*** represents 1% level of significance

Source: Survey data (2019)

Discussions

The findings of this research indicated that more than half of respondents have a high level of knowledge on solid waste disposal and more than three-fourth of respondents practice on the municipal system of solid waste disposal.

The results showed that there is a significant relationship between the socio-economic and demographic characteristics such as education level, monthly income of household and race of the respondent, and respondent's knowledge on solid waste disposal. Results of binary logistic regression analysis show that female respondents are less likely to have high knowledge on solid waste disposal than male, respondents' education with high school and above are more likely to have high knowledge on solid waste disposal than their education is below high school level and respondents with a monthly income of 200,000 kyats and above are less likely to have high knowledge on solid waste disposal than those with below 200,000 kyats of monthly income. The result of the education level has a positive influence on knowledge is similar to Jatau (2013), Laor et al. (2018), and Seng et al. (2018).

In terms of respondent's practice on solid waste disposal, the socio-economic and demographic characteristics such as education level and monthly income of households have a significant relationship between respondent's practices on solid waste disposal. From the binary logistic regression analysis, it is observed that respondents with high school and above are more likely to practice the municipal system of solid waste disposal than their education is below high school level, and the respondents with a monthly income of 200,000 kyats and above are less likely to practice the municipal system of solid waste disposal than those with below 200,000 kyats of monthly income. The result of the education level has a statistically significant influence on practices supported the findings of Jatau (2013) and Laor et al. (2018).

Moreover, it is observed that the association between respondents' knowledge level and practice on solid waste disposal is statistically significant. The result is consistent with Laor et al. (2018).

Conclusion

According to this study, most of the respondents suggested providing more trash bins in every possible public place. Regular collection of waste twice a day should be practiced at all townships from avoiding emission and preventing rodent and either animal harboring. Garbage trucks should collect waste not only from the main road but also from the streets as well as lanes. On the other hand, the community should dispose of waste by separated dry and wet waste properly as well. Respondents requested to conduct awareness about waste management in the community and especially to add in the school syllabus. They also suggested enforcing a fine

system to those who litter on the road and improperly dispose of their household waste in the environment.

Based on the findings, the following points were recommended.

- The government should promulgate and enforce policies on waste management. Laws of acts should be issued in line with waste management being necessary to impose the law at the same time.
- Public awareness should be provided on waste segregation to the household level through media and ensure to spread to the grass-root level of the country.
- Municipal service charges should be increased (proper rate) for collection service to change the mindset of the public that they will take into account and discipline in discarding the waste and it would be really helpful for the department to run better and to provide the necessary equipment.
- Logistical support (vehicles and additional workers) is needed and comprehensive solid waste management planning should be developed.
- Cooperation and coordination with multilevel stakeholders and promotion of Public-Private Partnership.
- Knowledge of waste management should be promoted focusing primarily on the group with a lower level of education through organizing workshops, seminars, and conferences on waste management by YCDC and public health educators.
- The Government and NGOs should support to undertake community-based projects on knowledge, attitudes, and practices associated with waste management to create public awareness and systematic practices related to waste management.

Acknowledgment

The authors would like to thank the participants for their cooperation and time and to extend sincere gratitude to Khin Cho Myint, Naw Htoo Marlar, Yandanar Su Hlaing Phyo, and Thant Thant Shein for their assistances during the survey period. We would like to thank authors and publishers of different journals for open access, without them this study would be not recognized.

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J. Myanmar Acad. Arts Sci. 2021 **Vol. XIX. No.8**

A SIMULATION STUDY ON EFFECT OF OUTLIERS IN REGRESSION MODEL WITH DUMMY VARIABLE

Maw Maw Khin[1]

Abstract

This paper aimed to study the effect of outliers in the regression model with a dummy variable based on simulated data. The two robust methods namely Robust Distance Least Absolute Value (RDL_1) and Least Trimmed Squares (LTS) and classical method like Ordinary Least Squares (OLS) estimation method were applied to these data. Simulation study showed that the RDL_1 and LTS methods detected several outliers whereas the OLS residuals did not reveal any outliers. Based on the mean squared error (MSE) criterion, the RDL_1 estimator is more resistant, but it suffers from the swamping effect. The LTS estimator has the second smallest MSE and the OLS method has the largest MSE in this case. The OLS regression is the best when data are free from outliers.

Keywords: outliers, OLS regression, RDL_1, LTS, MSE

Introduction

Regression analysis is an important tool for any quantitative research. For the regression analysis, the Ordinary Least Squares (OLS) method can produce bad estimates when the error distribution is not normal, particularly when the errors are heavy-tailed. It explores the relationship between dependent and explanatory variables. Many hypotheses claimed by economic theories can be tested by applying a regression model on real data. The OLS method is mostly applied in the regression technique. The application of this specific method requires several assumptions. A researcher should be aware of the fact that the OLS method performs poorly if these assumptions are not fulfilled.

In the last two centuries, various strategies were introduced to test whether the model assumptions are fulfilled or not. Besides, various more general regression techniques are available based on less stringent conditions. Until the mid-20th century, violations of the model assumptions were treated independently of any common error source. But in particular, outlying observations within the data can cause violations of model assumptions, and thereby it can have a huge impact on regression results.

Even if one outlying observation can destroy OLS estimation, resulting in parameter estimates that do not provide useful information for the majority of the data. Outliers will make the error variance inflate, the confidence interval becomes stretched, and the estimation cannot become asymptotically consistent. When outliers inflate the error variance, they damage the model of power to detect the outliers. Rousseeuw and Van Zomeren (1990) proposed a vertical outlier, good leverage point, and bad leverage point.

Rousseeuw and Van Zomeren (1990) pointed out that high leverages can affect the estimated slope of the regression line in OLS, thus they may cause more serious problems than the vertical outlier. Moreover, their occurrence in regression models may move to some low leverage as well as high leverage and it can turn in vice versa. These two concepts are called masking and swamping in linear regression. Furthermore, the range of explanatory variables increases when they exist in regression analysis. Thus, the multiple coefficient of determination (R^2) which is a well-known and popular measure of goodness-of-fit in the regression models will increase even by any changes of a single *X* variable. Besides, high leverages may be the prime source of collinearity-influential observations whose presence can make collinearity and can destroy the existing

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collinearity pattern among the *X* variables. In this respect, to eliminate these outliers' effects on linear regression the role of robust method becomes necessary.

Robust regression methods have been developed as an improvement to OLS estimation in the presence of outliers and provide information about what a valid observation is and whether this should be thrown out. The primary purpose of robust regression analysis is to fit a model that represents the information in the majority of the data. In this context, robust regression is to employ a fitting criterion that is not as vulnerable as OLS to unusual data. One remedy is to remove influential observations before using the OLS fit.

The robust methods provide an alternative to an OLS regression model when fundamental assumptions are unfulfilled by the nature of the data. When the estimates of the parameters of statistical regression models and test assumptions, it is frequently found that assumptions are substantially violated. Sometimes, the variables can be transformed to confirm those assumptions. Often, however, a transformation will not eliminate or satisfy the leverage of influential outliers that bias the prediction and distort the significance of parameter estimates. Under these circumstances, robust regression that is resistant to the influence of outliers may be the only reasonable remedy. The objectives of the study are (i) robust regression methods are better than the OLS estimation methods when data contain outlying observations and (ii) if data were free from outliers, the OLS estimation method outperforms the robust regression methods.

2. Data and Method

To show the fact that the robust procedure outperforms the classical method in the dummy variable regression model, simulation with data set contaminated by different types of outliers was carried out. Observations used in this analysis were to be classified into four categories namely regular data, good leverage points, vertical outliers, and bad leverage points. The model included two types of regressors namely continuous and discrete regressors was expressed in the following form.

$$y_i = 9 + x_{i1} + x_{i2} + I_{i1} + \varepsilon_i\,, \qquad i = 1,\ldots,30, \tag{1}$$

Where both x_{i1} and x_{i2} follow a standard normal distribution, I_{i1} is a binomial distribution with a success rate of 0.5, and ε_i is a normal distribution with mean zero and standard deviation 0.5. The regressand variable was generated by the model stated in Equation (1). Once these 30 observations have been generated, cases 25 and 26 were then transformed to be vertical outliers by doubling their *y* values and keeping the others. Cases 27 and 28 were bad leverage points by adding 9 to their x_1 values and keeping the others as well. Case 29 and 30 were good leverage points by adding 9 to both x_1 and x_2 values and reproducing the corresponding *y* values as the model (1). The resulting simulated data are presented in Appendix Table (1).

Result and Discussion

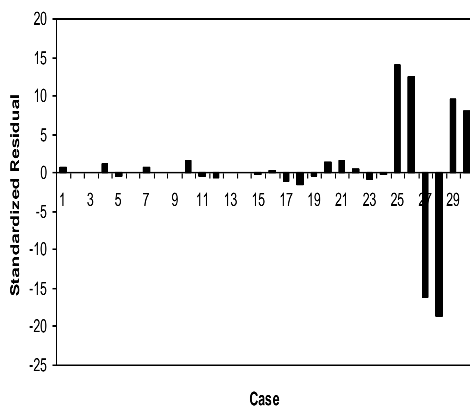
The Robust Distance Least Absolute Value (RDL_1), Least Trimmed Squares (LTS), and OLS estimation methods were applied to these simulated data and the results were summarized in Table (1). First, the RDL_1 estimation method was applied to these simulated data. For checking outliers, the standardized residuals were shown in Figure 1(a). The case 25, 26, 27, 28, 29, and 30 were revealed as outliers. This is because the weight was calculated by the continuous design matrix without considering the model fitting. The resulting weights were shown in Figure 1(b). Therefore, case 27, 28, 29, and 30 were outlying observations occurred from ***X*** space and will be given relatively small weights as shown in part (b) of Figures (1). These make case 29 and 30 become bad leverage points in the diagnostic plot of Figure 1(c). The cutoff values were indicated

± 2.5 and $\sqrt{\chi^2_{2,0.975}}$ by horizontal and vertical lines. These results pointed out that the RDL$_1$ method results in the swamping effect due to its weights for the L_1 procedure obtained from the application of a continuous design matrix.

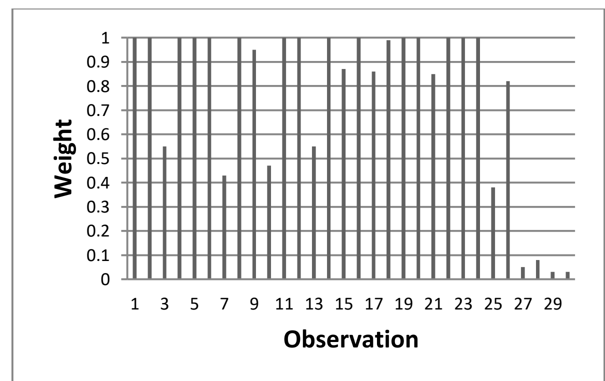
Thus, the same data set was used to apply the LTS estimation method and the results were displayed in Table (1). Parts (a), and (b) of Figure (2) show the results of robust standardized residuals and the diagnostic plot obtained from LTS regression analysis, respectively. From part (a), the LTS procedure detected cases 25, 26, 27, and 28 to be outliers. It gave a weight 1 for both cases 29 and 30. The corresponding diagnostic plot also divided all points into the right categories as the original configuration of these data being generated. The fit from the LTS method ignored outlying observations, which gave the MSE of 0.3042 shown in Table (1).

Then, the OLS estimation method was applied using the simulated data again. The large MSE of OLS for the simulated data set argued that data were highly influenced by outliers and Figure 3(a) shows the vertical outliers or bad leverage points. The OLS regression estimators often break down in the presence of those outliers. It was evident from the graphical sketch of data as the OLS line was pulled towards the middle of the two groups of the data points rendering it was an unrepresentative line. A Gaussian Q-Q plot was shown in Figure 3(b) confirms that the residuals were roughly normally distributed. Only a few outliers can cause the distribution to be heavier-tailed.

According to the result of LTS analysis, the observations (25, 26, 27, and 28) gained from the simulated data were excluded and the remaining data were rerun using the OLS estimation method. Table (2) presents the regression results for the two data sets (contaminated and non-contaminated). New OLS regression represents the results after eliminating the outlier found through the LTS method. The intercept and slope coefficients changed and all were statistically significant at a 1% level. The fact that the F and R^2 values increased indicates that the new OLS regression is well-matched with those remaining data. The OLS line fits the simulated (non-contaminated) data well with a reasonable MSE of 0.1230. Figure 4(a) shows the OLS residuals without considering the cases 25, 26, 27, and 28. The cases 29 and 30 were located near the regression surface. Figure 4(b) suggests that the residuals were approximately normally distributed. Based on the results from non-contaminated data, it can be concluded that the OLS regression (New) method outperforms than two robust methods.



(a)



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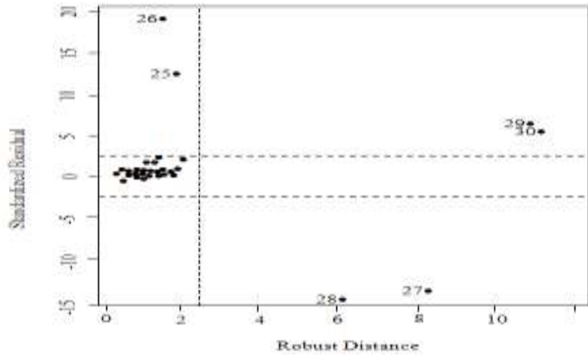

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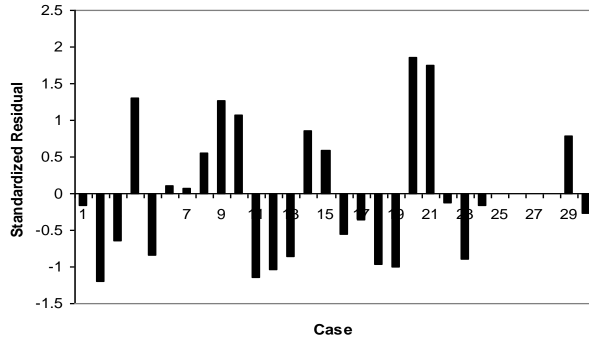
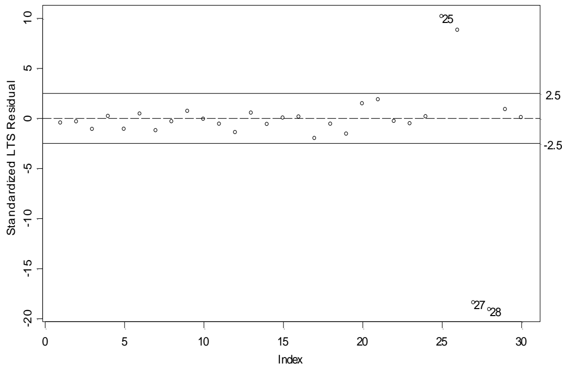


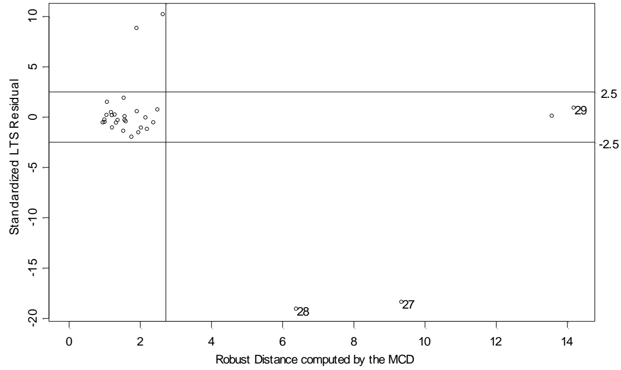
(d)

Source: Appendix Table (1)

Figure 1 Simulated Data Set Using the RDL_1 Procedure: (a) plot of the standardized residuals; (b) plot of weights; (c) diagnostic plot and (d) least squares residuals without cases 25, 26, 27, and 28



(a)



(b)

Source: Appendix Table (1)

Figure 2 Simulated Data Set Using the LTS Robust Procedure: (a) plot of the standardized residuals; and (b) diagnostic plot

Table 1 OLS, LTS and RDL_1 Regression Models Fitted to the Simulated Data

Method	Coefficients				MSE
	Constant	x_1	x_2	I_{i1}	
OLS	8.84^{***}	0.43^{**}	1.34^{***}	2.47^{**}	6.1504
LTS	9.22^{***}	1.16^{**}	0.72^{***}	1.37^{***}	0.3042
RDL_1	8.94^{***}	0.82^{***}	0.77^{***}	1.40^{***}	0.1849

Note: (1) Significant at *** 1%, **5%, * 10%

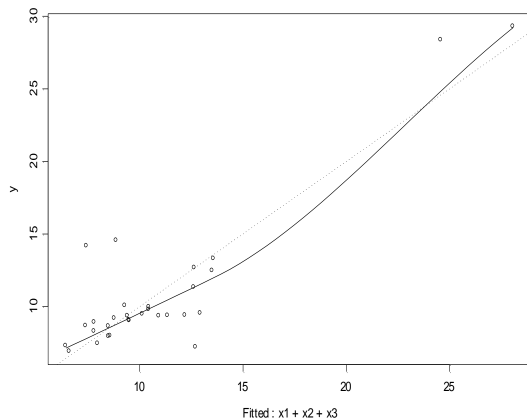
Source: Appendix Table (1)

Table 2 Two Ordinary Least Squares Regression Results

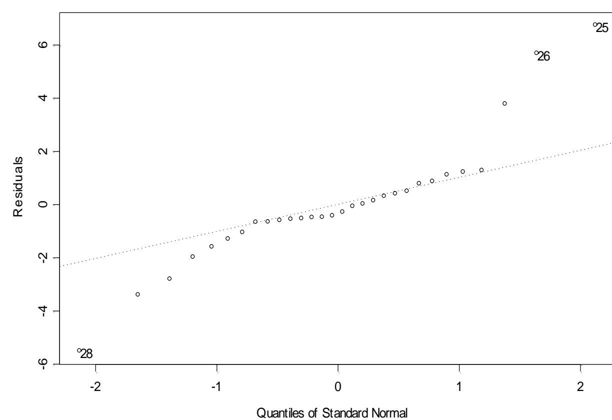
OLS Regression Based on Contaminated Data				New OLS Regression Based on Non-contaminated Data		
Variable	**Coefficient**	**Standard Errors of Coefficients**	***t* Statistics**	**Coefficient**	**Standard Errors of Coefficients**	***t* Statistics**
Constant	8.8410 ***	0.5926	14.9203	9.1344***	0.0872	104.7172
x_1	0.4276 **	0.1737	2.4611	1.0139***	0.0412	24.6214
x_2	1.3386 ***	0.2355	5.6847	0.9480***	0.0504	18.8205
I_{i1}	2.4729 **	0.9456	2.6153	0.9954***	0.1484	6.7095
MSE = 6.1504, R^2 = 0.7995, F = 34.55***, n=30				MSE = 0.1230, R^2 = 0.996, F =2046.865***, n=26		

Note: (1) Absolute value of *t* statistics in parentheses
(2) Significant at *** 1%, **5%, * 10%

Source: Appendix Table (1)



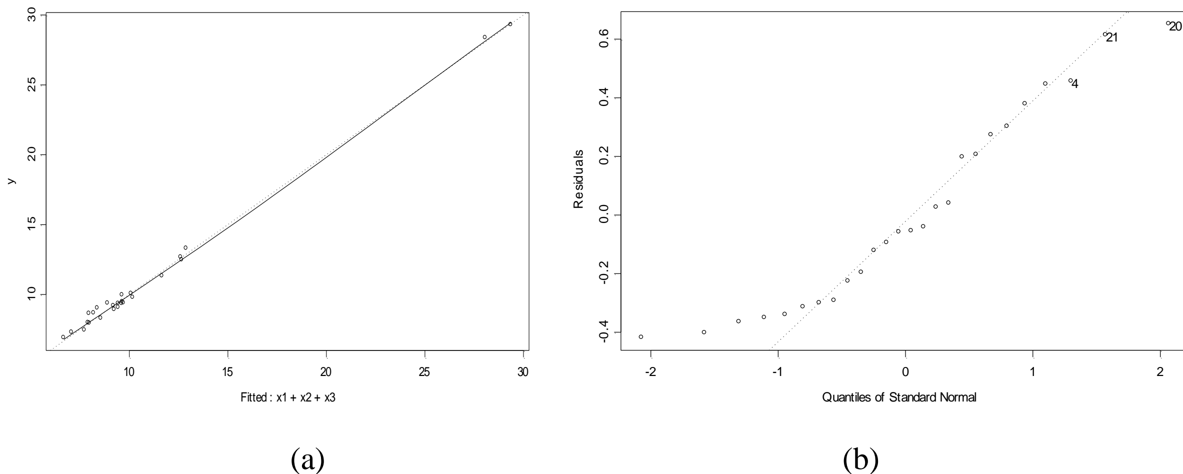
(a)



(b)

Source: Appendix Table (1)

Figure 3 Simulated Contaminated Data Set Using the OLS: (a) scatter plot with OLS line; and (b) quantiles standard normal plot



(a) (b)

Source: Appendix Table(1)

Figure 4 Simulated Non-contaminated Data Set Using the OLS: (a) scatter plot with OLS line; and (b) quantiles standard normal plot

Conclusion

This study illustrated that the RDL_1 and LTS methods outperform the OLS method in the regression model involved with a dummy variable. It was found that based on the contaminated simulation data, the RDL_1 and LTS methods detect several outliers whereas the OLS residuals do not reveal any outliers. Based on the mean squared error (MSE) criterion, the RDL_1 estimator is more resistant but it cannot detect correctly for the cases 29 and 30. It suffers from a swamping effect. The OLS method is much worse in this case.

According to the results of LTS analysis, it is correctly detected the observations 25 and 26 are vertical outliers, 27 and 28 are bad leverage points. It has the second smallest MSE of 0.3042. The cases 25, 26, 27, and 28 are omitted and the remaining data are rerun using the OLS method. In this case, the two robust namely RDL_1 and LTS and OLS methods worked well, indicating that the values of MSE are quite close to each other. Based on this study, it can be concluded that when there are outliers in the data, the robust methods perform better than the OLS method. It is found there is no outlier in the data OLS estimation method is more robust than RDL_1 and LTS methods.

Acknowledgement

I would like to convey my deepest thanks to Rector and Pro-rector of Yangon University of Economics who encouraged me to submit this research paper for the conference organized by MAAS.

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Table 1 Simulated Data Set **Appendix**

Case	x_1	x_2	I_1	y	Case	x_1	x_2	I_1	y
1	0.92	0.04	0	10.05	16	-0.56	1.15	0	9.46
2	-0.11	1.23	0	9.77	17	0.94	-1.72	1	9.33
3	1.39	1.2	1	12.45	18	-1.46	1.13	1	9.38
4	0.13	-1.12	0	8.66	19	1.2	-1.16	0	8.9
5	0.25	-0.86	0	8.28	20	-1.29	0.15	0	8.62
6	-1.44	0.26	0	7.96	21	-1.7	1.04	0	9.01
7	2.18	0.3	1	12.65	22	0.17	-0.1	0	9.17
8	-0.48	-1.65	0	7.28	23	-1.09	-0.3	0	7.43
9	-1.75	0.59	1	9.36	24	-1.27	0.15	0	7.93
10	1.64	1.17	1	13.28	25	0.06	-2.92	1	14.16
11	-0.2	0.55	0	9.05	26	0.45	-1.97	1	14.54
12	0.87	0.7	1	11.31	27	8.89	0.22	0	9.52
13	-1.39	2.01	0	9.33	28	6.87	-1.15	1	7.19
14	0.18	-0.7	1	9.95	29	10.96	8.26	0	28.35
15	-1.21	-1.29	0	6.89	30	10.37	9.21	1	29.28

Source: Simulated Data obtained from Model (1)

EFFECT OF TRAINING AND DEVELOPMENT ON EMPLOYEE PERFORMANCE OF PRIVATE BANKS

May Su Myat Htway Aung[1]

Abstract

The main objective of this paper is to analyze the effects of training and development on employee performance in Private Banks. The descriptive and analytical research methods are used to meet the objectives of the study. A total of employees from ten private banks, that is the highest assets and market share within private banks in Yangon Region are surveyed by using random sampling method. The research data is collected by using research questionnaires instruments and analysis for multiple regression method by SPSS software. Though there are some limitations to obtain accurate data, it is possible to interpret the correlations between the independent and dependent variables. Based on the previous study and theoretical background of the study, the conceptual framework is constructed, mainly divided into three parts; the independent variables – training and development policy, procedures, and practices, the moderating factors – the employee related factors such as education, job position, and work experience, and the dependent variables -the employee performance measuring with the productivity, and satisfaction. Moreover this study includes the mediating factors or intervention factors of employees' competencies that effect employee performance. The study found that among the training and development policy, procedures, and practices were positive significant relationship with employee performance. The findings of moderating effects demonstrated that the education level of respondents is correlated but cannot affect relationship between training and development program and employee competencies. However, employee competencies have strongly significant relationship with training and development policy, procedures, and practices. The findings also highlight the training policy, procedures, and practices had a significant effect on employee productivity and employee satisfaction. The results of this study are encouraging for policy maker especially for employee performance in private bank, and management of bank's employees as it suggests opportunities for increasing employee's productivity and satisfaction of banking industry in Myanmar.

Keywords: *Training and Development, Competencies, Productivity, Satisfaction, Private Banks.*

Introduction

Employees play a vital role for any organization. By implementing training and development, employees provide extensive technical and skillful knowledge and make them assets for the organization. In this way, the organizations achieve the competitive advantage in the market compared to its competitors. Training and development is an aspect of human resource practices that help in enhancing employees' skills, knowledge, and competence of improving employees' ability to perform efficiently (Armstrong 2009).

Investing in training and development is imperative for any organizations, which certainly realize a return on investment in training and developing their workers. The business of bank provides a service and that are delivered through its employees and the services are consumed by its customers at the same time. In the banking sector, training and development is a continuous process in improving the employees in the organization. In addition, training and development is an effort to enhance their current and future performance, but after giving them training, the organization must keep track of their performance which means training requires evaluation (Neelam et al., 2014).

A stable and solid banking system is generally considered as an engine for the economic growth. Hence, the development of employee skills is closely related to the soundness of banking

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sector. Customers undergo a complicated experience in gaining a service that involves both the mental and physical interaction (Haynes and Fryer, 2000) with the service providers i.e. the employees. Those findings lead one to believe that to avoid consumer switching or consumer disappointment, workers have to be professional enough to deliver the best services to consumers.

Central to Myanmar's economic development is the reform of its finance sector and specifically, it is the banking sector. In 2018, there were 31 domestic banks including 19 private banks, 8 semi private banks, 4 government owned banks, and 13 foreign banks in Myanmar banking sector (CBM report, 2018). Among them, ten private banks have largest market share and assets. Therefore, this study selected the ten private banks and examines the effect of training and development on the employee performance of private banks in Myanmar.

Objectives of the Study

The main objective of this study is to analyze the effect of training and development: policy, procedure and practices on employee performance of private banks in Yangon, Myanmar. The specific objectives are:

1. To identify the training and development policy, procedure, practices, and competencies of employees in private banks.
2. To analyze the effect of training and development on competencies of employees and employee performance.
3. To explore the mediating effect of competencies of employees in the relationship between training and development and employee performance.
4. To examine the moderating effect of employee related factors on the relationship between training and development and competencies of employees.

Scope and Method of Study

This study concentrates to describe the causes of training and development, competencies of employees, and employee performance among employees of the bank. Out of 19 private banks in Myanmar 10 private banks are selected. These selected private banks have highest market share and assets in Myanmar. Target population of this study is the employees of selected private banks in Yangon. Among them, all level of employee who attended training and development are selected. To get the size of sample from the population, Yamane (1973) formula is taken in consideration.

Both primary and secondary sources of data are used in this research. The primary data are collected through questionnaire while secondary data are taken from the various sources such as management text books, Ministry of Planning and Finance's published report books, and journal, Central Bank of Myanmar's published reports, web site, and journal, research papers concerning training and development and employee performance from various fields, and internet. The questionnaire is based on five point Likert Scale and dividing parts such as employee related factors, training and development policy, procedure, practices, and employee performance. Descriptive statistics such as mean, percentages, and standard deviation were used. This study employed quantitative research method using multiple linear regression method in SPSS 23 to analyze the data and test the hypotheses. Reliability and validity of data are tested before proceeding to the regression analysis.

Literature Review

One most important critical aspect of the Human Resource Management function is training and development for the effective use of human resources. Employee training and development is an attempt to enhance current or potential performance of an employee to perform through learning, typically through improving the employee's attitudes or increasing his or her skills and knowledge (Wexley, 1984). Basically, the objective of training and development is to contribute to the organization's overall goal. Training is imparting a specific ability to do a particular job while creation is concerned with the general enhancement and growth of individual skills and abilities through conscious and unconscious learning (Cole, 2002).

Policies are formulated to provide guides to action and to set limits to decision making; what should be done in certain circumstances and how particular requirements and issues must be dealt with, Armstrong & Stephens (2005). Employee training and development of banks policy refers to the bank's learning and development programmes and activities. While policy formulation is an exercise meant for the attainment of organization's goals, it also serves the concurrently as a statement of the organization's corporate philosophy. Moreover procedure or program is implementation of policy and it is essential for organization performance and individual performance (Degraft-Otoo, 2012). Mamoria (1995) also defined training and development procedures as designed to meet specific objectives. There are many objectives for training and development procedures. The objectives may be from employees or employers side. The key objectives for training and development are: to enhance performance and skills, to acquire job-related knowledge, to increase productivity, to reduce labor turnover, to develop self-confidence, to increase employees' satisfaction in organization. Training is teaching, or acquisition of any skills and knowledge relating to particular useful competencies in one or others. Practices in training have particular objectives in enhancing one's efficiency, capacity, profitability and performance (Dessler, Sutherland, & Cole, 2005).

Employee competencies can be improved through effective training programs and subsequently enhance the employee overall performance. By gaining suitable knowledge, skills and attitude through training they can perform their current job more effectively and also prepare for future job (Wright & Geroy, 2001). Therefore, employee core competencies are also a collection of expertise, skills, and strengths that an employee requires to excel in an organization. It is the cornerstone of the employee's development, performance, and overall success within the organization.

Employee performance comprises the actual output or result of an organization as measured against its intended outputs or goals and objective. The impact of employee performance can be manifest through employee productivity, employee satisfaction and employee commitment (Richard, Devinney, Yip, and Johnson, 2009). In addition, there are a range of measures that can be taken into consideration when measuring performance, for example, uses of productivity, efficiency, effectiveness, and quality and profitability measures (Ahmed,2018).

Conceptual Framework of the Study

To implement the study, the following conceptual framework is drawn based on the previous studies. In this study the training and development is the independent variable and employee performance is the dependent variable. These two variables have been chosen to see the relationship between these variables i.e. to see the impact of training and development on the employee performance. Based on the results of the previous empirical studies, four hypotheses for this study were explored. That is shown in research conceptual framework. The conceptual frame work can also be seen from the following Figure.

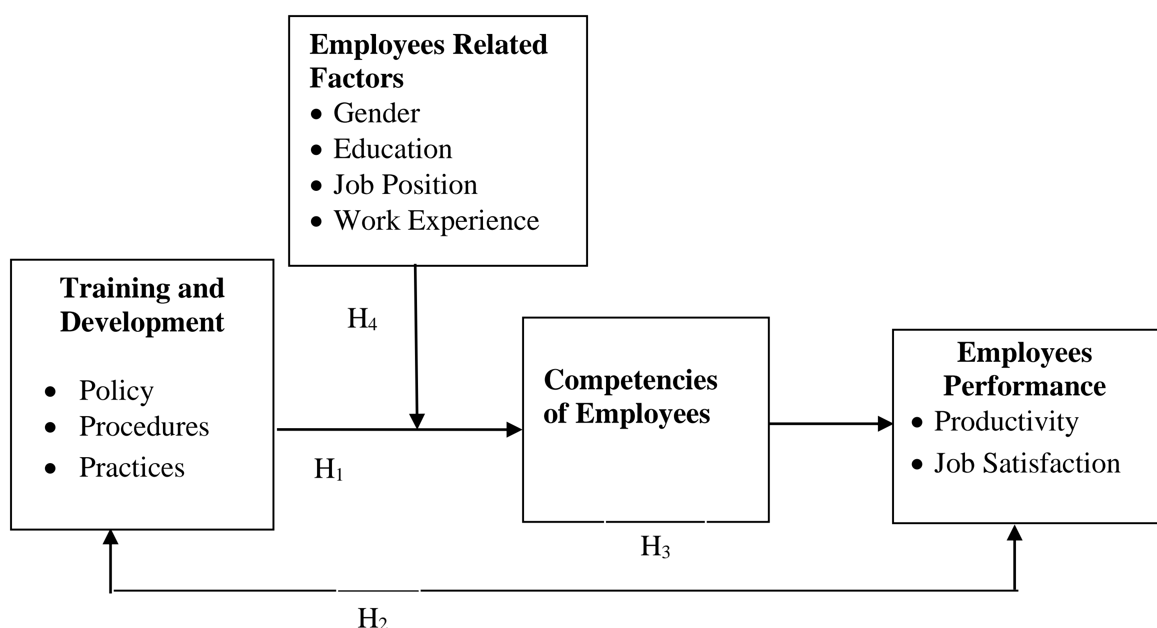

Figure 1 Conceptual Framework of the Study

Analysis and Results

The initial phase of analysis is to determine the characteristics of the respondents involved in the study. A profile of the respondents is developed in terms of background information of the personal characteristics relating to training and development. Firstly 400 employees' profile including general information of the employees such as gender, age, position, department, service year and education are identified. Each characteristic has been analyzed in terms of absolute value and percentage, and the summary table of demographic characteristics is used to display these data more clearly. Table (1) shows the summary Table of demographic characteristics of banks' employees.

Table 1 Demographic Characteristic of Private Banks' Employees

No. of employees = 400

Items	Number of Respondents	Percent
Gender - Male	114	28.5
- Female	286	71.5
Age(Years) - 21-25	93	23.3
- 26-30	129	32.3
- 31-35	99	24.7
- 36-40	68	17
- >40	11	2.7
Occupation - Manager	31	7.8
- Supervisor	63	15.8
- Senior Staff	117	29.3
- Junior Staff	113	28.3
- Guard	60	15.0
- Others	16	4.0

Department - Reception	115	28.8
- Treasuring	165	41.2
- Exchange	30	7.5
- Remittance	90	22.5
Experience(Years) - < 2	125	31.3
- 2- 4	96	24.0
- 5-7	141	35.3
- 8 -10	38	9.5
Education - Master	35	8.7
- Graduate	328	82.0
- Others	37	9.3

Source: Survey Data, 2019

According to the mean values of the items, the respondents generally agree the three key factors of training and development and two factors of employee performance. Each factor includes different number of items and is measured on five-point Likert scale. Therefore the respondent can fill up their answer by selecting one from the five options.

The study uses reliability test. Reliability refers to the degree to which error-free measures are taken and therefore yield consistent results (Zikmund 1997). Cronbach's Alpha is measure of internal consistency. Furthermore, in this study Confirmatory Factor Analysis varimax rotation was performed. The Kaiser-Meyer-Oklin (KMO) value varies between 0 and 1. The summary results for the mean value, standard deviation, and reliability and validity test are shown in following Table 2.

Table 2 Summary Results for Mean Value, Standard Deviation, and Reliability and Validity Test

Factors	Cronbach's Alpha	Validity KMO	Mean	Standard Deviation
Training Policy	0.905	0.917	4.1282	0.51052
Training Procedures	0.830	0.877	4.2364	0.47237
Training Practices	0.865	0.917	4.2825	0.46266
Employee Competencies	0.898	0.899	4.2881	0.46281
Productivity	0.863	0.844	4.5122	0.39036
Satisfaction	0.876	0.878	4.1554	0.49722

Source: Survey Data, 2019

Multiple Regression Analysis

Multiple regression analysis was performed to observe the relationship between the independent variables and dependent variable. The result of multiple linear regression analysis

for model 1, model 2, and model 3, and model 4 are shown in Table (3) to Table (7). This model is base on hypothesis.

Analysis Results for Model 1

Model 1 identify the relationship between training and development (policy, procedure, practices) and employee competencies, employee competencies regress with training and development (policy, procedure, practices). The results of the relationship between training and development (policy, procedure, practices) and employee competencies are presented in the following Table (3).

Table 3 Effect of Training and Development (Policy, Procedure, and Practices) on Employee Competencies

Dependent Variable: Competencies	Unstandardized Coefficients		t	Sig	VIF
	B	SE			
(Constant)	0.030	0.033	0.908	0.365	
Policy	-0.048***	0.010	-5.020	0.000	2.407
Procedures	0.042***	0.011	3.985	0.000	2.286
Practices	0.999***	0.011	89.457	0.000	2.439
R^2	0.980				
Adjusted R^2	0.980				
F statistics	6387.889***				
Statistically significant indicate ***at 1%, ** at 5%, * at 10% level respectively					

Source: Survey Data, 2019

In Table (3) the relationship between training and development (policy, procedure, practices) and employee competencies, employee competencies is analyzed with the multiple regression. In this Table, the value of the F test, the overall significance of the model, is highly significant at 1% level. The specified models explain that the variation of employee competencies is predicted by three independent variables as the value of R^2 is 98 %. The multicollinearity statistics by using variance inflation factors (VIF) are also checked, indicating that there are no variables exceeding our "rule of thumb" of 10 for VIF.

In the regression analysis shown in Table (3), all of three variables in training and development have significant and positive effect on employee competencies. According to the result, training policy, procedure, and practices provide for employee skills development. Employee learning effective training and development and follow the training objectives and organization its make the skills development.

Analysis Results for Model 2

Model 2a shows the relationship between training and development (policy, procedure, practices) and productivity. The summary results of model 2a are presented in the following Table (4).

Table 4 Effect of Training and Development on Productivity

Dependent Variable: Productivity	Unstandardized Coefficients		t	Sig	VIF
	B	SE			
(Constant)	2.465	0.163	15.155	0.000	
Policy	0.182***	0.047	3.856	0.000	2.407
Procedures	0.068	0.052	1.302	0.194	2.286
Practices	0.234***	0.055	4.240	0.000	2.439
R^2	0.306				
Adjusted R^2	0.301				
F statistics	58.210***				
Statistically significant indicate ***at 1%, ** at 5%, * at 10% level respectively					

Source: Survey Data,2019

The specified models explain that the variation of employee performance is predicted by two independent variables as the value of R^2 is 30.6 %. In the regression analysis shown in Table (4), among three variables in training and development, policy and practices has a significant and positive effect on productivity. However, training and development procedure has no significant level, it no effect on productivity. According to the result, training policy and practices provide for employee productivity such as reducing time consuming, good communication on customer, and so forth.

Model 2b shows the relationship between training and development (policy, procedure, practices) and job satisfaction. The summary results of model 2b are presented in the following Table (5).

Table 5 Effect of Training and Development (Policy, Procedure, and Practices) on Satisfaction

Dependent Variable: Job Satisfaction	Unstandardized Coefficients		t	Sig	VIF
	B	SE			
(Constant)	-0.069	0.072	-.950	0.343	
Policy	0.598	0.021	28.544	0.000	2.407
Procedures	0.401	0.023	17.250	0.000	2.286
Practices	0.008	0.025	0.317	0.752	2.439
R^2	0.915				
Adjusted R^2	0.915				
F statistics	1670.764***				
Statistically significant indicate ***at 1%, ** at 5%, * at 10% level respectively					

Source: Survey Data, 2019

As a result, among three variables in training and development, policy, procedure, and practices has a significant and strongly positive effect on satisfaction. According to the result,

training policy, procedures, and practices provide employee satisfaction. It mean employee have a lot of benefit from training policy, procedures, and practices.

Analysis Results for Model 3

Model 3 identified the training and development and employee competencies effect on employee performance, employee performance is regressed with training and development and employee competencies.

Table 6 Effect of Training and Development and Employee Competencies on Performance

Dependent Variable: Performance	**Unstandardized Coefficients**		**t**	**Sig**	**VIF**
	B	**SE**			
(Constant)	1.146	0.086	13.275	0.000	
Training &Development	0.929***	0.042	22.158	0.000	4.396
Competencies	-0.173***	0.040	-4.336	0.000	4.396
R^2	0.791				
Adjusted R^2	0.790				
F statistics	749.263***				
Statistically significant indicate ***at 1%, ** at 5%, * at 10% level respectively					

Source: Survey Data, 2019

In Table (6) the effect of employee competencies on performance, performance is analyzed with the multiple regression. In this Table, the F statistics is 759.2971 and its significant level is at 1% (p-value= 0.000). The specified models explain that the variation of employee competencies is predicted by two independent variables as the value of $R^{2\ is}$ 79 %. According to the result, employee competencies such as skills development provide for employee performance such as reducing time consuming, good communication on customer, and so forth.

Analysis Results for Model 4

Model 4 shows the moderating effect of employee related factors on relationship of training and development and employee competencies. Before the analysis, the moderating effect analyzed of multiple regression, firstly, analysis the correlation between training and development and employee competencies, secondly analysis the relationship between employee competencies and moderating variables (employee related factors: Gender, Education, Occupation, and Service). According to results, training and development is positively correlated to employee competencies and education within employee related factors is correlated to employee competencies. Other employee related factors are not correlated in employee competencies'. The analysis on moderating effects of education between training and development and employee competencies shows in following Table (7).

Table 7 Moderating Effect of Education between Training and Development and Employee Competencies

Source	Model 1				Model 2			
	B	SE	t	Sig	B	SE	t	Sig
(Constant)	0.420	0.114	3.688	0.000	1.126	0.401	2.807	0.005
T and Dev	0.911	0.026	35.615	0.000	0.744	0.095	7.850	0.000
Education_ 1	0.026	0.039	.670	0.503	-0.722	0.418	-1.728	0.085
Education_ 2	-0.076	0.052	-1.460	0.145	-0.996	0.573	-1.740	0.083
Training * Education_1					0.178	0.099	1.799	0.073
Training* Education_2					0.222	0.140	1.583	0.114
ΔR^2	0.001							
R^2	0.777				0.778			
F value	458.631***				276.952***			
Statistical significance Indicate *** at the 1% level,** 5% level and* 10% level								

Source: Survey Data,2019

Table 7 confirmed that education level of respondents have no moderation effect on the relationship between training and development (policy and procedure) and employee performance although there is a few increment of R^2 (ΔR^2) and the regression coefficient of the interaction term is not significant after adding the interaction terms of any moderating variable to the regression model. The results suggest that the education level of respondents is correlated but no effect on the relationship between training and development program and employee competencies.

Findings and Discussion

This study expected to fulfill the research gap in the literature of the country context based on the private banks of Myanmar. According to literature training and development (policy, procedure, and practices) promoted employee performance which was the dependent variable or the expected outcome of this study. Based on the importance of these factors, four main objectives were explored to gain the expected employee performance through training and development and competencies of employees.

The data were collected from various respondents to establish the various demographic characteristics of the employees including gender, position, education level and year of services. Among the respondents, there were more female than males, but gender imbalance did not influence the study in any way. The data were collected from employees of different positions and department in order to ensure different perspectives. Among the positions of respondent, senior staff is highest 30 percent and others such as cleaner is lowest 4 percent. It means most of the respondents' position is at moderating level and the answer is reliable and valid. From the data on education level of the respondents, most of them had attained a university bachelor degree because the practice of private banks is that employees have to attain a minimum of a bachelor degree. Moreover, the data are also complied from employees of different years of service to obtain different perceptions that were held by the bank employees of the different trainings that have been

undertaken. Most private banks employees had been in service for long times and thus understand the effects of training and development to their job performance.

From the study (Imran and Tanveer, 2015) there is a strong relationship of training and development and employee skills development. The finding from the study of Weerakkody and Ediriweera (2010) also proved that training policy, procedures, and practices have positively impact on competencies of employees. According to the results, this study also proved that training and development policy, procedures, and practices have effect on employee competencies.

According to regression analysis results, three variables in training and development, among them policy and procedures have a significant and positive effect on productivity and policy, procedures, and practices are strongly related on satisfaction of employees. This finding is in line with the previous study Neelam et al., (2014). In this study, described the training and developments are strongly effective on employee performance.

As the results, employees of private banks feel that the training and development can improve speed and productivity in processing work, and thus, generally make less mistakes and are more productive. Furthermore, employees believe that training programs can enhance their skills in achieving customer satisfaction, increasing self-confidence and having good relationship with co-workers. They also believe that they are able to adjust well to technological changes happening within the bank because of the training programs.

Therefore, employees feel that the result of training and development programs can give job satisfaction. Moreover, employees feel that they have more emotional attachment towards bank and start feeling as a part of the organization after they had joined the training program. Therefore, they become committed to the current job and keep working at the banks in the future, even if there is another better job offer. From the findings, it is clear that there are numerous benefits of training and development of employees at private banks and thus, this can enhance employee performance.

In this study, mediation effects of competencies of employees have effect on relationship of training and development (policy, procedure, practices) and business performance. Moreover, moderating factors of demographic characteristics of the employees include gender, position, education level and year of services is presented. According to survey results, moderation analysis of this study performed employee related factors among education is the effect of the relationship of training and development and employee competencies.

Recommendations and Contribution

Based on the findings of the study, the following factors including productivity, job satisfaction through training and development are needed to consider increasing employee performance. This study recommends that selected private banks are mainly focus on training and development since employee competencies effect employee performance. It also shows that the needs of the employees' competencies and training should be valued and private banks should take more effort to make them better in day to day job performance. It is also recommended that private banks should take into account both individual and operational needs when carrying out organizational assessment.

According to the result, not all the employees in private banks take induction training when they start to work at the bank. They usually start to attend training within one year after employment. Thus, selected private banks offer induction training to every employee when they start work at the bank in order to know the organizational objectives, goal, culture and policy.

Today, as it increases the staff efficiency, skills and productivity many organizations have also come to realize the role of training and development programs. In order to achieve the benefits of training, private banks are ensuring that the following are instituted at the workplace.

First, identification of training needs should be done more professionally with line manager as well as the individuals involved together with HR personnel. All involved understand exactly what the trainee's lack, what skills are needed and what attitude toward job success needs to be improved. Private Banks identify the training needs in the organization that also covered departmental or team and individual plans. Only when the expectations of the employees and employers meet the organization will be more sustainable.

Secondly, banks should be focus on learning, training and development as well as training policy and procedures for organizational development and survival. Organizational career planning involves matching an individual career aspiration with the opportunities available within the organization. The banking sector improves the necessary skill set and delivers the best service to customers.

Thirdly, motivation generally seeks to boost employee morale to work hard and thus, increase productivity. Instituting proper training and development program, banks should initiate policy for motivation attached to training. Motivation involves both extrinsic, such as more compensation, allowance, other benefits and intrinsic rewards such as recognition, respect, acceptance by fellow worker, opportunities for promotion, career development and consultation for important matters. Morale, on the other hands, increases productivity indirectly reducing absenteeism, accidents, employee turnover and etc. Therefore, motivation can lead to job satisfaction which in turn leads to the development of employee performance.

Fourthly, it is vital to monitor and evaluate training in order to assess its effectiveness in the specified outcomes and to identify where enhancements or adjustments are needed to make the training even more successful. The basis upon which each training category is to be assessed should be determined at the planning level, when considering how to acquire and interpret the information needed to assess learning events.

Finally, it is very important to attend training and development procedures and that is positively related to employee performance. There is organization support for location. At present, most of the private bank's training class or training schools are in Yangon and all employees come to attend the training and development program. It is not convenient for employees and makes higher cost for organization. This suggestion is not only for employees but also for organization.

Moreover, banks should take into consideration that each and every employee needs to be developed. Therefore, private banks should allow all the employees to be involved in training procedures that help them for improving their performance. Their training and development programs ensure that the employees are more professional and skillful. By continuously improving their training program, higher employee performance and morale attachment to the bank can occur, with lower turnover rate. This is the reason why private banks should formulate quality and effective training programs that improve their employee performance.

Employee learned effective training and development and follow the training objectives of the organization and skills development. This study expected to fulfill the research gap to the literature and the country context based on the private banks of Myanmar. The HRM of the banks are mostly responsible for scheduling the policy, procedures, and practices. Therefore, they should provide specific training procedures for the employees.

Banks should take into consideration that each and every employee needs to be developed. Therefore, private banks should allow all the employees to be involved in training procedures that help them for improving their performance. Their training and development programs ensure that

the employees are more professional and developed in the skill set. By continually improving their training program, higher employee performance and morale attachment to the bank can occur, and lower the turnover rate. This is the reason why private banks should formulate quality and effective training programs that improve their employee performance.

In addition selected private banks in Yangon benefited directly from this research, because they became aware of the banks' policy, procedures, and practices that affect the competencies of employees and employee performance of banks' employees. Invariably, this study improve the whole of the banking industry is understanding the effect of training and development on competencies of banks' employee and productivity and job satisfaction of employee performance.

Furthermore, the bank employees who do not have enough competencies do not improve their performance such as productivity and job satisfaction in organization, and they try searching for a new bank and adjusting to new situations. Moreover, the customers will be also searching for a new bank for their financial transactions is presented because they do not have satisfied services. Thus the issue is obviously relevant to banks' administration, managers, and researchers, while the prevention can be perceived as better than the cure. Hence it is more advantageous to manage cases of subsequent employee turnover or to control employees' intention to leave instead of spending money and time on solving its detrimental effects. Moreover, protection of above issue as better way for organization success.

It can be stated that this current study contributes methodologically to understandings of the nature of the chosen sample, which is represented by employees in private banks in Yangon. There is no research concerning with effect of training and development on employee performance of private banks in Myanmar. Thus by attempting to understand the phenomenon of the training and development and employee performance of employee in private banks, and the training policy, procedure, and practices influences on the private banks' employees' competencies, and performance of their private banks, the finding of the present study act as a bridge, filling a gap in the training and development policy, procedures, and practices and employee performance literature for private banks in Yangon, Myanmar.

Need for Further Research

This section attempts to explain the requirements of the further studies for the effects of training and development on employee performance. Firstly, this study only focuses on selected Private Banks and includes 400 employees from managerial and non-managerial levels. The number of employees does not cover for all the Private Banks and level of employees is not for specific results. Hence, the first recommendation for further research should be to expand the study on the training and development and should also try to expand the study on employee performance of all branches of Selected Private Banks and other Banks and need to describe the specific level. Therefore, the data obtained from the whole nation of Banks result will be more accurate and comprehensive picture to capture the key factors of training and development practices in banking industry from the respondents.

Another recommendation is that the further study can be done by focusing on other human resources management areas such as performance appraisal, equal employment opportunities, and other related factors such as leadership style, job security and so on. The main factors in this research are training policy and procedure, and employee companies. Therefore, this is a limitation in this study owing to the other factors such as external environment; organization support and government support that affect the employee performance in banking industry have not been covered.

Moreover, further research should also try to obtain sufficient data, and should adjust the numbers of independent variables questions and dependent variables questions. This study main focus is effect of training and development on employee performance. However, some environmental factors also have effect on employee performance such as corporate culture, organizational structure, job design, performance assessment systems, power and politics prevailing in the firm and group dynamics. Therefore, this study can be further investigated by adding other variables which contribute to the performance of employees.

Acknowledgements

First of all, I would respectfully express my heartfelt gratitude to the Principal of National Management Degree College who encouraged me to conduct this research. Moreover, I would like to express special thanks to Rector and Pro Rector in Yangon University of Economics. I would like to show special gratitude to my supervisor, retired professors, and professors from Yangon University of Economics. My profound appreciation extends to employees and responsible persons from selected private banks for their willingness to participate in the survey. I wish to convey my sincere gratitude to all my colleagues from the Department of Business and Economics, National Management Degree Collage, for their continuous support, encouragement and their willingness to help throughout the period of writing the paper. Last but not least, I also truly want to express my thanks to my most-respected mother, my sisters and brother, my beloved friends for their sustained support and encouragement.

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THE EFFECT OF DESTINATION IMAGE AND DESTINTION EXPERIENCE ON TOURIST SATISFACTION AND LOYALTY IN BAGAN*

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Abstract

This study was conducted with the objectives of investigating the tourists' perception on destination image and experience of Bagan, the effect of tourist satisfaction on loyalty, and to analyze the moderation effect of destination experience on the relationship between destination image and satisfaction. 165 samples of tourist who visited Bagan at two consecutive Sundays in July, 2019 were taken by using systematic sampling method at exist points of five major destination points, by using structured questionnaire. Multi-hierarchical linear regression was used to analyze the moderation effect of destination experience. It was found that visitors had a good destination image and they felt good destination experience at Bagan. Both destination image and experience have positive, significant effect on tourist satisfaction; which in turn effect on tourist loyalty. Destination experience has negative moderation effect on the relationship between destination image and satisfaction of tourists. Destination marketers particularly give a great care on providing good destination experience to have satisfaction as poor experience may degrade the good image of Bagan or a good experience can even promote the image of Bagan. In order to spread positive word-of-mouth, tourist satisfaction is important and it should be nurtured by creating a good image and safe and pleasant experience for tourist.

Keywords: destination image, destination experience, tourist satisfaction, and tourist loyalty.

Introduction

Tourism whatever named as smokeless industry, or a nation's invisible export, it can bring the major source of income if well managed. It can create many opportunities in terms of employment, GDP growth, regional cooperation, cross cultural understanding, infrastructure development in the country. That is why, many countries have been trying to increase the tourist arrivals in different ways. To promote tourist arrivals, attractive destinations need quality services for creating the revenue and job opportunities (Chen and Tsai, 2007) for the countries. Therefore, destination management organizations (DMOs) need to develop relevant marketing strategies to create more attractive destinations not only for international tourists but also for local tourists and they need to retain tourists loyal to the destination (Hawkes & Kwortnik, 2006; San Martın, 2005). In trying to promote tourism, a destination should have some specific attributes to attract potential tourists as well as to keep previous tourists come again in the future and spread positive vibe within the community. Having a good image of destination is an important feature to attract potential tourists while creating good memorable travel experience is critical for the current and previous tourists so that they would like to revisit again in the future, spread positive word of mouth thereby, keep loyal to that place in the future so that it will have consistent flow of tourists.

The most important goal for every destination marketer is to understand the way tourists choose a destination, evaluate superior destination experiences, become delighted, attached and loyal to a destination. A destination is not only a tourism facility but it also comprises of other related services in a given area, which in combination, create attractiveness to the tourists (Um et al., 2006). The destination package to enhance the tourist satisfaction includes such unique attributes as natural environment, good infrastructure, culture and traditions, local restaurants and

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souvenir shops. These unique attributes become the prior image of a destination and it formed in the mind of potential tourists to choose such destination. Eskildsen et al. (2004) also concluded that destination image determines the influence of perceived value, customer satisfaction and customer loyalty. Together with image formed prior in the mind of tourists, actual destination experience may have more positive or negative perception to have effect on satisfaction and revisit intention or positive word of mouth. Therefore, destination experience is the key reason to attract tourists to come back again and to increase positive word of mouth, loyal behaviors to a destination. If a destination fulfills the expectation of tourists, tourists will make repeat visits and spread positive word of mouth publicly. Therefore, a destination should focus on enhancing the quality and quantity of tourism products and services, communication, and from that mounting destination loyalty.

It is obvious that highest tourist arrivals are because of the attraction, good at the marketing aspect, forming a good prior image, and creating the best destination experience. As one of the world's famous cultural destination site as well as the major tourist destination for Myanmar, Bagan should also strive to boost up its image and offer good destination experience in different term to attract more of the tourists and spread positive word of mouth among world's tourists. Myanmar, despite of its rich cultural heritage, diverse geographical and natural attractions, with is authenticity, the rate of tourist arrival is still much lower than other countries in the region. According to UNWTO (2018), international tourist arrival to Myanmar was 3.5 million tourists even less than Laos, while Thailand received 38.2 million and Malaysia 25 million. Therefore, destination marketers in Myanmar should seriously consider to promote the image and create better tourism experience.

Bagan is well known for its many ancient Buddhist temples, pagodas and monasteries, as it became the capital of first Myanmar Empire and it is one of the most famous places not only in Myanmar but all over the world for its rich archeological heritages of 11th to 13th centuries. Bagan is regarded as the flagship destination of Myanmar and it has been recognized as a World Heritage Site by UNESCO in 2019.

As a major tourist attraction in Myanmar, Bagan enjoys the growth of its tourism industry and earning greater revenue generated by international tourists. Even though Myanmar's nature of hospitality mainly contributes to spread positive image of the destination, the role of infrastructure, other supporting services like restaurants, some infrastructure including public toilet and road access, the security concerns among local public and all other conditions including hygiene, should not be overlooked. Having a good understanding about tourists, what they want, what they are seeking for, how they perceive and decide a destination is fundamental in marketing to gain competitive advantage. Therefore, it is the time to reassess what kind of perception is formed in the mind of tourists in terms of image and experience and make effective, necessary improvements to be ready in post- Covid-19 pandemic period. Particularly in this time of Pandemic when tourist destinations are almost empty and it will take time to revitalize again. Now is the most suitable time to reflect the status of Bagan in the view of tourists and to update and upgrade the destination image and facilities responding to the needs of tourists so that when people travel again, Bagan would be more than ready to fulfill the needs of tourists and to give the best travel experience, bestowing satisfaction and loyalty deeply rooted in their mind. On the other hand, despite of being the main tourist destination in the country's emerging tourism industry, there has been few academic research in terms of destination management in many places of Myanmar including Bagan. The ministry concerned and the industry related associations are also implementing their activities with very rare research findings. Time to bounce up from the conservative, traditional rule of thumb approach to destination marketing, there is an urgent need of systematic, reliable and scientific research in the field of tourism industry in Myanmar.

This study fulfills this research gap which desperately needs in Myanmar with the focus of the following research questions.

1. What is the tourists' perception on current status of destination image and destination experience in Bagan?
2. How destination image and destination experience effect on tourist satisfaction and loyalty in Bagan?
3. How destination image and destination experience interact to have effect on tourist satisfaction in Bagan.
4. Does tourist satisfaction effect on tourist loyalty in Bagan?

Bagan was chosen as a case study because it can be said as a flagship destination in Myanmar and the most recipient of the international tourists among others. The study of this site would generate proper policy and guidelines for the marketers, the authorities, NGOs, and the public for enhancement of destination image and experience thereby creating satisfaction and loyalty to Bagan. In order to answer these research questions, this study tries to assess with the following objectives. The general objective of the study is to provide destination marketers in Bagan, from which to the whole country, Myanmar with current situation of tourist perception on Bagan and to explore factors affecting tourist satisfaction and loyalty in Bagan. The specific objectives of the study are;

1. To determine the tourists' perception on destination image, and destination experience in Bagan,
2. To analyze the effect of destination image and destination experience on tourist satisfaction in Bagan,
3. To examine the moderation effect of destination experience on the relationship between destination image and tourist satisfaction in Bagan
4. To analyze the effect of tourist satisfaction on loyalty in Bagan.

Literature Review

Destination Image and Tourist Satisfaction

Marketers in the tourism organizations provide the selling points of the specific destinations which are distinguishable from other rival destinations in order to retain current tourists and to attract new tourists (Alegre & Cladera, 2006). Distinguishing features of a particular destination such as wonderful architecture, unique culture and traditions, infrastructure, safe environment and hospitability of local people form the image of this destination.

Researchers defined image in different ways, using different dimensions. The two components of image include: cognitive, and affective (Agapito, Valle & Mendes, 2011, San Martín & Rodríguez del Bosque, 2008). Cognitive dimension of destination image represents the beliefs a person has concerning with the characteristics or attributes of a tourist destination (Baloglu, 1999; Pike & Ryan, 2004), while the affective component refers to the individual's feelings towards the tourist destination (Kim & Richardson, 2003). Destination image encompasses only cognitive image components (Rajesh, 2013). Cognitive image refers to beliefs, impressions, ideas, perceptions and knowledge that people hold on objects (Crompton, 1979). That is why, this paper used cognitive image of destination only.

The formation of an overall image of a destination and positive experience of tourists has effect on the tourists' satisfaction. Destination image as part of destination branding once congruent

with the tourists will create repeat visit and positive word of mouth among them (Kotler, 2017). Chen & Tsai (2007) found that destination image indirectly influences satisfaction. Chi & Qu (2008) found in contrast that destination image has positive impact on attribute satisfaction; tourist satisfaction in turn had direct and positive impact on destination loyalty. Ramseook-Munhurruna, Seebalucka, and Naidooa (2014) provided a strong evidence that destination image directly affects perceived value and satisfaction, while only satisfaction directly affects loyalty of tourists in an island destination such as Mauritius. Chen and Phou (2013) found that destination image (DI) directly affects satisfaction and indirectly affects destination loyalty. Kim (2018) also discussed the positive causal relationship between destination image and satisfaction of tourist in the empirical study of tourists to Taiwan. Lui, Li and Kim (2017) conducted an empirical study at Macau and found that there was quite a strong positive relationship between destination image and tourist satisfaction. The image of destination is one of the influencing factors on decision making of tourists among the rival destinations. Therefore, local people need to participate in creating positive image of the destination to attract many tourists by protecting the natural resources of a destination. Such positive image of the destination is powerful for attractiveness to the tourists who are willingly to visit this destination. The first hypothesis of this study is portrayed as follow.

Hypothesis 1: Destination image has positive effect on tourist satisfaction.

Destination Experience and Tourist Satisfaction

Experience is the main form of economic offering in tourism, it is inherently personal, which occurs in the mind of an individual who has full engagement with a destination at an emotional, physical, intellectual, or even spiritual level (Pine & Gilmore, 1998). In reality, destination attraction does not work alone to attract visitors. There must be deep travel experience with greater value to create the experience more significant and rewarding (Kotler, 2017). A destination is an amalgam of diverse products and environments generating a total destination experience. Whilst some destination features (e.g. physical environment and landscape) cannot be easily changed and thus seem less manageable, other factors, especially those in the industry supply chain collaboration, are more malleable and could be well managed. Taking a marketing perspective, Mossberg (2007) argued that prominent factors making tourism experiences include physical environment, industry personnel, other tourists and products and souvenirs.

Destination experience differs in terms of dimensions depending on the type of destination. The 4Es instruments, comprising of educational, escapist, esthetic, and entertainment based on Pine and Gilmore (1998) is used for tourism venues like golf, mountain or nature-based tourism and win tourism destinations. Kozak and Rimmngton (1999) developed another four tourism destination experience dimensions which include attraction, infrastructure, restaurants and service performance. Such dimensions are mostly suitable for cultural and historical sites. Therefore, these dimensions are used to measure destination experience for Bagan in this study. Attractions include all forms of natural and created resources, culture, heritage, history, customs, architectural features, traditional artwork, cuisine music and handicrafts (Crouch & Ritchie, 1999). Infrastructure of a tourist destination is highly technology dependent and include services like online booking facilities and virtual tourism experience forums alike. Infrastructure part of tourist destination includes diverse conditions such as internet, travel agencies, tour operators, transportation suppliers, hotels, tour guides, local entrepreneurs, the locals. It obviously also includes the things to do and see at the destination such as attractions, typical landmarks museums, heritage sites, various types of events, natural characteristics, and even include government and non-governmental agencies. Restaurant component means the dining experience of tourists, not only food quality, but how the food is authentically presented, the ambient atmosphere, cultural sophistication of food and good employee service (Chang, Kivela, & Mak, 2011). The major support services include accommodation, transportation and communication facilities.

The extent to which tourist expectations were met or exceeded decides the level of tourist satisfaction (Akama & Kieti, 2003). This means, if the overall performance of tourism services meets or exceeds expectation, the tourist is considered satisfied; on the other hand, if the performance is below the tourist expectation, satisfaction level is considered low or non-existent. The more positive the destination brand experiences are for the individuals and the more dimensions are assimilated, the more satisfied a visitor will feel. Ozar and Kose (2013) found the positive relationship between different components of brand experience on customer satisfactions at fast-food restaurants in Turkey. Nobar and Rostamzadeh (2018) extended their study on brand experience-customer satisfaction in hospitality area and thereby, found a positive relationship between customer experience and satisfaction among the guests of a hotel in Iran. Based on the past literature, hypothesis 2 was developed as follow.

Hypothesis 2: Destination experience affect positively on tourist satisfaction.

Destination Image, Destination Experience and Tourist Satisfaction

Tourism represents an experience-based industry (Pizam, 2010; Prentice, Witt & Hamer, 1998). When tourists come to a destination, they have already formed an expectation based on that image. Then, when they actually experienced from it, they have seen the performance of the destination. After that, they got satisfied if performance exceeds expectation. However, tourists will get dissatisfied if their experience is lower than their expectation (destination image). Therefore, in order to get tourist satisfaction, destination image work together with the destination experience. Tourist satisfaction with a destination was determined by the experience a tourist obtained during the visitation. Destination experience are the clues that make tourists perceive and sense in the environment and they need proper management. Without proper management, negative clues can ruin the positive image formed previously by the tourists (Kotler, 2017). In contrast, a less competitive image of a destination can be dampened by well-managed, positive experience faced by the tourists. In combination with the actual experience of a destination, tourists become satisfied or dissatisfied with a destination; and decide whether to come back again in the future or not. In other words, when the image of destination interacts with the experience of tourists, it effects on satisfaction and loyalty of tourists. Therefore, this study aims to find out the interaction effect of destination experience and image on tourist satisfaction and loyalty. Then, the third hypothesis of this study was developed as follow.

Hypothesis 3: There is moderation effect of destination experience on the relationship between destination image and tourist satisfaction.

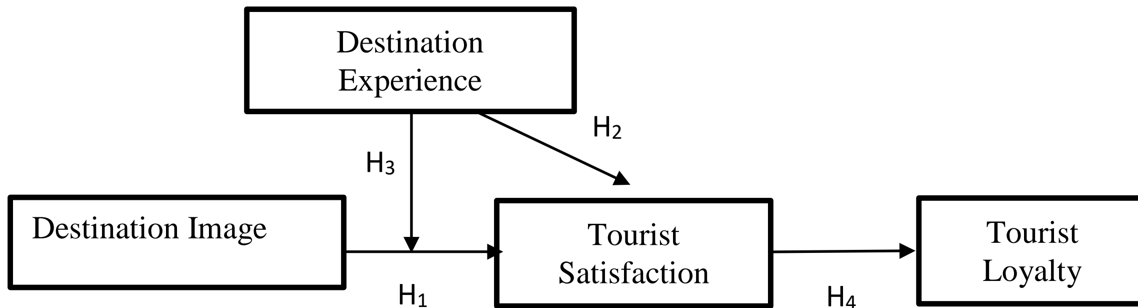
Tourist Satisfaction and Loyalty

Tourist satisfaction is the degree of positive feeling aroused from the experience at the destination. Their satisfaction is highly related to loyalty and this will support to behavior retention for such destination. Previous research in the tourism context shows that satisfaction leads to intention to return, willingness to pay more and willingness to recommend the place to others (Baker & Crompton, 2000; Bigne, Andreu, & Gnoth, 2005; Yoon & Uysal, 2005).

The word loyalty can be connected to the tourism world, particularly to a destination because it can be revisited and recommended to friends and family who are potential tourists just like a product can be resold and recommended according to Yoon and Uysal (2005). Tourists' loyal to a destination can be measured in terms of their intention to return, actual repeat visitation, and willingness to recommend the destination (Pritchard & Howard, 1997; Oppermann, 2000; Kim & Crompton, 2002; Yoon & Uysal, 2005; Picón, Castro, & Roldán, 2014). Therefore, the fourth hypothesis of this study turns out as below.

Hypothesis 4: Tourist satisfaction has positive, significant impact on tourist loyalty.

Based on the above literature review, conceptual framework of the study can be found in Figure 1.



Source: Own Compilation based on Previous Studies

Figure 1 Conceptual Framework of the Study

Methodology

Quantitative research method was used in this study. Both primary data and secondary data was collected. Primary data was collected from 165 samples tourists who visited Bagan on particular days on 7th July and 14th July, 2019 (at two consecutive Sundays), with five group of students by using systematic sampling method at exist points of five major destination points_ Thatbyinnu, Shwezigon, Dhammayangyi, Ahnanda and Bupaya pagodas; from 10 am to 12 noon. The respondents were invited to have voluntary participation in face to face interview with structured questionnaire. Sample size was determined by the use of Cochran formula (1963) as follows.

$$n=\frac{z^2pq}{e^2}$$

where, z = standard normal deviation set at 95% confidence level

p = the (estimated) proportion of the population

q = 1-p

e = the desired level of precision (i.e. the margin of error based on pilot survey)

$$n=\frac{z^2pq}{e^2}=\frac{(1.96)^2(0.5)(0.5)}{(0.08)^2}=150$$

The required sample size was 150 but considering 10% cushion rate, a total of 165 data was collected. Secondary data was collected from the sources of ministries especially Ministry of Hotels and Tourism, and from previous literature. For data analysis, SPSS version 23 was used to run both descriptive and inferential statistics. Pearson correlation analysis was used to measure the relationship between destination image, destination experience, customer satisfaction and customer loyalty. Simple linear regression was used to find the effect of destination image and that of destination experience on tourist satisfaction; and the effect of tourist satisfaction on loyalty. Multi-hierarchical linear regression analysis was also used to analyze the moderation effect of destination experience on the relationship between destination image and tourist satisfaction.

As research instrument, the structured questionnaire composed of 5-point Likert scales questions, ranging from "1 = strongly disagree" to "5 = strongly agree". The questionnaire composed of 3 sections. The section (A) included demographic questions like nationality, gender, occupation, education, and their purpose of visit. Section (B) asked the respondents about their

destination image on Bagan, their destination experience, satisfaction and loyalty. Items for measuring the destination image was taken from Prayag and Ryan (2012); and those for destination experience were adopted from Huang, Afsharifar, and Veen (2015). The modified destination experience scale consists of 25 items: 8 items for attraction, 5 for infrastructure, 6 for restaurants and 6 for service. Items for measuring the tourists' satisfaction were drawn from previous studies (Grace and O'Cass 2005; Fullerton 2005; Garbarino and Johnson, 1999). The modified customer satisfaction scale consists of 8 items. For the customer loyalty, items were adopted from Grace and O'Cass (2005). The modified customer loyalty scale consists of 9 items.

Analysis and Results

First of all, descriptive statistics were run for demographic data of the respondents. Out of 165 respondents, there included 92 males (55.75%) and 73 females (44.24%) and that gender difference among respondents is not so big. Most of the respondents (63%) were between 20 to 30 years old and second largest group is above 50, followed by another group with the age of 30-40 years. As Bagan is one of the most popular tourist destinations in the world, a diverse group of tourists all over the world visited, counting to have 29 countries in total; even though it is relatively not a high season for travelling in Myanmar. The largest number of people among them are from France and Spain. Demographic factors are shown in Table 1.

Table 1 Demographic Characteristics of the Respondents

Items	Classification	Frequency	Percent
Gender	Male	92	55.8
	Female	73	44.2
Age	< 20	9	5.5
	20-30	63	38.2
	30-40	33	20.0
	40-50	45	15.2
	> 50	35	21.2
Purpose of Visit	Holiday	152	92.1
	Visiting friends and relatives	4	2.4
	Business	5	3.0
	Honeymoon	2	2.3
	Others	2	1.2
Nationality	America	13	7.9
	Belgium	10	6.1
	China	8	4.8
	France	40	24.2
	Italy	8	4.8
	Spain	28	17.0

Source: SPSS Output (July, 2019)

Then, descriptive statistics of each of the variables was shown in Table 2 by using mean value of each of them. Mean value of destination image on Bagan was 4.28 and tourists' overall experience on Bagan was quite high, having 4.012 out of 5-point scales. Tourists who visited Bagan because of good destination image and they had a nice experience and they enjoyed Bagan well as the satisfaction rate was 4.48. In breaking down the destination experience into four dimensions- attraction, infrastructure, restaurants, and services, it was seen that tourists enjoyed Bagan's attraction well with mean value of 4.093. Tourists, however, had relatively low perception on Bagan's infrastructure because its mean value was 3.448 only. However, Bagan earned quite a

good image of restaurants and service of its people because the mean values of these two were 4.058 and 4.445. That is why Bagan got tourists' satisfaction mean score of 4.48 which is quite a high score for agree level. In assessing tourist loyalty, it was found that tourists to Bagan has quite high destination loyalty, with the mean value of 4.002.

Table 2 Tourists' Perception on Destination Image, Destination Experience, Satisfaction and Loyalty

Particular	Mean	Standard Deviation
Destination Image	4.278	0.407
Destination Experience	4.012	0.349
Attraction	4.093	0.449
Infrastructure	3.448	0.615
Restaurants	4.058	0.552
Services	4.445	0.442
Tourist Satisfaction	4.480	0.477
Tourists' Loyalty	4.002	0.590

Source: Survey Data (July, 2019)

After this, reliability was checked for each variable with Cronbach's Alpha value and the result was shown in Table 3. From the result, it can be seen that Cronbach's Alpha value for all the variables were well above the cut-off criteria 0.7 except a slightly low level of 0.688 for destination image, yet at an acceptable level. Then, to test the relationships among the variables, Pearson's correlation analysis was tested and it was found in Table 3 that destination image is positively and significantly correlated with destination experience (r=0.600, p = 0.000), tourist satisfaction (r=0.660, p = 0.000) and tourist loyalty (r=0.583, p=0.000). Destination experience also has positive, significant relationship with tourist satisfaction (r= 0.645, p = 0.000) and tourist loyalty (r=0.543, p=0.000). Tourist satisfaction is also positively and significantly correlated with tourist loyalty (r=0.607, p=0.000).

Table 3 Correlation Analysis and Reliability of Variables

Variables	Cronbach's Alpha	DI	DE	TS	TL
DI	0.688	1			
DE	0.835	0.600**	1		
TS	0.866	0.660**	0.645**	1	
TL	0.840	0.583**	0.543**	0.607**	1

Note: DI= Destination Image, DE = Destination Experience, TS= Tourist Satisfaction, TL = Tourist Loyalty

**p value is significant at 1%.

Source: Survey Data (July, 2019)

To test the first hypothesis, simple linear regression was run to find the effect of destination image on tourist satisfaction; and the result was shown in Table 4.

Table 4 The Effect of Destination Image on Tourist Satisfaction

Model	Unstandardized Coefficients		Standardized Coefficient	p-value
	B	Std. Error	Beta (β)	
Constant	1.164***	0.297		0.000
Destination Image	0.775***	0.069	0.660	0.000
R^2	0.436			
Adjusted R^2	0.432			
F-Value	95.197***			

***p value is significant at 0.1%.

Source: Survey Data (July, 2019)

It was found in Table 4 that the destination image has positive, significant effect on tourists' satisfaction with B = 0.775, p = 0.000; with the fit model having R-square value of 0.436; F = 95.197***. Hypothesis 1, stating that there's positive effect of destination image on tourist satisfaction is supported. Prior image of a destination in the perception of tourists is quite important to elicit satisfaction. Therefore, key players such as destination management organizations, travel and tour companies, even the public who involved in the supply chain of tourism need to take due care to create positive image of a specific destination among tourists.

In order to examine the effect of destination experience on tourist satisfaction, simple linear regression was run and the result is shown in Table 5. Destination experience has very huge, positive, significant effect on tourists' satisfaction with B = 0.882, p = 0.000; with the fit model having R-square value of 0.416; F = 115.349***. Therefore, hypothesis 2 was supported. With no doubt, what a tourist's experience during his trip is very important to have satisfaction on the trip to a destination.

Table 5 The Effect of Destination Experience on Tourist Satisfaction

Model	Unstandardized Coefficients		Standardized Coefficient	p-value
	B	Std. Error	Beta (β)	
Constant	0.937***	0.331		0.005
Destination Experience	0.882***	0.082	0.645	0.000
R^2	0.416			
Adjusted R^2	0.412			
F-Value	115.349***			

***p value is significant at 0.1%.

Source: Survey Data (July, 2019)

To analyze the moderation effect of destination experience on the relationship between destination image and tourist satisfaction, multi-hierarchical regression analysis was used and the results were shown in Table 6.

Table 6 The Moderating Effect of Destination Experience on Destination Image and Tourist Satisfaction

Step	Model	Unstandardized Coefficients		Standardized Coefficients	R^2	Adjusted R-square	F-Value
		B	Std. Error	Beta (β)			
1	DI	0.775***	0.069	0.660	0.436	0.432	125.849***
2	DI	0.501***	0.079	0.428	0.533	0.528	92.023***
	DE	0.531***	0.092	0.388			
3	DI	3.384***	0.697	2.474	0.578	0.570	73.134***
	DE	3.078***	0.629	2.630			
	DI x DE	-0.654***	0.158	-3.841			

Note: DI= Destination Image, DE = Destination Experience
***p value is significant at 0.1%.
Source: Survey Data (July, 2019)

First of all, as step-1, simple linear regression was run and it was found to have positive, significant effect on tourist satisfaction (B = 0.775, p = 0.000) as already analyzed in hypothesis 1, and the model is fit with R-square value of 0.436; F= 125.849***. Having a positive image on the attributes of a destination can enhance tourists' satisfaction. Then in step-2, before testing the moderation effect, destination experience was entered into the model and the regression results showed that both destination image and destination experience had positive, significant impact on tourists' satisfaction with B = 0.501, p = 0.000 and B = 0.531, p = 0.000. The model fitness is better after the destination experience was added to the model because adjusted R-square was improved from 0.432 to 0.528. Model fitness is also good with F-value (92.023***).

Finally, in step-3, to test the moderation effect of destination experience on destination image and tourist satisfaction, interaction term of the two independent variables (DI x DE) was created and run the regression. The regression model was improved with the adjusted R-square value of 0.570 being differed from 0.528 in the second step and 0.432 in the first step. F-value was still significant with 73.134***. As the interaction term of DI and DE has negative, significant effect (B = -0.654, p = 0.000), it can be concluded that destination experience dampened the effect of destination image on tourist satisfaction. Hypothesis 3 was also supported.

Another simple linear regression analysis was run to test the influence of tourist satisfaction on loyalty and it was shown in Table 7. The model fitness is acceptable with R-square value of 0.369, F= 95.197***. Tourist satisfaction was found to have high positive, significant impact on loyalty (B = 0.750, p = 0.000). Again, hypothesis 4 is supported as well. When tourists got true satisfaction at a destination, he or she wants to come back again in the future, or recommend that place to others.

Table 7 The Effect of Tourist Satisfaction on Tourist Loyalty

Model	Unstandardized Coefficients		Standardized Coefficient	p-value
	B	Std. Error	Beta (β)	
Constant	0.642***	0.346		0.000
Tourist Satisfaction	0.750***	0.077	0.607	0.000
R^2	0.369			
Adjusted R-square	0.365			
F-Value	95.197***			

***p value is significant at 0.1%.
Source: Survey Data (July, 2019)

Table 8 shows the summary of the hypotheses and their results. All the hypotheses were supported.

Table 8 Summary of the Results of Hypotheses Testing

Hypothesis	Description	Result
1	Destination image has positive effect on tourist satisfaction.	Supported
2	Destination experience affect positively on tourist satisfaction.	Supported
3	There is moderation effect of destination experience on the relationship between destination image and tourist satisfaction.	Supported
4	Tourist satisfaction has positive, significant impact on tourist loyalty.	Supported

Source: Survey Data (July, 2019)

As shown in the table, all the hypotheses were supported. Destination image and destination experience has positive, significant effect on tourist satisfaction and tourist satisfaction has positively and significantly effect on tourist loyalty. In addition, negative moderation effect of destination experience on the relationship between destination image and tourist satisfaction was found in this study. Figure 2 describes the summary of the results of the study.

Source: Survey Data (July 2019)

Figure 2 Summary of the Results

According to the summary of the results, it can be found that the effect of destination image and destination experience on tourist satisfaction and the negative moderation effect of destination experience on the relationship between destination image and tourist satisfaction; and then this satisfaction can influence tourist loyalty to the destination with the case of Bagan, Myanmar.

Findings and Discussion

Based on the analysis, major findings and discussion were described in this section. Firstly, descriptive statistics was analyzed to know tourists' perception on destination image, their destination experience, satisfaction and loyalty. Having a high mean score of destination image and tourists' destination experience showed that tourists who visited Bagan because of good destination image have good perception on Bagan image even after arrival. In addition, tourists to Bagan seemed to have a good destination experience on various dimensions as attraction, restaurants, and service except infrastructure because all the mean scores of different dimensions are more than 4 except infrastructure having 3.44.

Among the four components of destination experience, attraction was the second highest mean score from the data. Bagan, already well-known as the archaeological treasure houses in Asia, has the peace, and tranquility of Buddhist architecture from 11th century, and tropical beauty and scenery of the country. Tourists certainly enjoy the attraction of Bagan and the results also proved this fact. For the tourists, Bagan is also a good place for cultural tourism, offering opportunities for community-based tourism (CBT) nearby, lacquerware firms to learn local products making and the culture of local people, puppet shows, and many other activities to learn local lifestyle which is still relatively authentic, and culinary tourism as an additional attraction. All these facts contribute to the attractiveness of Bagan.

Tourists also enjoyed the restaurant dimension of destination experience of Bagan. As Bagan has a long history of being top popular tourist attraction site in Myanmar, it has variety of restaurants with reasonable price where one can enjoy local cuisine and enjoy culture shows at the same time. In addition, the nature of Myanmar people who tend to help others in general and being hospitality in the essence of Myanmar culture that tourists gave a high score on restaurants and services in the dimensions of destination experience of Bagan.

Only infrastructure of Bagan was rated quite low in the perception of tourists. It provides the important message for the ministry concerned, the related industry associations, and all the stakeholders to seriously think about it to improve the infrastructure of Bagan so that tourists would have nice, and memorable experience in the life through the trip. The public toilet system and road access, need to be convenient, hygienic, meet the certain level of criteria, while giving esthetic feeling as well.

Results showed that tourists' destination experience has positive, significant impact on tourist satisfaction. No matter how famous a destination and its image are, the satisfaction of tourist depends on the actual personal touch and feeling can have great impact on how a person feels. As destination experience composed of different dimensions, attractions, infrastructure, restaurants, and services all have a stake for the satisfaction of tourists. Both are required to get some devotions in balanced manner. For example, even though attraction may be top most obvious factor every tour company aware of, and do not give tourist friendly infrastructure, or do not provide local cuisines at the restaurants with tourists' convenience, or the tourists facing the hostility of local people, they all can create very bad experience for tourists and will last in the memory for long.; and tourists who faced those kinds of situations with the spoiled attraction. from marketing point of view, product's performance is lower than expectation that it leads to dissatisfaction.

Although destination image of Bagan is quite high, it is still much lower than different dimensions of destination experiences. It was also found in the results that destination image has positive, significant on tourist satisfaction. Actually, destination image is formed through different sources of information and physical evidence. Marketing effort and promotion campaign of ministry concerned, DMO, other relative associations and travel and tour organizations seem to support the good image of Bagan.

Destination experience was found to have negative moderation effect on the relationship between destination image and tourist satisfaction, meaning that even if tourists face unfavorable image on a destination yet has inevitably to come to the destination with particular reasons, a good destination experience can mitigate the possibility of or amount of dissatisfaction. In contrast, though a visitor got superior image, yet the experience is not so pleasant, the level of satisfaction would be lower than it should be. Therefore, it shed light on the importance of providing destination attributes for DMO organizations, marketers, government authorities, and every stakeholder. The result highlights that the quality standards in the whole value chain of tourism industry is also important to get tourist satisfaction. Only satisfied tourists consider to revisit a place again in the future or spread positive word of mouth to other people; as the results showed that satisfied tourists lead to loyal tourists.

As tourist satisfaction leads to loyalty of destination, having positive, significant impact of satisfaction on loyalty, it is good news for the destination marketers in Bagan to make an effort especially in creating a good destination experience and positive destination image in the mind of tourists as they influence satisfaction. Word of mouth is particularly important in attracting customers and same conditions apply to tourism sector as well. Tourist loyalty is particularly important for the destination to invite more of the potential tourists to the site and create repeat visit by previous tourists. Tourism which is quite delicate and sensitive product especially concerns with human perception and mindset, it is very important for a destination to spread positive word-of-mouth. Decision making process for choosing a tourism destination is more complicated and information search is extensive. Satisfied tourists are the reliable source to carry a good vibe within the society. And people tend to make a lot of information search and human interaction is considered more trusted source of information especially in case of visiting a place which involves health, security, pleasure and money, it is of vital important for the marketers to create customer or tourist satisfaction at the time of visit (the moment of truth) so that these satisfied tourists can become loyal to the destination in Bagan.

Recommendations

Based on the findings, destination marketers of Bagan should make some developments to attract more of the tourists in the future. DMO organizations and individual businesses in the tourism sector can consider how to add and promote the attractiveness of Bagan in addition to the originally built temples, without being hurt the authenticity of the place. In order to create the rich experience of Bagan, there should be some information counters not only Bagan but also in different destinations in Myanmar. This is the major weak point of destinations in Myanmar. Plans should be there to provide tourists with enough information on transportation, and the historical background of the place. Having a CBT near Bagan is also another good marketing strategy to help tourists stay longer and have richer experience at one place.

Not simply relying on the attraction of Bagan alone, tourism industry should be aware of creating a safe and sound infrastructure for tourists' reliability, safety, and convenience. As tourists, cleanliness and availability of public toilets is one of the basic things to be fulfilled for the hygiene. There should be enough, clean public toilets and restrooms in the destination place, here at the pagoda compounds in Bagan built at the convenient corners. Trash bins should be placed at

certain distances so that tourists can leave their trash at proper places and keep the environment clean already. Not only that, there should be some plans for tourists in Bagan who are unfamiliar to walk bare foot on stony, and hot yard in the pagoda compound. Local restaurants should also be well administered for their hygienic, safe and tasty food. Rather than sticking to the local preference, they should find or adjust the recipe for tourist friendly; at the same time, take care of waiting staff about their personality, quality of service and care. Government and DMO organizations, may be by running public, private partnership, or by travel and tour companies themselves should provide trainings and some awareness to the staff, and local people about their service, their tourist knowledge and ethics.

As found in the result, destination image does have influence to have tourist satisfaction, Myanmar authorities, tour operators, local public and other stakeholders concerned should cooperate to promote the image of Bagan. To boost up the image of a destination, particularly, being listed as world heritage is very important and must keep the status sustainable as well. Since enquiry stage, all the information should be well provided and readily accessible. Not only that, one weakest point in Myanmar to be improved is the provision of destination information at travel information centers or right at the destination place. Without good input, tourists cannot have a good imagination of what the place actually in meaning is or what the value of this. Destination management organizations are still weak in marketing, maintenance and promotion of campaigns to boost tourism in Myanmar. Many of the fake news, and biased media, or the feedback from previous tourists all enhance or degrade the image of Bagan. It is very important that travel and tour organizations in Myanmar should participate in promotion of good image of Bagan in collaboration with local people and media. Tourists should be given good information, explore different types of cultural activities to be enjoyed. There can be some films production that helps promote the image of the country.

Even though current time is not suitable for travelling due to Covid-19 crisis, this is a good timing for making improvements to build destination brand in terms of image and experience. It is a good timing to reflect based on the experience of previous travelers. As suggestion for post Covid-19 period, destinations should create an image of a safe travel place, having a well-planned and well-informed disaster-response program, a concrete immigration policy, having some standards meeting the criteria set by particular accredited organizations, a warming and caring atmosphere where tourists can rely on safely for their entire enjoyable trip in the destinations in Myanmar. Rules must be clear and set to be strictly followed by the local citizens and staff as well with the provision of educations as necessary.

Contributions of the Study

This study implies that by maintaining the World heritage, it will help improve the sustainable tourism in Bagan, the flagship destination in Myanmar as well as in Mekong Region. Following the recommendations based on the results, Bagan can get destination competitiveness and it is hoped to improve in the areas for creating better tourist experience that has not received well attention before. Revealing the current situation of tourists' perception on Bagan, it gives awareness on the strengths and weaknesses of a sample tourism destination in Myanmar.

This study highlighted the importance of creating a positive prior image from different perspectives with efforts from different parties, and the moderation effect of destination experience on destination image to have impact on tourist satisfaction and loyalty, focusing the research area in Bagan. It highlighted the awareness that destination image alone is necessary but not sufficient condition and all the supporting industries, even the local public, sanitary issues should be considered in developing and maintaining the sustainable tourism destination.

The negative moderation effect of destination experience on destination image highlights that improving a destination experience is very important for a destination rather than relying alone on its explicit feature of destination image. In addition, there should be some activities or chances to experience by tourists, especially with local culture, local firms and people. With well managed destination, tourism will bring many of the foreign income into the country, creating the economic growth of the country. This study tried to generalize the moderation effect of destination experience on destination image to have impact on tourist satisfaction and loyalty, focusing the research area in Bagan.

Suggestions for Future Studies

Although there are a lot of travel destinations in Myanmar, Bagan was chosen because it is the top most visited place by the tourists to Myanmar, and the data collection time is low season in Myanmar except Bagan. Cross-sectional data was collected on two consecutive Sundays of July at five main destination points in Bagan to make sure that respondents do not overlap to each of the research assistants' group. Data was collected at the exit point of each place so that tourists would have more experience with a place prior to answer the questionnaire. The timing was also set to be very identical for all the five groups at five points to cover most of the tourists at the same time in Bagan. Although well planned, there may be some tourists missing on the data collection day if they have arrived to the place after the designated data collection period. In the future, researchers may try to collect data in the high season. Particularly this time of Corona virus outbreak, this would be a nice idea to try out again in the post-Covid19 period. However, the destination experience dimensions would have great changes in terms of disaster prevention, and other prevention measures and it should be counted in for future research.

Conclusion

Nevertheless, this paper contributes to the tourism industry by revealing the current situation of tourists' perception on Bagan, top tourism destination in Myanmar so that it can give awareness on the strengths and weaknesses of a sample tourism destination in Myanmar. From this research, tourism authorities concerned, destination management organizations, tour operators, and general public to maintain a good destination image, take necessary initiatives to create better destination experience so that there will be sustainable increase in the number of tourists, thereby enhancing the local economy. It highlighted the awareness that destination image alone is necessary but not sufficient condition and all the supporting industries, even the local public, sanitary issues should be considered in developing and maintaining the sustainable tourism destination.

Acknowledgements

We would like to express our deepest gratitude to Professor Dr. Tin Tin Htwe, the Principal of National Management Degree College for always encouraging to conduct tourism related researches as much as possible in our best effort. We also would like to extend our special thanks to post-graduate and undergraduate students of Commerce specialization, Monywa University of Economics for their dedication in collecting data from international tourist at Bagan. Without their help, this research would not be a success. The last, but not least, we owe our gratitude to the very kind, empathetic and open-minded respondents who willingly helped responded our survey in friendly manner.

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ACCESSIBILITY TO THE AFFORDABLE AND ADEQUATE MEDICINE UNDER INTELLECTUAL PROPERTY LAW*

Phyu Phyu Thinn[1]

Abstract

The idea of protecting the pharmaceutical products including medicine under patent system of intellectual property law is designed to provide reward for the production industry and also to give incentive for further innovative and research. However, this will often put burden for some countries where the patented essential medicines are high price and out of reach for the poor. To encounter public health needs, changes were made in the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS Agreement) by providing more flexibility to the poorer countries and to increase the safeguards that countries could use remaining within TRIPS obligations to improve public health care. This paper will aim to analyze these flexibilities provided by the TRIPS Agreements for the WTO member States to encounter public health crises in the countries where no or limited local production capacity for essential medicine.

Keywords - Public health, Flexibilities, Compulsory licensing, Parallel imports.

Introduction

Intellectual Property (IP) simply refers to the ‘creation of mind’ and the intellectual property rights (IPRs) are the bundle of rights exclusively given to the creator or owner of IP for the enjoyment of his/her/their creation. IP system has been established primarily to reward the innovators and creators for their contributions to society. IP regimes are said to be justified because they encourage research, creative endeavor and innovation. It is so obvious that IPRs has simply focused on the private rights as reward and/or incentive for one’s own creation.

Recently, the impact of intellectual property rules and practices on the health of poor people in developing countries has generated substantial controversy in the World Trade Organization (WTO) negotiations. Accessibility to adequate and affordable medicines is one of the problems that developing countries might face and therefore, as a solution, a State may need to limit patent rights on some kinds of medicines or to limit the exclusive patent rights given to the patentee in order to make those medicines affordable in case of public health crisis.

Under international intellectual property law, there is a recognized principle that “*States need to consider the requirement to balancing the rights between creators and users in the enforcement of intellectual property*”. As international intellectual property rights instruments, the TRIPS Agreement can be employed with its flexibilities to bind States to design an intellectual property rights system that strikes a balance between promoting general public interests in areas of health, culture and education, whilst protecting the property rights of authors and inventors.

The research is aimed to emphasize the practice of WTO particularly for patent system by adopting the particular strategic plan for member States so as to balance between their protection given to the rights of creators and their responsibility to protection public interests in cases of national emergencies or public health crises.

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The research will be a contribution to the national implementation of IP system that how the TRIPS flexibilities can be employed so as to the establish of highest attainable standard of healthcare for the people in balancing of individual patentee rights.

Method of the Study

Combination of the descriptive and analytical legal research methods are applied in this paper. The primary data of the research comes from international conventions and national legislation. Secondary data are literary books, articles, online resources, news as well as events.

Problem Statement

Patent protection under intellectual property law is important for the development of new medicines. It is so obvious that patent protection always creates incentive for the research industry to develop new medicines in the pharmaceutical industry. By giving such right to monopoly as reward on the efforts, it could face problems for developing countries and create barriers to attain patented drugs adequately and affordably. As a consequence, countries have to take account of their obligation to adequate standard of health while they provide exclusive rights to the pharmaceutical industry on the products.

It is the idea of WTO to provide the balancing of IP Rights between creators and users by the TRIPS Agreement with its flexibilities which cause the accessibility of essential patented medicine by all. This paper will find out such kind of flexibilities provided under the TRIPS Agreement for member States to encounter public health crises dealing with access to patented medicines.

Protection of IPRs from Human Rights perspective

In Article 15(1)(c) of the International Covenant on the Economic, Social and Cultural Rights (ICESCR) where Myanmar is a State-Party, it recognizes the right of everyone 'to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author'. This circumstance creates problems in terms of human rights if the product is essential for the enjoyment of human rights yet it becomes inaccessible to poor people. [1]

It is highlighted in Article 12 of the same Covenant that the right of everyone to the enjoyment of the highest attainable standard of physical and mental health. In respect of implementing this obligation, necessary steps to be taken by States which explicitly include the 'prevention, treatment and control of epidemic, endemic, occupational and other diseases' (Article 12(2) (c)) and the 'creation of conditions which would assure to all medical service and medical attention in the event of sickness' (Article 12(2) (d)).

The right to adequate health care is also recognized in Universal Declaration of Human Rights (UDHR) as everyone has the right to entitle the adequate standard of living for the health and well-being of himself and of his family, including food, clothing, housing, medical care and basic necessary social services.[2] A State's obligation to support the right to health is reviewed

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[1] Sarah Joseph, "Blame it on the WTO?", Oxford University Press, 2011, p- 214.
[2] Article 25 (1) of UDHR.

through various international human rights mechanisms, such as the Universal Periodic Review (UPR), or the Committee on Economic, Social and Cultural Rights.

The WHO Constitution (1946) envisages that "…the highest attainable standard of health as a fundamental right of every human being". For the enjoyment of 2030 WHO universal health coverage, one of the essential components of the right to health is "quality health care system". Quality includes the accessibility of health care services that may depend on affordability, and the availability of the essential medicines.

It is obvious that access to affordable and adequate medicine is one of the top priorities for States whether developed or developing ones in terms of their human rights obligations. All States actually recognizes the gravity of the public health problems afflicting many developing and least developed countries, especially those resulting from HIV/AIDS, tuberculosis, malaria and other epidemics as Coronavirus. The establishment of intellectual property system should be implemented in a way supportive of a State's right to protect public health and essentially, to promote access to adequate medicines for all without concerns about the patent effects on prices while protecting the rights of patent holder.

Balancing Intellectual Property Rights and Public Interests

The main international agreement relating to the intellectual property is the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS Agreement). It is also a multilateral trade agreement annexed to the WTO Agreement[1] and therefore, all WTO members have to take responsibility to protect the intellectual property within their jurisdiction in line with minimum standards provided in the Agreement while recognizing the needs of the developing countries and giving assistance to those countries in the implementation of protection of IPRs. For least developed country WTO members, transition period to implement TRIPS provisions has been extended until 1 July 2021 and with respect to pharmaceutical products, extension is given until 1 January 2033, or until such a date on which they cease to be a least developed country member.[2]

The TRIPS Agreement should not prevent all members from taking measures to protect public health and it do recognize the right of all member States to adopt measures necessary to protect public health and nutrition.[3] It is also highlighted that the protection of IPRs in domestic levels of all member States is to ensure their mutual supportive manner and to take into account of public interests and national security interests. There are limited exceptions provided to the exclusive rights conferred by a patent with three conditions.[4] The first condition is that these exceptions do not unreasonably conflict with the normal exploitation of the patent and then, the second condition is the such exceptions are not unreasonably prejudice the legitimate interests of the patent owner, and the final condition is that in adoption of such exceptions, States must take into consideration of the legitimate interests of third parties.

In addition to these exceptions provided in Ar. 30, the TRIPS Agreement further recognizes the "*other use of patent*". Such the term "other use" includes the usage by the government itself, or any third party under government's permission without authorization from the patent holder. Under Article 31, governments may use by itself or allow third parties to use the subject matter of

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[1] Marrakesh Agreement Establishing the World Trade Organization (1994)
[2] IP/C/73 (6 November 2015)
[3] Article 8 of the TRIPS Agreement.
[4] Article 30 of the TRIPS Agreement.

a patent (Compulsory Licensing) without having authorization from the patent owner depending on its individual merits by using flexibilities under TRIPS Agreement.

Compulsory Licensing (CL)

Compulsory licensing is that when a government allows someone else to produce a patented product or process without the consent of the patent owner or plans to use the patent-protected invention itself. However, the practice of compulsory licensing can only be done under a number of conditions aimed at protecting the legitimate interests of the patent holder.

The TRIPS Agreement allows "compulsory licensing" as part of the agreement's overall attempt to strike a balance between promoting access to existing drugs and promoting research and development into new drugs. But the term "compulsory licensing" does not appear in the TRIPS Agreement. Instead, the phrase "other use without authorization of the right holder" appears in the title of Article 31. Compulsory licensing is only part of Article 31 since "other use" includes usage by governments for their own purposes.[1]

Under the conditions contained in Article 31, a compulsory license can be granted by a government, *inter alia*, to allow a third party to produce a generic version of a patented pharmaceutical product without the authorization of the patent holder, in so allowing low-price generic pharmaceuticals to be produced locally or imported from abroad. The confirmation that each member "has the right to grant compulsory licenses and the freedom to determine the grounds (e.g. national emergencies or public health crises situations) upon which such licenses are granted" has particular significance.

For allowing the permission to such use, the main condition for States is their responsibility to make sure that any such use is allowed "predominantly for the supply of the domestic market" in its own territories[2] and the right holder shall be paid adequate remuneration in the circumstances of each case by taking into account the economic value of the authorization.[3] Therefore, Article 31(f) of the TRIPS Agreement restricts that products made under compulsory licensing must be "predominantly for the supply of the domestic market".

In a compulsory licensing, the patent holder retains intellectual property rights and 'shall be paid adequate remuneration' according to the circumstances. Generally, the grant of a compulsory license requires prior negotiation with the patent holder.[4] However, this prior negotiation is not necessarily to be a requirement in cases for "national emergencies", "other circumstances of extreme urgency" or "public non-commercial use" (or "government use") or anti-competitive practices.

Compulsory licensing as a policy mechanism can be used to address a number of situations including, among others: the high prices of medicines; or anti-competitive practices by pharmaceutical companies; or failure by pharmaceutical patent holders sufficiently to supply the market with needed medicines; or emergency public health situations, or the need for establishing a pharmaceutical industrial base.[5] In the pharmaceutical sector, compulsory licenses have been

[1] https://www.wto.org/english/tratop_e/trips_e/factsheet_pharm02_e.htm (last visited 25 July 2020)
[2] Article 31 (f) of the TRIPS Agreement.
[3] Article 31 (h) of the TRIPS Agreement.
[4] Pedro Roffe, "Negotiating health: intellectual property and access to medicines", Earthscan, 2012, p- 6.
[5] South Center, 'Utilizing TRIPS Flexibilities for Public Health Protection Through South-South Regional Frameworks', 2004, p- 13.

used to stimulate price-lowering competition and to ensure the availability of needed medicines. For instance, if a new product is introduced to the market which plays an important role in public health, such as a vaccine against HIV/AIDS, malaria or perhaps Coronavirus, a country's national law could grant a compulsory license under Article 31 of the TRIPS Agreement in order to have benefits for the community.

Notably, compulsory licensing has certain additional requirements. In particular, it cannot be given exclusively to licensees (e.g. the patent-holder can continue to produce), and usually it must be granted mainly to supply the domestic market. It is so practical and beneficial for countries which have strong or sufficient local manufacturing capacity in the pharmaceutical industry.

Parallel Imports

Under the TRIPS Agreement, a government can permit compulsory license, without knowing the patent holder, to a person or legal entity to import generic pharmaceuticals from other foreign resource if there is insufficient or inadequate local production capacity for a particular product.

Parallel importation occurs when a third party, without the consent of the patent holder, imports a medicine that has already been put on the market abroad more cheaply by the patent holder or a licensee. The practice is based on the principle that the patent holder has been compensated through the first sale of the product and that further control over the resale of the product would unreasonably restrain trade and competition.[1] It is also called the 'exhaustion of intellectual property rights'. In other words, parallel imports are not imports of counterfeit products or illegal copies. These are products marketed by the patent owner or with the patent owner's permission in one country and imported into another country without the approval of the patent owner.[2]

Parallel importation is used as a measure to prevent market division and price discrimination on a regional or international scale. Because most pharmaceutical companies set prices for the same products at different levels in different countries, parallel importation enables consumers to gain access to the product without affecting the right of the patent holder to receive remuneration in the country where the product is first sold.[3]

In order to be an effective pro-competitive measure in a scenario of full compliance with TRIPS, parallel imports should be allowed whenever the patentee's rights have been exhausted in the foreign country.[4] Since TRIPS allows countries to design their own exhaustion of rights regimes, developing countries should aim to facilitate parallel imports in their legislation to access the genuine patented medicine without impairing the patent holders' rights.

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[1] Pedro Roffe, "Negotiating health: intellectual property and access to medicines", Earthscan, 2012, p- 7.

[2] https://www.wto.org/english/tratop_e/trips_e/factsheet_pharm02_e.htm (last visited 25 July 2020)

[3] South Center, 'Utilizing TRIPS Flexibilities for Public Health Protection Through South-South Regional Frameworks', 2004, p- 14.

[4] Commission on Intellectual Property Rights, "Report of the Commission on Intellectual Property Rights, Integrating Intellectual Property Rights and Development Policy", London, September 2002, p- 42.

Doha Declaration on the TRIPS Agreement and Public Health (2001)

Though the TRIPS Agreement allows freedom to use its flexibilities, in practice, some governments were unsure of how the TRIPS flexibilities would be interpreted, and how far their right to use them would be respected.[1]

At the fourth Doha Ministerial Conference (2001), WTO Members also reaffirmed the right of each member to use the full provisions of the Agreement which provide flexibility for protecting public health and, in particular, for promoting access to medicines for all.[2] The Doha Declaration on the TRIPS Agreement and Public Health was adopted by WTO Member States _ affirming the primacy of public health. The Doha Declaration highlighted the right to make use of flexibilities provided within TRIPS to enhance access to medicines for countries with low or no pharmaceutical production capacity.[3]

Paragraph 5 of the Doha Declaration reaffirmed some of the flexibilities available under the TRIPS Agreement[4], notably those relating to parallel imports and compulsory licenses. Meanwhile, Paragraph 6 of the Declaration recognizes that WTO Members with insufficient or no manufacturing capacities in the pharmaceutical sector could face difficulties in making effective use of compulsory licensing under the TRIPS Agreement.

This is because 'compulsory licensing' is not always a solution for resource-limited countries. For instance, when prior authorization from the patent owner is required, as in the normal case, negotiations can be lengthy and complicated, and a country may not have the necessary legal expertise. In addition, the manufacturing process for a pharmaceutical product may be protected under a separate patent or as a trade secret. Moreover, countries may lack the technical expertise or facilities necessary to copy and manufacture the product or to attain the economies of scale that make such a decision feasible. [5]

Eventually, the WTO General Council adopted in its Decision on the Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health[6] on 30 August 2003. It is also known as **"August Decision"**. This Decision noted the existence of exceptional circumstances justifying a waiver of obligations under TRIPS Article 31 (f) (domestic market requirement) and (g) (authority of review) for pharmaceuticals products and adopted measures that, in effect, created rules permitting a two-country compulsory license.[7] The TRIPS Council responded by implementing a temporary waiver of Article 31 (f) concerning the "domestic market" limitation and proposing a new amendment to the TRIPS Agreement to allow *waiver* of the "domestic market" limitation on compulsory licensing.

All WTO Member countries are allowed to import under this decision, but the decision lists 23 developed countries that voluntarily announced that they would not use the system as importing Members: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece,

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[1] https://www.wto.org/english/tratop_e/trips_e/factsheet_pharm02_e.htm (last visited 25 July 2020)

[2] South Center, 'Utilizing TRIPS Flexibilities for Public Health Protection Through South-South Regional Frameworks', 2004, p- 11.

[3] Chikosa Banda, "Intellectual property and access to essential pharmaceuticals: recent law and policy reforms in the southern Africa development community region." *Md. J. Int'l L.* 31 (2016): 44, p- 4.

[4] Article 31 of the TRIPS Agreement.

[5] Pedro Roffe, "Negotiating health: intellectual property and access to medicines", Earthscan, 2012, p- 7.

[6] WT/L/540 (2 September 2003)

[7] Judy Winegar Goans, 'Intellectual Property; Principles and Practice', 2014, p- 136.

Ireland, Iceland, Italy, Japan, Luxembourg, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom. After joining the EU in 2004, 10 more countries have been added to the list: Cyprus, Slovenia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Czech Republic and the Slovak Republic.[1] On the other hand, Australia recently adopted legislation and regulations to authorize domestic drug manufacturers to produce generic drugs for export to countries exercising their compulsory licensing rights.[2]

Amendment of the TRIPS Agreement (Article 31bis)

Although, as discussed above, these flexibilities under TRIPS agreement addressed some concerns for least-developed countries, the question of access to pharmaceutical products remained for countries that lacked local manufacturing capacity.

On 6 December 2005, WTO Members approved *Amendment to the TRIPS Agreement*[3] in order to make permanent decision on patents and public health originally adopted in 2003, August Decision. This was the first WTO multilateral treaty amendment since its formation. Accepting of the Protocol amending the TRIPS Agreement by two thirds of the WTO's members, the amendment took effect on 23 January 2017.

Following the entry into force of the Amendment, members to which the amended TRIPS Agreement applies may derogate from the obligations set out in paragraphs (f) and (h) of Article 31 of the TRIPS Agreement with respect to pharmaceutical products pursuant to Article 31bis, the Annex and the Appendix to the TRIPS Agreement. For other Members that have yet to accept the Protocol, the waiver provisions established under the August Decision continue to apply.[4] Myanmar has approved the Amendment on 16 December 2015 and then it takes the responsibility to follow the new amendment (Article 31bis) of TRIPS Agreement.

The new Article 31bis of the TRIPS Agreement gives full legal effect to compulsory licensing system and allows low cost generic medicines to be produced and exported under a compulsory license exclusively for the purpose of serving the needs of countries that cannot manufacture those products themselves. When a country produces the pharmaceutical products under compulsory license and wish to export as 'eligible export country' to a recognized 'eligible importing member'[5], the former TRIPS requirement for "the supply of domestic market" shall not apply with respect to the grant by it of a compulsory license. However, the country must fulfill its responsibilities in Annex of the Agreement.

However, companies have been pressuring governments not to import medicines from countries that produce generic versions, claiming that the practice is a breach of the TRIPS agreement. Countries that have used compulsory licensing have drawn sharp criticism from foreign governments as well as retaliatory measures from pharmaceutical firms. When Thailand used compulsory licensing to get cheaper access to Abbott's combination lopinavir/ ritonavir antiretroviral product, Abbott withdrew seven pending applications for registration of new

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[1] Pedro Roffe, "Negotiating health: intellectual property and access to medicines", Earthscan, 2012, p - 7.

[2] Dreyfuss, Rochelle Cooper, and Justine Pila, eds. "The Oxford handbook of intellectual property law", Oxford University Press, 2018, p- 21.

[3] WT/L/641 (8 December 2005)

[4] www.wto.org (as of: February 2020)

[5] Any least-developed country Member, and any other Member that has made a notification to the Council for TRIPS of its intention to use the system set out in Article 31*bis* and this Annex ("system") as an importer. (Annex to the TRIPS Agreement)

medicines from the Thai Food and Drug Administration, temporarily withholding those drugs from patients in Thailand. These tactics may have discouraged developing nations from exercising their rights under TRIPS.

Myanmar Patent System and Compulsory Licensing

Myanmar Patent Law was enacted by the Pyidaungsu Hluttaw on 11 March 2019 as the Law No.7/2019 with the primary objectives to protect the rights and interests of the patentee and the inventor as well as to support the balancing of rights and responsibilities between the innovators and users.[1]

This Law including 25 Chapters with 119 Sections will come into force on such date of confirmation notified by the President. Being the members of LDCs, Myanmar can enjoy the TRIPS extension for protection of IP Rights. Particularly a product or process relating to the drugs manufacturing cannot be patentable in Myanmar until 1 January 2033 under the policy of the Council of WTO.[2] According to this policy, there are some inventions_ agricultural chemical products; foodstuffs; and microbiological items_ which cannot be patentability until 1 July 2021.

There is a particular chapter[3] in the Myanmar Patent Law which provides for the compulsory licensing. The main responsible body for intellectual property, IP Agency, has the authority to grant the compulsory license with the approval of the Central Committee.

Any person or legal entity may apply to the Registration Officer for a compulsory license under the following conditions:-

(a) Special requirements of public interests as union security, public nutrition and health, or important national economic sectors;

(b) Such use is permitted to remedy a practice determined by the judicial or administrative body to be anti-competitive;

(c) Misuse of his exclusive rights by the patentee, or neglect to deter such misuse by his authorized person;

(d) Such invention cannot be available, by local production or importation, in the domestic level with sufficient quality or quantity, or fair price;

(e) Claim for the protection of second patent that involves an important technical advance of considerable economic significance in relation to the invention claimed in the first patent and without infringing the first patent, the second patent cannot be performed.[4]

When issuing compulsory license, it is the duty of IP Agency to inform the patent holder promptly about the issuance of license and also the starting date of the license, the conditions of the license including the term, and the damages payable to the patentee. In considering the amount of damages for compulsory license, the stipulations contained in the WTO General Council Decision dated 30 August 2003 (August Decision) may take into account by the Agency.

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[1] Section 3 of the Patent Law (2019).
[2] WT/L/971 (2 December 2015)
[3] Chapter 17 of the Patent Law.
[4] Section 66 of the Patent Law.

The exception is that no compulsory license can be applied due to the reason of the insufficient quantity of production of the patented products or such production which can only be produced by using patented process either before 4 year from the date of patent application or before 3 year from the date of patent granting.[1]

When applying compulsory license, the applicant must submit his/ her prior effort for voluntary license as the evidence that he has not been received the permit from the patentee within the reasonable time. However, such evidence of voluntary license does not need to prove in case of public emergency, or the circumstances of extreme urgency, or in the case of public non-commercial use, or the remedies determined by the judicial or administrative procedures to be anti-competitive.[2]

Under Section 71 of the Law, the use of compulsory license shall be authorized for the supply of domestic market of the Union. However, this "domestic market supply" requirement is not essential in the following cases

- when the practice is to be anti-competitive, or
- the compulsory license is connected with the patent either for the pharmaceuticals product or for the process of such products, and
- the authorization of compulsory license is to export said products in accordance with the WTO General Council August Decision to any foreign countries where no local production capacity or no ability to produce such products exists.

It is notable that Myanmar Patent law designs to use TRIPs flexibilities by allowing compulsory licensing in line with TRIPS Amendment. Compulsory Licensing can be granted in cases of pharmaceutical products or to export such products to other countries with lack of capacity to product such products.

For using the compulsory license on the pharmaceutical products, the amendment (Article 31bis) of the TRIPS Agreement contains the specific guidelines and requirements for eligible importing members and for exporting members. Being a member of LDCs, Myanmar should take the benefits from its level of development and urgent need to adopt adequate policies and mechanism as 'eligible importing member' in order to get essential patented medicines to meet the need of the people.

When Myanmar government recognizes and applies compulsory license as the eligible exporting members for pharmaceutical products, it will need to provide legal rules and mechanisms and also will need to notify to the TRIPS Council with conditions contains in its Annex. In such notification, Myanmar shall have to include the conditions attached to it. The information provided shall include the name and address of the licensee, the product(s) for which the license has been granted, the quantities for which it has been granted, the country or countries to which the products are to be supplied and the duration of the license.

[1] Section 69 of the Patent Law.
[2] Section 70 of the Patent Law.

Findings

Providing effective legislation and procedures for compulsory licensing may have an important role to play in maintaining a pro-competitive IPR policy in the new environment. Resource limited countries including Myanmar should establish effective legal mechanisms to practice TRIPS flexibilities. Myanmar needs to consider the adoption of the appropriate provisions for government and non-commercial use by taking into consideration of patent holders' rights. Developed countries should maintain and strengthen their legislative regimes to prevent imports of low priced pharmaceutical products originating from developing countries. Meanwhile developing countries like Myanmar should not eliminate potential sources of low cost imports from other developing or developed countries.

Recommendation

In such cases where the country has insufficient or no pharmaceutical production capacity on the particular medicine/products which are essential for public needs, Myanmar can take benefits from TRIPS flexibilities under Article 31bis by notifying to the TRIPS Council as an eligible importing member specifying the names and expected quantities of the products needed in the country.

When Myanmar provide national policy and legal mechanisms concerning "compulsory license" system to facilitate access to genuine medicines with affordably and adequately, it should establish strong legal system to protect of IPRs that can promote the innovation and creation for new medicines and to attract foreign investment that can enhance country's economic development.

Conclusion

The reminder of the flexibilities under TRIPS broadly covers all countries and users of technology both in developed and developing countries. The particular advantage of the flexibilities for developing countries lies in their level of development. They can benefit from the utilization of the TRIPS flexibilities to deal with public health crisis in the case where access to patented drugs becomes unaffordable and patent needs to be diluted to make generic copies of the needed drugs. For those countries with insufficient or no manufacturing capacities in the pharmaceutical sector, the TRIPS Agreement provides a solution by its flexibilities in order to encounter their concerns for access to adequate and affordable patented medicines.

Acknowledgements

First of all, I would like to express my heartfelt thanks to Professor Dr. Khin Chit Chit, Head of Department of Law, University of Yangon for giving me a chance to do the research. Additionally, I owe much gratitude to Dr. Daw Than New and Dr. Khin Mar Yee, Retired Professors of Department of Law, University of Yangon for their encouragement to do the research. Then, I also want to show my deepest thanks to my beloved Professors, Associate Professors as well as colleagues from my department for their supports in writing this research. Lastly, I would like to devote my sincere thanks to the Myanmar Academy of Arts and Science for allowing the submitting of this paper.

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LIABILITY ISSUES IN MULTIMODAL TRANSPORT OF GOODS

Baby Win[1]

Abstract

Multimodal transport comprises at least two different modes of transport on the basis of a multimodal transport contract. Liability issues in multimodal transport of goods are the legal issues for the international transport, since it may involve two legal systems or more. These issues can be solved by making of single carriage contract by their agreement. Issues are concerned with basis of liability, period of responsibility, exclusion of liability, limitation of liability, loss of right to limit liability, time bar for suit, liability of carrier for his agents and servants etc. The focuses of the paper is to present the possible issues and possible application of legal documents relating to international multimodal transport. Relating to the liability issues, existing unimodal conventions applicable to the separate legs of multimodal carriage, existing multimodal legal documents and Myanmar Laws are compared and analysed in this paper.

Keywords: Multimodal Transport Operator, Multimodal Transport Convention, Unimodal Transport Convention, International Conventions, Regional Agreements, National Law.

Introduction

International trade involves the transport of goods from one country to another. Such transport may be executed by sea, air, rail or road or by a combination of these modes of transportations. If it is done by only one mode of them, the international transport is unimodal transport. And if it is carried out by a combination of them, it is combined or multimodal transport. Nowadays, trade parties mostly used the multimodal transport system than unimodal transport system since multimodal transport system can be faster transit of goods and more efficient way of getting goods to market.

The term international multimodal transport means the carriage of goods by at least two different modes of transport on the basis of a multimodal transport contract from the place in one country at which the goods are taken in charge by the multimodal transport operator to a place designated for delivery situated in a different country[2]. Therefore multimodal transport comprises at least two different modes of transport on the basis of single multimodal transport document.

When the goods are conveyed from one country to another by multimodal transport, containers are largely used. Thereupon, it may be incurred loss of or damage to the goods or late delivery of the goods. If such loss or damage could be localized, it would be applicable by relevant laws which is occurred the loss, damage or delay of the goods during the course of transport. It can be solved for only localized damaged, however, not for non-localized damaged or loss. If the loss could not be localized, it will be difficult to choose the applicable law. The multimodal transport contract needs the uniform applicable law such as CMR for the international transport. The United Nation Convention on Multimodal Transport of Goods was attempted by United Nations in 1980, but it not yet come into force. ASEAN Framework Agreement on Multimodal Transport was signed by ASEAN countries in 2005. Myanmar as being a member of ASEAN, she also has enacted Multimodal Transport Law of Myanmar in 2014. For example, liability for loss in sea transport is

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[2] Article 1 of United Nation Convention on International Multimodal Transport of Goods, 1980.

usually governed by The Hague or Hague-Visby Rules, liability for loss in land transport (which covers carriage by rail and road) is concerned by the CMR or CIM which is mainly applicable in Europe, and liability for loss in air transport is applied by Warsaw Convention. Therefore, liability issues may be treated by different legal systems and it may cause the conflict of laws problems.

Different Liability Issues

When the goods are suffered the damages, in carrying the goods by container, it cannot be known where the stage of damages occurred, since multimodal transport involves at least

two different modes of transport. Thereupon it will be chosen the applicable law for the respective issue in order to solve that problem according to the private international law rules, since there is no uniform liability in their legal provisions. It can differ with regard to the liability requirement such as basis of liability, period of responsibility, exclusion and limitation of liability and time bar for suit.

1. Basis of Liability

Generally, basis of liabilities are almost the same. The carriers are liable for loss of or

damage to the goods as well as delay in delivery if such events were caused while in his charge.

In the sea carriage, The Hague Rules and the Hague/Visby Rules are in force between a significant numbers of states. However, they do not regulate the multimodal carriage. The sea carrier is liable for damage resulting from loss of or damage to the goods as well as from delay in delivery if the occurrence which caused the loss, damage or delay took place while the goods were in his charge.[1] It is based on the presumed fault. Carriage of goods by road is covered by the CMR (Convention on the Contract for the International Carriage of Goods by Road). The CMR applies to every international contract for the carriage of goods by road in vehicles for reward; the road carrier is under a duty to perform the carriage of the goods safely and without delay. The vehicles used by the carrier for the carriage must be suitable and fit for its purpose. In case of total or partial loss of the goods during transit or in the case of delay in delivery, the carrier is presumed to be liable for the damage.[2] The COTIF/CIM (Uniform Rules concerning the Contract of International Carriage of Goods by Rail) should be the system of uniform law concerning the contract of international carriage of passengers and goods in international through traffic by rail, including complementary carriage by other modes of transport subject to single contract. Relating to the carriage by rail, the rail carrier is under a contractual duty to perform the carriage of goods by rail safely and without delay. In case of damage or loss of the goods during transit or delay in delivery, the carrier shall be liable.[3]As regards the carriage by air, the provisions regarding multimodal carriage in the Warsaw Convention and the Montreal Convention are quite similar. Article 31 of the Warsaw Convention provides that in the case of combined carriage performed partly by air and partly by any other mode of carriage, provisions of the Warsaw Convention apply only to the period of the carriage by air. Furthermore, the period of the carriage by air does not extend to any carriage by land, by sea or by river performed outside an aerodrome. The air carrier is obliged to make the

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[1] Article 5(1) of the Hamburg Rules, 1978.
[2] Article 17 of the CMR, 1956.
[3] Article 36(1) of CIM, 1980.

performance of his contractual duty to carry safely and without delay. If he fails to do so and then the register of the goods was damage or loss and delay in delivery,[1] he is deemed to be liable.

In order to achieve uniform liability and avoid conflict of laws problems for multimodal transport, it was attempted by United Nations in 1980. This is United Nations Convention on Multimodal Transport of Goods, 1980. The UN Multimodal Convention promotes a uniform solution to the problem of defining the basis of liability undertaken by the multimodal transport operator (MTO). Subject to the few exceptions, the liability of the MTO does not depend on the segment of the transport at which the loss occurs. Consequently, as the basis of the MTO's liability concerns, there is no need to distinguish between "localised loss" and "unlocalised loss"[2]. The basis liability of MTO is based on the "presume fault or neglect". This is similar to the Hamburg Rules.

The liability of the MTO under the Rules is based on the principle of presumed fault or neglect. That is provided that the MTO is liable for loss of, or damage to, the goods and for delay in delivery, if the occurrence which caused the loss, damage or delay in delivery took place while the goods were in his charge, unless he proves that no fault or neglect of his own, his servants or agents or any other person referred to in Rule 4 has caused or contributed to the loss, damage or delay in delivery. However, the MTO is not liable for the loss following delay in delivery unless the consignor has made a declaration of interest in timely delivery which has been accepted by the MTO.[3] If the multimodal transport involves carriage by sea or inland waterways, the MTO will not be liable for "loss, damage or delay in delivery with respect to goods carried by sea or inland waterways when such loss, damage or delay during such carriage has been caused by: - act, neglect or default of the master, pilot or the servants of the carrier in the navigation or in the management of the ship, fire, unless caused by the actual or privity of the carrier.[4]These defences, however, are made subject to an overriding requirement that whenever loss or damage resulted from unseaworthiness of the vessel, the MTO must prove that due diligence was exercised to make the ship seaworthy at the beginning of the voyage. The provisions of the Rule 5.4 are intended to make the liability of the MTO compatible with the Hague-Visby Rules for carriage by sea or inland waterways.

In order to harmonize the multimodal transport rules and regulations within the sub region, ASEAN has begun to negotiate since 1996. The ASEAN Framework Agreement on Multimodal Transport was signed on 17th November 2005 at Vietnam. The Framework Agreement is applied to all MTOs under the register of each competent national body and all contracts of multimodal transport, if the place for the taking in charge or delivery of the goods is located in a member country.

The MTO is liable for loss resulting from of, or damage to, the goods as well as from delay in delivery, if the occurrence which caused the loss, damage or delay in delivery took place while the goods were in his charge, unless he proves that he, his servants or agents, etc., took all measures that could reasonably be required to avoid the occurrence and its consequences. However, the multimodal transport operator shall not be liable for loss following from delay in delivery unless

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[1] Article 18 and 19 of the Warsaw Convention, 1929.
[2] https://www.pravo.unizg.hr/_download/repository/Marin.pdf.p-8.
[3] https://unctad.org/en/PublicationsLibrary/tradewp4inf.117_corr.1_p-8.
[4] Rule 5 of UNCTAD/ICC Rules for Multimodal Transport Document, 1992.

the consignor has made a declaration of interest in timely delivery which has been accepted by the multimodal transport operator[1]. Thus, MTO is not liable if he can prove any exclusion of liability

Myanmar has no law that specifically defined for multimodal transportation before 2014. When disputes arising out of multimodal transport operation will been governed by existing Myanmar laws. Nowadays the liability issues of MTO have been solved by Multimodal Transport Law in Myanmar 2014. Although this provision is nearly like to ASEAN Framework Agreement on Multimodal Transport, 2005, some provisions are differ to United Nations Convention on Multimodal Transport of Goods, 1980 and UNCTAD/ICC Rules, 1992.

The liability of the MTO under the Multimodal Transport Law is liable for the acts and omissions of his servants or agents, when any such servants or agents is acting within the scope of his employment, or of any other person of whose services he made use for the performance of the contract, as if such acts and omissions were his own[2]. It is based on the principle of presumed fault or neglect. However, the MTO is not liable for the loss following delay in delivery unless the consignor has made a declaration of interest in timely delivery which has been accepted by the MTO.

2. Period of Responsibility

With regard to the period of responsibility, each legal system is differed. Some are defined that "from the time of loading the goods to the time of delivering". However, some are defined that "from the time receiving for the carriage of the goods to the time of delivering".

Relating to the carriage by sea, the period of responsibility is that "from the time when the goods are loaded on to the time they are discharged from the ship"[3]. Therefore it cannot be responsible for that "before loading the goods ad after being discharge the goods from the ship". As a general rule the shipowner is only bound to deliver over the ship's side. This principle was covered in the case of Petersen v. Freebody & Co.[4] In this case, a cargo of spars was to be discharged "overside into lighters". The consignee provided lighters at the ship's side, but did not employ sufficient men in the lighters to take delivery within the time fixed for unloading. The shipowner sued for damages in respect of the delay. Held, by the Court of Appeal, that the shipowner was not bound to put the spars on board the lighters. His duty was simply to put them over the rail of the ship and within reach of the men on board the lighters. Consequently the consignee was liable for the delay in unloading. This responsibility is mean that tackle to tackle period. According to Article 4 of the Hamburg Rules, the period of responsibility was covered that "the period of during which the carrier is in charge of the goods at the port of loading, during the carriage and at the port of discharge". This is construed as covering the "port to port" responsible. Therefore the carrier is responsible for the damages resulting in taken in his charge from port to port.

In road carriage, it is defined that "the place of taking over of the goods and the place of discharged for delivery"[5]. Therefore it may responsible from the time when they received the goods for the carriage to the time when they delivered the goods to the consignee. It is nearly like the

[1] Article 10 of ASEAN Framework Agreement on Multimodal Transport, 2005.
[2] Section 17 of Multimodal Transport Law, 2014 is similar Article 10 of the ASEAN Framework Agreement, 2005.
[3] Article 1(e) of the Hague-Visby Rules, 1968.
[4] Petersen v. Freebody & Co., [1895] 2 Q.B. 294.
[5] Article 1(1) of CMR, 1956.

Hamburg Rule. In rail carriage, it is provided that "from the forwarding station to the destination station"[1]. It may agree to define the place by making special agreement. It means that port to port responsibility as sea carriage under Hamburg Rules. The period of responsibility in carriage by air is that "the period during which the goods are in charge of the carrier".[2] It may be air port to air port responsibility.

Under the United Nation Convention on International Multimodal Transport of Goods, the period of responsibility of the MTO includes "the period from the time he takes the goods in his charge until the time of their delivery[3]. It is almost the same as the Hamburg Rule and CMR.

According to the ASEAN Framework Agreement 2005, the period of responsibility of the MTO covers the period from the time he taken the goods in his charge to the time of their delivery.[4] It is similar to the UN Convention.

As regard the period of responsibility of the MTO, section 16 of Multimodal Transport Law 2014 provided that "the period from the time he takes the goods in his charge until the time of their delivery. It is similar to ASEAN Framework Agreement.

3. Exclusion of Liability

Although goods have been lost or damaged whilst in the custody of the shipowner, he is not necessarily responsible, for his liability in respect of them may have been excluded by the rules of the Common Law or by the express terms of the contract or by statute.

Common Law exceptions comprise act of God, act of Queen's enemies, inherent vice in the goods themselves, the negligence of the owner of the goods and a general average sacrifice. If cargo damages were caused by any of them, the sea carrier is not responsible for it. The carrier is entitled to exclude his liability if he can prove that the loss, damage or delay in delivery is in the scope of "the exclusions of the carrier's liability" under special Rules.

Under the Hague-Visby Rules, exclusion of liability covered fault in both the navigation and management of the ship. The sea carrier is not liable for loss, damage or delay in delivery if the carrier can prove that the loss, damage or delay in delivery caused by;- (a) act, neglect or default of the master, mariner, pilot or the servants of the carrier in the navigation or in the management of the ship,(b) fire unless caused by the actual fault or privity of the carrier, (c) perils, dangers and accidents of the sea or other navigable waters, (d) act of God, act of war, act of public enemies, (e) arrest or restrain of princes, rulers or people, or seizure under legal process, (f) quarantine restrictions, (g) act of omission of the shipper or owner of the goods, or his agent, (h) strike or lockouts or stoppage or restrain of labour from whatever cause, whether partial or general, (i) riots and civil commotions, (j) saving or attempting to save life or property at sea, (k) wastage in bulk or weight or any other loss or damage arising from inherent defect, quality or vice or the goods, (l) insufficiency of packing or marks, (m) latent defects not discoverable by due diligence, (n) any other cause arising without the actual fault or privity of the carrier, his agent or servants[5].

[1] Article 27(1) of CIM, 1980.
[2] Article 18(2) of the Warsaw Convention, 1929.
[3] Article 4.1 of UNCTAD/ICC Rules for Multimodal Transport Documents, 1992.
[4] Article 7 of the ASEAN Framework Agreement, 2005.
[5] Article 4, Rule 2 of the Hague-Visby Rules, 1968.

According to Article 5 of the Hamburg Rules, in the carriage to live animals, the sea carrier is not liable for loss, damage or delay resulting from any special risks inherent in those kinds of carriage.

The road carrier will be relieved of liability if the loss, damage or delay was caused:- by the wrongful act or neglect of the claimant, or by the instruction of the claimant, or by inherent vice of the goods, or by unavoidable circumstances, or by one of the special risks. The special risks are the use of open, unsheeted vehicles, or the lack or defective condition of packing of the goods, or the handling, loading, storage or unloading of the goods by the sender, the consignee or its servants, or the vulnerable nature of the goods, or the insufficiency or inadequacy of marks or numbers on the package, or the carriage of livestock[1]. If the road carriage is performed in vehicles specially equipped to protect the foods from the effects of heat, cold, variation in temperature or the humidity of the air, the road carrier cannot claim the benefit of the special risks such as the vulnerable nature of the goods, unless he prove that all steps incumbent on him in the circumstance with respect to the choice, maintenance and use of such equipments were taken and he complied with any special instructions issued to him. To be able to rely on the exception for special risks, the road carrier must prove that he took all steps "normally incumbent on him in the circumstances" and that he complied with any special instructions given to him[2].

The railway that received the goods for carriage together with the consignment notes is not liable for the loss, damage or delay was caused by the owner of the person entitled to the goods, inherent vice of the goods, unavoidable circumstances, one of the lists of inherent special risks.[3]The air carrier is not liable if he proves that he and his servants have taken all the necessary measures to avoid the damage, or that he was prevented from taking them[4]. Further, the carrier proves that the damage was caused by the negligence of the injured person; he shall be wholly or partly exonerated from his liability[5]. In addition, the carrier is not liable if he can prove that the damage was caused by inherent defect, quality or vice of that cargo, defective packing of that cargo performed by a person other than the carrier or his servants or agents, an act of war or an armed conflict, an act of public authority.

Under the UN Convention, the MTO is not entitled to limit his liability if he proved that the loss, damage or delay resulted from a personal act or omission of the MTO done with the intent to cause such loss, damage or delay, or recklessly and with knowledge that such loss, damage or delay would probably result[6]. Thus, a distinction is made between the MTO's own behaviour and the behaviour of others, and the MTO does not lose his right to limit liability in cases where he is only vicariously liable for acts or omissions of' other persons.

According to the ASEAN Agreement, The MTO entitles to relieve from his liability if he proves that the loss, damage or delay was caused by any of the circumstances:- force majeure; act or neglect of consignor, the consignee or his representative or agent; insufficient or defective packaging, marking, or numbering of the goods; handling, loading unloading, stowage of the goods effected by the consignor, the consignee or his representative or agent; inherent or latent defect in the goods; strike, lock-out, work stoppage, total or partial restraints on labour; with respect to goods

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[1] Article 17 of the CMR, 1956.
[2] Article 18 of the CMR, 1956.
[3] Article 36 of the CIM, 1980.
[4] Article 20(2) of the Warsaw Convention, 1929.
[5] Article 24 of Amended Warsaw Convention, 1955.
[6] Rule 7 of UNCTAD/ICC Rules for Multimodal Transport Documents, 1992.

carried by sea, or inland waterways, when such loss, damage, or delay during such carriage has been caused by; act, neglect or default of the master, mariner, pilot or the servant of the carrier in the navigation or in the management of the ship; or fire unless caused by the actual fault or privity of the carrier. However, always provided that whenever loss or damage has resulted from unseaworthiness of the ship, the multimodal transport operator can prove that due diligence has been exercised to make the ship seaworthy at the commencement of the voyage[1].

Under the Multimodal Transport Law 2014, the MTO entitles to relieve from his liability if he proves that the loss, damage or delay was caused by any of the circumstances:- act or neglect of consignor, the consignee or his representative or agent; insufficient or defective packaging, marking, or numbering of the goods; handling, loading unloading, stowage of the goods effected by the consignor, the consignee or his representative or agent; inherent or latent defect in the goods; strike, lock-out, work stoppage, total or partial restraints on labour; act of God or force majeure.

With respect to goods carried by sea, or inland waterways, when such loss, damage, or delay during such carriage has been caused by; act, neglect or default of the master, mariner, pilot or the servant of the carrier in the navigation or in the management of the ship; or fire unless caused by the actual fault or privity of the carrier.[2] However, always provided that whenever loss or damage has resulted from unseaworthiness of the ship, the multimodal transport operator can prove that due diligence has been exercised to make the ship seaworthy at the commencement of the voyage.

4. Limitation of Liability

According to Article 4(5) of the Hague Rules 1924, the sea carrier's liability for loss or damage to the goods is limited to 100 pounds sterling per package or unit. However this amount was amended in Article 4(5) of the Hague-Visby Rules1968 which is 666.67 SDR per package or unit or 2 SDR per kilogram of gross weight of the goods, whichever is the higher. According to annex I, article 6(1)(a) of the Hamburg Rules, liability limits were set at 835 units of account per package or other shipping unit or 2.5 units of account per kilogram of gross weight of the goods lost or damaged, whichever is the higher. The liability of the sea carrier for delay in delivery is limited to an equivalent to 2½ times the freight payable for goods delayed but not exceeding the total freight payable under the contract. However, the sea carrier is not entitled to limited his liability if it is proved that the loss, damage or delay in delivery resulted from an act or omission of the carrier done with intent to caused such loss, damage or delay or recklessly and with knowledge that such loss, damage or delay would probably result. If it is caused by his servants or agents, it cannot be limited to his liability. Under the Rotterdam Rules, liability limits were set at 875 SDR per package or unit or 3 SDR per kilogram of gross weight of the goods, whichever is the higher. This issue may be of crucial importance to the MTO if he falls within the definition of the carrier. It is also very important issue in cases when MTO, after paying damages to the cargo owner for the goods lost during the sea transport, brings recourse action against (maritime) performing carrier liable for the damage occurred. The (maritime) performing carrier also has the right to limit his liability according to the applicable conventions.[3]

[1] Article 12 of ASEAN Framework Agreement on Multimodal Transport, 2005.
[2] Section 22 is similar Article 12 of ASEAN Framework Agreement on Multimodal Transport, 2005.
[3] Jasenko Marin, The Harmonization of Liability Regimes Concerning Loss of Goods During Multimodal

Under the CMR as amended by the 1978 Protocol, the carrier's liability is limited up to 8,33 SDR per kg of gross weight short. The sender has the option to declare the value of the goods in the consignment note in order to avoid this limitation. In addition, the carrier has to refund in full the carriage charges, customs duties and other charges incurred in respect of the carriage of the goods. In case of delay in delivery damages are limited that is not exceeding the amount of the freight.[1] It is not exceeding the carriage charges. In case of willful misconduct on the part of the carrier, the road carrier's liability is unlimited. The liability of the rail carrier is limited to fixed amounts. It is 17 units of account per kilogram of gross-mass short and refund of carriage charges and other amounts incurred in connection with the goods.[2] The liability of the air carrier is limited to a sum of 17 SDR per kilogram[3]. But if the damage resulted from an act or omission of the air carrier, his servants or agents, done with intent to cause damage, his liability is unlimited. In addition, if the air carrier accepts the goods for carriage by air, without issuing an air way bill in accordance with article 8 of Warsaw Convention, his liability is unlimited as well.[4]

According to Rule 6.1of the UNCTAD/ICC Rules for Multimodal Transport Document 1992, unless the nature and value of the goods have been declared by the consignor and inserted in the multimodal transport document, the MTO shall not be liable for any loss of, or damage to, the goods in an amount exceeding the equivalent of 666.67 SDR per package unit, or 2 SDR per kilogram of gross weight of the goods lost or damaged, whichever is the higher. A higher limit is provided for cases where the multimodal transport does not, according to the contract, include carriage by sea or inland navigation. In such a case liability of the MTO is limited to an amount not exceeding 8.33 SDR per kilogram of gross weight of the goods lost or damaged, without any reference to package limitation which is more appropriate for sea transport. This solution is inspired by the corresponsive solution of the CMR. If a case was delay in delivery of the goods, it is limited to an amount not exceeding the equivalent of the freight under the multimodal transport contract[5]. Additionally, in the cases of "localised loss" in respect of which an applicable international convention or mandatory national law would have provided another limit of liability if a separate contract of carriage had been made for that particular stage of transport, then the limit of the MTO's liability shall be determined by reference to the provisions of such convention or mandatory national law.[6]

Under Article 14 0f the ASEAN Framework Agreement on Multimodal Transport, the MTO shall in no event be liable for any loss or damage to the goods in an amount exceeding the equivalent 666.67 SDR per package or unit, or 2 SDR per kilogram of gross weight of the goods lost or damaged, whichever is the higher. However, the multimodal transport does not, according to the contract, include carriage by sea or inland waterways, the limits of liability of the MTO are increased to an amount not exceeding 8.33 SDR per kilogram of gross weight of the goods lost or damaged. The MTO's liability for loss resulting from delay in delivery, or consequential loss or damage is limited to an amount not exceeding the equivalent of the freight under the MT contract.[7]

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[1] Article 23 of the CMR, 1956.
[2] Article 40 of CIM, 1980.
[3] Article 22 of Amendment Warsaw Convention, 1955.
[4] Article 9 of the Warsaw Convention, 1929.
[5] Rule 6 of UNCTAD/ICC Rules for Multimodal Transport Document, 1992.
[6] https://www.pravo.unizg.hr/_download/repository/Marin.pdf.p-10.
[7] Article 18 of the ASEAN Framework Agreement on Multimodal Transport is similar Rule 6 of UNCTAD/ICC Rules for Multimodal Transport Document, 1992.

The aggregate liability of the multimodal transport operator shall not exceed the limits of liability for total loss of the goods.

The MTO, however, is not entitled the limitation of liability if it is proved that the loss, damage or delay resulted from his personal act or omission done with the intent to cause such loss, damage or delay, or recklessly and with knowledge that such loss, damage or delay would probably result.[1]

According to Myanmar Multimodal Transport Law 2014, unless the nature and value of the goods have been declared by the consignor before the goods have been taken in charge by the multimodal transport operator and inserted in the multimodal transport document, the MTO shall in no event be or become liable for any loss or damage to the goods in an amount exceeding the amount of special drawing right imposed by rules issued under this law with reference to the international convention or the regional agreement related to multimodal transport for each package or for the gross weight of the goods lost or damaged.[2] If the multimodal transport does not, according to the contract, include carriage of goods by sea or by inland waterways, the liability of MTO shall be limited to an amount not exceeding the amount of special drawing right for the goods lost or damaged with reference to the rules issued under this Law composed by the international convention or the regional agreement related to multimodal transport for each package or for the gross weight of the goods lost or damaged. The MTO's liability for loss resulting from delay in delivery, or consequential loss or damage is limited to an amount not exceeding the equivalent of the freight under the MT contract.[3] The aggregate liability of the multimodal transport operator shall not exceed the limits of liability for total loss of the goods. The MTO, however, is not entitled the limitation of liability if it is proved that the loss, damage or delay resulted from his personal act or omission of the MTO done with the intent to cause such loss, damage or delay, or recklessly and with knowledge that such loss, damage or delay would probably result.

5. Time Bar for Suit

According to Hague-Visby Rules, the term of limitation within which claims against the sea carrier must be brought, is one year from the day of delivery.[4] Under the Hamburg Rules, it is two year.[5] The term of limitation for claims arising out of the carriage of goods by road is one year from the discharge of the goods. If it is willful misconduct by the carrier, the term of limitation is three years.[6] The term limitation for bringing claims against rail carrier is one year. However, in case of willful misconduct or fraud by the rail carrier, the term of limitation is two years.[7] The onus of proving willful misconduct or fraud on the part of the rail carrier rests on the claimant. The term of limitation for action on the air carrier is within two years from the date of arrival at the destination or ought to have arrived or the carriage stopped.[8] The term of limitation for claims arising out of the carriage of goods by road or by rail is one year. This provision is similar to

[1] Ibid, Article 20 is similar Rule 7 of the UNCTAD/ICC Rules for Multimodal Transport Document,1992.

[2] Section 26 of Multimodal Transport Law 2014 is similar Article 16 of the ASEAN Framework Agreement, 2005.

[3] Section 30 of Multimodal Transport Law 2014 is similar Article 18 of the ASEAN Framework Agreement, 2005 and Rule 6.5 of the UNCTAD/ICC Rules Multimodal Transport Document, 1992.

[4] Article 3 (6) of the Hague-Visby Rules, 1968.

[5] Article 20 (1) of the Hamburg Rules, 1978.

[6] Article 32 (1) of the CMR, 1956.

[7] Article 58 (1) of the CIM, 1980.

[8] Article 29 of the Warsaw Convention, 1929.

Hague-Visby rules. For the air carrier, the term of limitation of action is within two years. This provision is similar to Hamburg Rules.

Under The UNCTAD/ICC Rules for Multimodal Transport Document 1992, limitation of action is provided 9 months.[1] Thus, the MTO will be relieved from liability unless the suit is brought within 9 months after delivery of the cargo, or of the date when the cargo should have been delivered.

According to ASEAN Framework Agreement 2005, limitation of action is nine months. The period commences from the time of delivery of the goods, or if they have not been delivered, the date they should have been delivered or the date the consignee would have the right to treat the goods as lost.[2]

Under Section 42 of Multimodal Transport Law 2014, limitation of action shall be in accordance with specific promulgations of any rules, notification, order, directive and procedures issued under this Law. Unless such provision is provided it shall be performed in accord with the provisions in existing Laws. If it differs to international convention and regional agreement, there were be issued related to multimodal transport operation.

Conclusion

This paper mainly focuses on the liability of multimodal transport operator on the basis of the comparative analysis are of the Multimodal Transport Convention, Unimodal Transport Convention and Myanmar Law. When the goods are suffered the damages, in carrying the goods by multimodal transport, it known where the stage of damages occurred. The judge or arbitrator has difficulty to find the location the place where it was caused. It is going to be used by only one contract from the beginning to the end. The separate convention of multimodal transport could not have a location problem.

In order to uniform liability provisions for multimodal transport, commercial parties enacted national and regional laws which are based on United Nations Convention on Multimodal Transport of Goods 1980, UNCT AD/ICC Rules for the Multimodal Transport Document 1992 and Convention on Contracts for International Carriage of Goods Wholly or Partly by Sea, 2009(The Rotterdam Rules), among them 1980 UN Convention and The Rotterdam Rules are not yet come into force. UNCT AD/ICC Rules for the Multimodal Transport Document was entered into force in 1992. Most of European Countries and China, India and ASEAN organization in Asia have enacted national law in line with Multimodal Transport Convention. Myanmar as being a member of ASEAN, she also has enacted law for Multimodal Transport in line with the ASEAN Framework Agreement on Multimodal Transport.

In order to avoid conflict of laws problem and the different liability issues relating to multimodal transport operation, the shipper and carrier may strictly express the applicable law when they made the multimodal transport contract or ratifying the international conventions/regional regulation for multimodal transport. They can make only single contract of carriage. If fail to do so, it will be treated the conflict of laws problems for the different liability issues. In my conclusion single contract for multimodal transport system is the best way to solve

[1] Rule 10. UNCTAD/ICC Rules for Multimodal Transport Document, 1992.

[2] Article 23 of the ASEAN Framework Agreement on Multimodal Transport, 2005.

the legal issue of liability in transport industry and it will help the development of the country's economy with less issue any form of international and regional legal instrument.

Acknowledgement

I would like to express my heartfelt thanks to Members of Myanmar Academic Art and Science for their permission relating to research paper presentation for Myanmar Academic Art and Science Research Journal. I especially thank to Professor (Head) Dr Thwin Pa Pa, Department of Law, Mandalay University for her encouraging and guidance.

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Convention on the Contract for the International Carriage of Goods by Road (CMR), Geneva (1956)

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J. Myanmar Acad. Arts Sci. 2021 **Vol. XIX. No.8**

DEFORESTATION IN MYANMAR: AN EXAMINATION OF ILLEGAL TIMBER SUMGGLING

Hnin Hnin Saw Hla Maung[1]

Abstract

Myanmar's neighbors: Thai and China have much demand for timber from Myanmar. These countries suffer from deforestation and consequently seem to take up forest areas near the Thai-Myanmar border and in the Kachin State sharing the China border. There is much Logging in Myanmar, and then logs are smuggled to China, Thailand, and a few in the others. The weakness of law, regulations, management and security and the international demand for hardwoods has caused illegal timber smuggling especially, remoteness areas with a few legal compliances. It makes some kind of areas, such as Kachin, serious deforestation. There are many cases relating to illegal timber smuggling in Sagaing and followed by Bago. As a result, numerous illegal logging operations caused environmental damage such as soil erosion, river contamination, and increased flooding. To prevent it, the Government imposed the export of raw logs in 2014, and Forest Law, 2018, etc. Even though the legal framework to control the illegitimate timber trade has developed, illegal timber smuggling continues.

Keywords: deforestation, illegal logging, smuggling

Introduction

Illegal timber smuggling is one of the causes of deforestation. Myanmar suffers the world's highest deforestation rates. A large area of forest of the country places long bordering with China and very closed to Thailand and India as well. Strategically, these places are important borders by tracts of forest. Due to the size and scope of Burma's forests, it is difficult for government organisations like Forest Department to regulate timer smuggling. The deforestation rate has especially increased in 2010-2015. Of major reasons for forest losses, Myanmar's illicit timber smuggling shows big deals in the region. The research includes illegal timber smuggling and forest cover, institutional arrangement, the legal framework for combating illegal timber smuggling, enforcement activities combating Illegal Timber Smuggling, and seizure and implementation of prevention of illegal timber smuggling.

Illegal timber Smuggling and Forest Cover

Illegal timber smuggling includes timber smuggling export/import of tree species banned under national or international law, such as the Convention on International Trade in Endangered Species of Fauna and Flora (CITES Appendix I)[2]; Export/import of tree species listed under CITES without the appropriate permits (CITES Appendix II and III)[3]; Export/import of log, lumber or other timber product in contravention of national bans, unauthorized movement of timber across district or national borders; movement of illegally logged timber from forest to market and exporting volumes of forest products in excess of the documented export quantity.[4]

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[1] Dr, Professor, Department of Law, University of Yangon.

2 Article III of Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973.

3 Article IV and V of Ibid.

4 Mikaela Nilsson Rosander, Current Issues and Opportunities for Sida/SENSA Engagement in Southeast Asia, Regional Community Forestry Training Center for Asia and the Pacific (RECOFTC),2008, p.5.

Forest resources are conserved, managed, and utilized in a sustainable manner by the establishment of Reserved Forests (RFs), Protected Public Forests (PPFs), and Protected Areas (PAs). RFs are for production, PPFs are local supply and PAs are for conservation.[1]

Myanmar's almost 29 million hectares (ha) of forest are home to one of the world's 36 hotspots of biodiversity (Conservation International 2020), as well as much of the remaining patches of contiguous natural forests in peninsular Southeast Asia. Despite this importance, 27 percent of Myanmar's forests, or 10.7 million ha, was cleared between 1990 and 2020.[2]

Since 2000, the rate has been accelerating even as the Union Government of Ministry (UGoM) put in place several initiatives to stem the deforestation, including a logging moratorium, reductions in the Annual Allowable Cut (AAC) for industrial forestry, and trade bans (started April 1, 2014). According to Global Forest Watch (GFW), at least one-third of this deforestation was driven directly by logging (Global Forest Watch 2020). Another study found that "inside forest reserves, excessive timber extraction primarily of teak (*Tectona grandis Lamiaceae*) but presumably also other high value species seems to be the major underlying driver of forest degradation".[3]

Institutional Arrangement

Ministry Office coordinates and facilities the tasks of the Forest Department (FD), Myanmar Timber Enterprise (MTE), Dry Zone Greening Department, Environmental Conservation Department, University of Forestry and Survey Department following the directives of MONREC, and deals mainly with policy matters and issues related to forestry and environmental conservation.[4]

Forests are largely owned and managed by the Forest Department, an agency under the Ministry of Natural Resources and Environmental Conservation (MONREC); the Forest Department sets the annual allowable cut (AAC) of timber for the country. The Myanmar Timber Enterprise (MTE), also under MONREC, is authorised to log forests by the Forestry Department; MTE then transports logs to depots and sells to private companies, which can only purchase logs from the State.[5]

Exports are supposed to be approved by the MTE, and exported through ports in Yangon[6], with the Forest Department approving private sector exports. Cross-border trade in illegally harvested timber to neighbouring countries such as China, India and Thailand is significant.[7] The process applies to manage natural forests and conversion forests. Currently, most timber is harvested from natural forests.[8]

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1 Section 2 (h), (J), (k) of the Forest Law, 2018.

2 Treue, Thorsten, Oliver Springate-Baginski, and Kyaw Htun. 2016. Legally and Illegally Logged out; Extent and Drivers of Deforestation & Forest Degradation in Myanmar. Yangon: EcoDev/ALARM. Accessed December 8, 2020.

3 *Ibid*.

4 https://www.monrec.gov.mm/department/8.

5 Leal, I. Iona Leal, EU FLEGT Facility pers. comm. to UNEP-WCMC 23 March 2017. (2017).

6 Woods, K. Timber Trade Flows and Actors in Myanmar: The Political Economy of Myanmar's Timber Trade. (Forest Trends, 2013).

7 UNODC. Criminal justice response to wildlife and forest crime in Myanmar, 2015.

8 MFCC. Myanmar Timber Legality Assurance System (TLAS). (Myanmar, Working Group of the Timber Certification Committee of Myanmar, 2013).

Institutions under the Ministry of Natural Resources and Environmental Conservation (MONREC) are performing their specific duties and responsibilities mainly related to forestry and environmental conservation.

As combating illegal timber trafficking and wildlife crime is a cross-cutting issue, Forest Department is promoting collaboration with international organizations, government institutions, community-based organizations (CBOs), and non-government organizations (NGOs) in law enforcement activities. Law enforcement task force is also conducted with the following organizations: Forest Department, National Police Force, Customs Department, Union Attorney General Office and Directorate of Trade and General Administrative Department.[1] The export process was witnessed by Minister Ohn Win and supervised by the Forest Department, the General Administration Department, the Custom Department, the Immigration Department and the Myanmar Police, etc.[2]

Myanmar is also participating in global and regional initiatives of combating illegal wildlife and timber trafficking such as United Nations Office on Drugs and Crime (UNODC)[3], The International Criminal Police Organization (ITERPOL)[4] and International Union for Conservation of Nature and Natural Resources **(IUCN),** The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat, etc.

Legal Framework for Combating Illegal Timber Smuggling

To protect and conserve natural environment, "ensure environmental sustainability Goal" is one of the Millennium Development Goals (MDGs).[5] The Republic of the Union of Myanmar shall protect and conserve natural environment.[6] Every citizen has the duty to assist the Union in carrying out the following matter, such as environmental conservation.[7]

Myanmar's evolving governance structures relating to forest are for the protection of significant deforestation and degradation of the country's forests. In order to evaluate specific legal compliance in the forest sector, one must identify appliance legislation governing specific legal criteria. The latter lists are the framework of legislation in Myanmar directly applicable to forest management and transport of timber. They are Environmental Law, 2012; Forest Law, 2018; Forestry Policy, 1996; Forest Rules, 1995; National Code of Practice for Forest Harvesting, 2019; MTE Extraction Manual, 2015; Community Forestry Instructions (CFI), 2019; National Environmental Policy of Myanmar, 2019; Myanmar Climate Change Policy, 2019; Myanmar's National Biodiversity Strategy and Action Plan (NBSAP) 2015-2020; Protection of Wildlife and Wild Plants and Conservation of Natural Areas Law, 2018; Notification 127/2019; and international commitments.

The Environmental Conservation Law, 2012 is designed "to reclaim ecosystems as may be possible which are starting to degenerate and disappear" and to ensure that "The relevant Government departments and Government organizations shall, in accord with the guidance of the Union Government and the Committee, carry out the conservation, management, beneficial use, sustainable use and enhancement of regional cooperation of…forest resources."[8]

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1 Notification No.(20/2011).
2 ITTO. Tropical Timber Market Report 24, no. 2 (January 2020).
3 UNODC, Criminal Justice response to wildlife and forest Crime in Myanmar: A Repaid Assessment, Pg.2.
4 Forest Department, Forest Mirror, October, 2017, Pg.14.
5 The Millennium Development Goals (MDGs), 2020.
6 Section 45 of the the 2008 Constitution of the Republic of the Union of Myanmar.
7 Section 390(b) of Ibid.
8 Environmental Conservation Law No 9/12 (2012).

The Forest Act, 1902 was repealed by the Forest Law, 1992 (The State Law and Order Restoration Council Law No. 8/92). The Forest Law, 2018 replaced in the Forest Law, 1992. However, rules, notifications, directives issued under the Forest Law, 1992 may continue to be applicable in so far as they are not inconsistent with this Law.[1]

The National Forest Master Plan provides a guiding framework for five- and ten-year forest management plans developed by the Forest Department for each forest district, based on estimated figures for timber and non-timber forest products.[2]

The Forest Rules, 1995 which were issued soon after the Forest Policy (1995), focus on increased formation and protection of reserved forests and protected public forests, the sharing of forest management responsibilities with local communities, the establishment of fast-growing plantations on degraded forestland to conserve soil, water and biodiversity, the harvesting of timber and other forest products in an environmentally sound manner and the establishment of wood-based industries.

Enforcement Activities Combating Illegal Timber Smuggling

In 2005, 600000 m3 out of one million of illegal logs came from Dehong. Dehong is important one in illegal timber trade. Timber can directly be exported to the province from "further afield", such as northern Shan State and Sagaing Division because transportation is quite good in border line on the part of Myanmar. At its log plot, most of the timber is those from nearby the Madalay and South Kachin area, Monywa and Ingyi, and Tamalan and Padauk derived from Kalay and Tamu, in Saging Division.[3]

In 2006, when illegal logging and trade took place in northern in Myanmar and the central Government realized that because of illegal purchasing business, the government loses much revenue. In May 2006, an agreement regulation on the timber trade between Myanmar and Yunnan was made.[4]

The high value of the trade may reflect increasing Chinese demand for luxury hardwoods such as Padauk and Tamalan, two species used in the production of high-end rosewood furniture. If the trade continues at current growth level, there are concerns that Padauk and Tamalan are soon being logged to commercial extinction.[5] For example, the logging situation in Kachin mostly found illegal which made the environmental degradation. The mountains are completely mined out.[6]

Qing and Ming dynasty furniture in China made with high-value luxury redwood, or rosewood species – known as Hongmu – is placing completely unsustainable demands on forests throughout the Mekong region and worldwide. Hongmu species include tamalan / Burmese rosewood, Burmese padauk, etc.

Tamalan is Endangered A1cd ver 2.3 (Needs updating)[7] A 1998 Dutch study proposed a CITES Appendix II listing.[8] Also, Legal Status in Myanmar: both tamalan and padauk are "group

1 Section 56 of Forest Law, 2018.
2 National Forest Master Plan 2001–2031.
3 EIA, "The Illicit Overland Timber Trade between Myanmar and China", 2015, Pg. 10-12.
4 Office of Yunnan Provincial People's Government, "Interim measures to manage timber and mineral cooperation between Myanmar and Yunnan Province", May 11, 2006.
5 ITTO, Status of Tropical Forest management, 2005.
6 EIA, "The Illicit Overland Timber Trade between Myanmar and China", 2015, Pg. 9.
7 http://www.iucnredlist.org/details/33247/0 & http:// www.iucnredlist.org/details/32306/0.
8 https://archive.org/stream/ contributiontoev98wcmc/contributiontoev98wcmc_djvu.txt.

1 species" and are classified as "reserved" in Myanmar. Therefore, they can be harvested and traded with permission of Ministry of Environmental Conservation and Forestry (MOECAF).[1]

The Forest Department estimated 100,000 hoppus tons of timber is smuggled annually, taking "a heavy toll on the ecosystem especially in Kachin and Shan States Kachin State, Shan States and the Sagaing Division".[2]

For Appendix I species, an import and export permit is required and may be issued only if: the specimen was legally obtained; the trade will not be threat to the survival of the species; and an import permit has already been issued.[3] For species under Appendixes I and II, CITES insists on sustainability, and requires Non Detriment Findings (NDFs) in determining whether the level of harvest of a species for export would be threat to the species' ecosystem throughout its range through its Review of Significant Trade.[4]

And the ministry of MONERC issued a notification in accordance with Section 30 of the Forest Law, 1992 restricted to use of the chain saw in 2013.[5] MTE also controls the timber trade and logging operations. In 2013, after a large amount of number of 35,000 tonnes of illegal timber including 5,000 tonnes of teak being seized by the Government,[6] the authority issued prohibition of log export in 2014.[7] The hammer mark of MTE must be put on all timber and they must be shipped through Yangon port to be legal trade in the notification.

MTE has responsibility for doing a hammer marking stamp for logs extracted. Yet due to without being distinguished by MTE on original places, timber from various areas may be mixed.[8] It cannot be able to trace back on timber original places, routes which is one of the difficulties to explore timber smuggling.

It was expected that when China's ban on the import of logs from Myanmar ended at the end of the year, as the recognition of Myanmar's log export ban and stop felling and smuggling of timber from the forests in northern Myanmar".[9] In 2015, MoU with China aimed to halt cross-border timber trade.

Until recently, there was a special case involving 15 foreign suspects who were acquitted later on.[10] Similarly, as Major seizure in Kachin State in January 2014, 155 Chinese labourers were arrested and very soon later released "life imprisonment" with the "present of Myanmar".[11] Consequently, that legal enforcement and implementation under forest law and rules would be weak for prevention of illegal timber smuggling.

Accordingly, The FD Deputy Director General commented that smugglers were "attempting to use a new route for illegal exports. Previously, smuggled timber crossed the border

1 EIA, Myanmar's Rosewood Crisis, June, 2014.
2 ITTO. Tropical Timber Market Report 19, no. 1 (January 2015).
3 Hewitt, J. 2007. An assessment of tree species which warrant listing in CITES. Friends of the Earth Netherlands; Keong C.H. 2006. The role of CITES in combating illegal logging – current and potential. TRAFFIC Online Report Series No. 13. TRAFFIC International.
4 Article III and IV of CITE; Mikaela Nilsson Rosander, ILLEGAL LOGGING: Current Issues and Opportunities for Sida/SENSA Engagement in Southeast Asia, p.54.
5 Notification 29/2013.
6 Eleven Media, "Myanmar seized 35000tons of Illegal Timber over past nine months", January 19, 2014.
7 Export of raw logs and exports through ports except Yangon, 2014.
8 Forest Trends, Analysis of the China-Myanmar Timber Trade, December, 2014, Pg. 5-6.
9 ITTO. Tropical Timber Market Report 19, no. 20 (October 2015).
10 UNODC, "Criminal Justice Response to Wildlife and Forest Crime in Myanmar", November 2015, Pg. 17.
11 *Ibid*, Pg. 3.

with China, but since the crackdown on the border and strict controls in China, smugglers have switched to ocean transport out of Yangon Port”.[1]

Some of the most serious deforestation has occurred in conflict areas. Large area of forest of the country places out of the control of authority concerned, such as Chin State and Kachin State. Strategically, these places are important borders by tracts of forest. Karen State bordering with Thailand, runs a system of “modified procedures”, where it is weakness in legal compliance. But, logging in such kind of areas is taken into granted illegal under Myanmar forestry laws.[2]

And, conflict between the government and ethnic groups and the lack of cooperation among relevant ministries is exacerbating the problem”.[3] The FD reported that “illegal timbers are being seized almost every day largely as a result of the Community Monitoring and Reporting System (CMRS)…Between 2016 and 2019, 160,000 tons of illegal teak was seized and 23,000 offenders including 59 foreigners were apprehended…U Tin Aye, former director of the Forestry Department and now acting Secretary of Myanmar Forest Association said timber is smuggled to China and other neighbouring countries but the Forestry Department alone is not capable of preventing these cross border activities.[4] Thus, there has been necessary for transboundary collaboration, cooperation among relevant ministries to combat illegal timber trafficking.

The volume of teak confiscated by the FD is almost same as the annual allowable cut for 2017-18.[5] Myanmar has harvested well above the sustainable limits set by the FD through their Annual Allowable Cut. Reality is likely much worse.[6]

In some cases, foreigners may give certain amount of money to inhabitants in order to assist them for logging. Lack of branch of Forestry Department in some conflict areas seems to drive such kind of cases. According to the organization of the Forest Department, each working person is responsible for 8882 acres of forest, which is five or six times compared to Thai, Cambodia, and Lao situations.[7] And over the past five years, few foreigners took part in trafficking timber cases. According to the Myanmar Police Force reports, there was weakness in investigation accused in the area of the illegal timber trade.[8]

The Regional Minister of Forestry for Bago “stated there has been an increase in illegal logging in the Bago Yoma Range where the 10-year logging ban has been in place since 2016-17…the Minister proposed activating an existing regulation which restricts entry into the forest.”[9]

“According to the Sagaing Region Forestry Department, corruption, poverty, limited employment opportunities and high market demand are the causes of illegal felling and deforestation...Sagaing Region and Shan State have experienced the worst illegal felling…According to the Minister, Forestry staff were recently attacked while apprehending suspects.”[10]

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1 ITTO. Tropical Timber Market Report 21, no. 3 (February 2017).

2 EIA, “The Illicit Overland Timber Trade between Myanmar and China”, 2015, Pg. 5.

3 ITTO. Tropical Timber Market Report 24, no. 6 (March 2020).

4 Forest Trends, Illegal Logging and Associated Trade in Myanmar: Impacts of Government Measures to Address Illegal Logging, January 2021, P.47.

5 ITTO. Tropical Timber Market Report 21, no. 8 (April 2017).

6 Forest Trends, Illegal Logging and Associated Trade in Myanmar: Impacts of Government Measures to Address Illegal Logging, January 2021, P.27.

7 WWW.forestdepartment.gov.mm/hluttaw_data (18.5.2017).

8 UNODC, “Criminal Justice Response to Wildlife and Forest Crime in Myanmar”, November 2015, Pg.18.

9 Forest Trend, Illegal Logging and Associated Trade in Myanmar: Impacts of Government Measures to Address Illegal Logging, January 2021, Pg. 47.

10 ITTO. Tropical Timber Market Report 21, no. 9 (May 2017).

Harwell and Blundell have further documented that illegal logging and the associated revenues can be weak the rule of law, fuel corruption, and hamper development.[1] Logging in Myanmar has historically suffered issues of corruption, weak forest governance and law enforcement.

The Myanmar Timber Merchants Association (MTMA) estimated that "illegally harvested timber leaving the country via overland routes could be worth over US$200 million annually and that the extent of the problem has been made worse by an escalation of the conflict between government forces and ethnic groups in the Shan and Kachin states… . Exported logs are being 'legalised' through the payment of local **taxes** where the logs will be processed.[2] It hinders the good governance of to implement sustainable forest management in order to support sustainable development.

Seizure and Prevention of Illegal Timber Smuggling

Between the fiscal year 2009-10 and 2015-16 (up to September), 87,206 illegal timber trafficking cases were detected. Sagaing Region is the highest with 16,577 cases followed by Bago Region 157,87 cases.[3] In Fascal Year 2017-18 (April to November), 6637.9 tonnes of teak, 9028.7 tonnes of hardwood and 16820.3 tonnes of others were seized.[4] Between the fiscal year 2018-19 and 2019-20, illegal timber trafficking cases, accused in Sagaing, followed by Bago are more than the other regions.[5]

Currently, the forest department not only conserves the environmental factors and maintains a sustained yield of the forest products, but search, arrest and seizure illegal timber and forest products by the following ways of:

(a) Regularly or casually search and arrest by the Town or District Forest Department;[6]

(b) Search and arrest illegal timber by monthly columns according to Region or State;[7]

(c) Inspect and arrest by DG Office, the Forest Department, depending on the information;[8]

(d) Search and arrest by Chindwin and Irrawaddy Columns;[9]

(e) Arrest collaborating with Tatmadaw, and other related organizations;[10]

(f) Arrest collaboration with Forest Security Polices in 8 Regions/States, 19 Districts;[11]

(g) Arrest by Community Monitoring and Reporting System- CMRS taking information.[12]

The Forest Law, 2018 highlights "forest administration", "permission for exaction of forest products". The 2018 Forest Law also expands "search, arrest and administrative action", and encourages a stronger community participation, institutional cooperation and related sectors

1 E. Harwell, Forests in Fragile and Conflict affected States, Washinton DCf Program on Forests, 2010.
2 ITTO. Tropical Timber Market Report 17, no. 9 (May 2013).
3 MOECAF, "Summary on Combating Wildlife Crimes and Illegal Timber Trafficking in Myanmar", 2015.
4 Forest Department, Forest Mirror, December, 2017, Pg.12.
5 https://www.forestdepartment.gov.mm/illegal_logging.
6 Forest Department, Forest Mirror, April, 2018,Pg 6.
7 Forest Department, Forest Mirror, November, 2019 Pg 8.
8 Forest Department, Forest Mirror, November, 2017 Pg 8.
9 Forest Department, Forest Mirror, September, 2017, Pg 10.
10 Forest Department, Forest Mirror, August, 2019 Pg 6.
11 Forest Department, Forest Mirror, April, 2018, Pg 6.
12 Forest Department, Forest Mirror, December, 2019 Pg 8-9 and 2020, Pg 7-8.

collaboration in search, arrest of illegal trafficking. The Law also provides reforestation, prevention of deforestation such as offences, and penalties to some extent.

After 2018 most of the cases can be taken action under forest law, 2018.[1] Whoever extracts moves or keeps in possession of over one ton of teak timber without a permit shall be punished with imprisonment for a term from a minimum of five years to a maximum of 15 years and shall also be punished with a fine not exceeding three million kyats.[2] Illegal timber trade is a great crime in some countries.[3] Therefore, it would be considered in the same way in Myanmar to prevent deforestation.

Moreover, Myanmar identifies illegal logging as an environmental matter, and not as a criminal act, which makes the Forest Department to suit against the offenders. Mostly, in illegal timber smuggling cases, it is only the accused who is punished and not the persons behind the scene.

Conclusion

Forest Law enforcement in Myanmar is weak. FD is continuously making efforts to improve law enforcement and fight illegal timber smuggling, but its resources are extremely limited. Although the theoretical framework for sustained yield forest management exists, the policies, laws and rules do not appear to be followed in practice. FD does not have a presence in many areas where illicit timber smuggling occurs especially along the border with China, and there is a general lack of resources to investigate possible crimes.

On the other hand, the demand on timber is growing in the neighbouring countries and consequently, illegal timber trade is conducted by several illegal means and ways. One of the challenges for combating illegal timber smuggling is the security problem in the border area that law enforcement is fragile. Community monitoring and reporting system had developed to fight illegal timber smuggling. But, it would be also necessary for the cooperation of ethnic armed groups across the country to combat illegal timber smuggling. Moreover, there has been necessary for transboundary collaboration, cooperation among relevant ministries to combat illegal timber trafficking.

And another problem is that illegal logging is still classified in Myanmar as an environmental matter, and not as a criminal act that makes question for the FD to suit against the offenders. Illegal timber sumggling is a great crime in some countries. It should therefore be considered in the same way in Myanmar. In order to overcome such difficulties, it would instantly need to reinforce above the weaknesses.

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J. Myanmar Acad. Arts Sci. 2021 **Vol. XIX. No.8**

COMPREHENSIVE STUDY ON LAWS REGULATING MEDIA IN MYANMAR

Hnin Nwe Htwe[1]

Abstract

The media is the essential one in the society and it supports not only for producing, gathering and disturbing news but also entertaining for the peoples. The media can affect the political, economic, social and religious security of a country. The effect of media can be negative or positive for the society. In a state, the media is controlled by various regulation systems. The media regulation system may be taking legal action, licensing, censoring and creating code of conduct. In Myanmar, there are many ways to regulate the media such as taking action by enacted law, licensing, examining by censor board and abiding the code of conduct created by related Councils. Most of the media regulation system is controlled by the state government but nowadays, self-regulatory bodies are also created and allow to regulate the media. In Myanmar, the authorities of licensing for all media such as press media, broadcasting media and digital media are solely controlled by the related Ministry. Myanmar Media regulation system can be seen as the strict regulation systems because of many national laws that can affect media sectors and controlling systems.

Keywords: News Media, Entertainment Media, New Media, Licensing, Censorship, Code of Conduct

Introduction

The media originated with press media since the ancient time. Nowadays types of media are improving more and more. The terms media includes press media or news media, entertainment media including video, television and radio broadcasting, and the latest new media or digital media including social media. The role of the media is important for a country and the regulation system of the media can reflect the situation of a country. Myanmar is a country that considers as a partly-free status for media freedom under International Standards. The media can be regulated by different ways. Under legal regulation system, the media can be controlled by government by means of imposing penalties, licensing and censorship systems. Censorship can also classify many types, such as moral censorship, military censorship, religious censorship, educational censorship and political censorship. As a self-regulation system, self-regulation bodies such as media press council can regulate the media by means of code of conducts, editorial independence and professional guidelines.

This paper focuses on national laws related with media in Myanmar and examines the all regulation systems for all kinds of media under the laws. The purpose is to highlight media regulation system and to improve media laws in accordance with the modern age.

Materials & Methods

This paper used two different methods of gathering the national laws and analysis on media regulation system for all news media, entertainment media and digital media. The materials are national laws, books, articles (including on the internet) and cases.

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The Media

Media, the plural form of *medium*, refers collectively to the print media (books, magazines, and newspapers); broadcast media (television and radio); digital media (sometimes referred to as new media, including internet, cell phones, and other medium that uses computer-based technology); and the entertainment media (all of these, plus movies, recordings and video games).[1]

The phrase "the media" began to be used in the 1920s. The notion of "mass media" was generally restricted to print media up until the post-Second World War, when radio, television and video were introduced. The audiovisual facilities became very popular, because they provided both information and entertainment, because the color and sound engaged the viewers/listeners and because it was easier for the general public to passively watch TV or listen to the radio than to actively read. In recent times, the Internet has become the latest and most popular mass medium. Information has become readily available through websites, and easily accessible through search engines. One can do many activities at the same time, such as playing games, listening to music, and social networking, irrespective of location. Whilst other forms of mass media are restricted in the type of information they can offer, the internet comprises a large percentage of the sum of human knowledge through such things as Google Books. Modern day mass media consists of the internet, mobile phones, blogs, podcasts and RSS feeds.[2]

Mass media which started from printed material in ancient times has gradually been developing and today many kinds of new media have emerged. Although the printed media or press media as the very first media was formerly very useful, important and popular, with the advance in technology, several other kinds of media were invented and nowadays, their use and popularity has spread rapidly all over the world.

Media Regulation

Media regulation means the whole process of control or guidance, by established rules and procedures, applied by governments and other political and administrative authorities to all kinds of media activities.[3]

Types of media regulation may be legal regulation, self-regulation and co-regulation system. The legal regulation system includes the imposing of penalties or taking actions under statute law or licensing systems or censorship systems of a state.

The imposition of penalties is the most straightforward method of regulating speech and expression as it is a powerful method of controlling the publication of information. Licensing is a method employed by governments and authorities to restrict activities that have a possible negative effect on society or certain members of society. It is a powerful tool of control and regulation.[4] Although licensing is not legitimate, purely technical systems of registration may be, as long as the specific criteria for registration are reasonable.[5]Censorship has been widely used throughout the history by kings, religious organizations, governments and communities.[6] Funk & Wagnall defined

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[1] George Rodman, Mass Media in a Changinh World History Industry Controversy, 3rd edition, 2010, p-7.
[2] Ajanta Bhattacharyya, History of Mass Media, Bazzle.com, 2011.
[3] http://www.le.ac.uk/oerresources/media/ms7501/mod2unit11/page_01.htm
[4] Teo Yi-Ling, Media Law in Singapore, 2003, p-3.
[5] Assessment of Media Development in Myanmar, UNESCO and IMS, 2016, p-41.
[6] Kyaw Thu, The Impact of Censorship on the Development of the Private Press Industry in Myanmar/Burma, 2012, p-9.

censorship as "supervision and control of the information and ideas that are circulated among the people within a society. In modern times, censorship refers to the examination of books, periodicals, plays, films, television and radio programs, news reports, and other communication media for the purpose of altering or suppressing parts thought to be objectionable or offensive." "Censorship is an official prohibition or restriction of any type of expression believed to threaten the political, social, or moral order. It may be imposed by governmental authority, local or national, by a religious body, or occasionally by a powerful private group."[1]

At present, human rights are being strongly advocated all over the world. So, the print media have been given freedom from censorship to express, publish, or distribute information, except in some politically restrictive countries. After moving to democracy society around the world, the media regulation systems are also changing to support media freedom. And some serios media regulation systems are canceled in most countries. But new media regulation systems are also creating to control the digital media, especially social media.

Media Regulation under National Laws

Myanmar is a country that possesses strict media regulation system. There are many national laws that can regulate to the media such as the Penal Code 1861; sedition (S-124 A), sale of obscene book (S-292 (a)), deliberate and malicious acts intended to outrage religious feeling of any class by insulting its religion or religious beliefs (S-295 A), defamation (S-499), printing or engraving matter known to be defamatory (S-501), statements conducing to public mischief (S-505), the Myanmar Official Secret Act (1923), the Television and Video Law (1996), the Press Law (2014), the Printing and Publishing Enterprise Law (2014), the Telecommunication Law (2013), the Electronic Transactional Law (2014) etc.

News Media Regulation

Myanmar's first newspaper, the Maulmain Chronicle newspaper was introduced for a handful of English-speaking readerships in 1836 in the city of Moulmein in British held Tenasserim. After 1988, The Newlight of Myanmar, Myanma Alin and Kyemon (The Mirror) dailies continued to be published. During the period 1962 to 2012, Myanmar did not have freedom of press and most of the newspapers were government owned. In October 2012, Myanmar's state newspapers became a public service media and were revamped with a new governing body. The new committee adopted necessary policies and programmes, ethics and principles to transform the newspapers into public service media and in August 2013, privately run daily newspapers hit the newsstands in the country.[2]

For news media, the Press Law and the Printing and Publishing Enterprise Law were enacted in 2014.

Section 2 (a) of the Press Law 2014 defines "press" means the public information industry carried out such as searching, acquiring, possessing, recording the news, analysising, distributing the information, by using the form of letter, voice, picture, television, figure, picture design by

[1] The Columbia Encyclopedia, Sixth Edition. 2001.

[2] Dr. Cho Cho Thwin, Media and Communication Systems in Myanmar, pp-2 and 3.

printing media, television media, internet media taking responsibility by the editor or any other means.[1]

For press media, prior censorship system was canceled under Section 5 of the Press Law 2014. And it was replaced with the licensing system. Under Section 4 of the Printing and Publishing Enterprise Law 2014,

"(a) The printers and publishers who wish to perform the printing and publishing enterprise shall apply for the recognition of their businesses to the Ministry with complete and correct facts.

(b) The body based locally or internationally company or organization wishing to establish a news agency shall apply for the recognition of their businesses to the Ministry with complete and correct facts."[2]

The Press Law provided that the publicated text of news media industry has the right to be exempted from censor but need to apply recognition from the Ministry. The recognition means the same as the making license for publication and for press media, the licensing system can be assumed as one kind of censorship system.

Section 9 of the

And as the terms to be complied for Printing and Publishing Enterprise, Section 8 of the Printing and Publishing Enterprise Law 2014 provided that

"The printer or publisher shall not print or publish the publications contained in any of the following matters:

(a) expressing the matters to be affected the ethnic groups or the citizens racially, religiously or culturally;

(b) expressing the matters to be affected national security, rule of law, community peace and tranquility, or equality, freedom, justice and rights of every citizen;

(c) expressing obscene words;

(d) encouraging and inciting crimes, brutality, violence, gambling, and the offence of narcotic drugs and psychotropic substances."[3]

These terms exist as the censored terms covering for all publishers. And the offences and penalties shall be punished with a fine only.

In early 2014, the Myanmar Press Council drafted a Code of Conduct (COC) that has been distributed across the country.[4] The code of conduct, issued on May 3, applies to all independent media organizations and covers 27 thematic areas, including politics and election reporting, reporting on religion, using leaked or confidential information, protecting sources, relations with government officials, and conflicts of interest. It applies to all news media organizations and journalists from all print, broadcast and online media.[5] The code of conduct intends to self-

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[1] Section 2 (a) of the Press Law, 2014.
[2] Section 4 of the Printing and Publishing Enterprise Law, 2014.
[3] Section 8 of the Printing and Publishing Enterprise Law, 2014.
[4] Assessment of Media Development in Myanmar, UNESCO and IMS, 2016, p-68.
[5] http://www.mmtimes.com/index.php/national-news/10278-media-code-of-conduct-finalised.html

censorship system as a soft regulation system. Section 9 of the Press law mentioned duties and ethnic for the Press Men and except Section 9 (h) the offences and Penalties shall be punished with a fine. But for Section 9(h), any press man shall be taken action under any existing law.

The Press law and the Printing and Publishing Enterprise Law are the laws that directly concern to the press media but other national laws are also covering press media.

The Penal Code 1861 provided that;

"Section 124 A Whoever by words, either spoken or written, or by signs, or by visible representation, or otherwise, bring to attempts to bring into hatred or contempt, or excites or attempts to excite disaffection towards [the Government established by law for the Union or for the constituent units thereof,] shall be punished with transportation for life or an shorter term, to which fine may be added, or with imprisonment which may extend to three years, to which fine may be added, or with fine."[1]

"Section 292 (a) Whoever sell, lets to hire, distributes, publicly exhibits or in any manner puts into circulation, or for purpose of sale, hire, distribution, pub-lie exhibition or circulation, makes, produces or has in his possession any obscene book, pamphlet, paper, drawing, painting, representation or figure or any other obscene object whatsoever, shall be punished with imprisonment of either description for a term which may extend to three months, or with fine, or with both.[2]

"Section 295A Whoever, with deliberate and malicious intention of outraging the religious feelings of any class of [persons dent in the Union] by words, either spoken or written, or by visible representations, insults or attempts to insult the religion or the religious beliefs of that class, shall be punished with imprisonment of either description for a term which may extend to two years, or with fine, or with both."[3]

"Section 499 Whoever, by words either spoken or intended to be read, or by signs or by visible representations, makes or publishes any imputation concerning any person, intending to harm, or knowing or having reason to believe that such imputation will harm, the reputation of such person, is said, except in the cases hereinafter excepted, to defame that person."[4]

"Section 501 Whoever prints or engraves any matter, knowing or having good reason to believe that such matter is defamatory of any person, shall be punished with simple imprisonment for a term which may extend to two years, or with fine, or with both."[5]

"Section 505 Whoever makes, publishes or circulates any statement, rumour or report,—

(a) with intent to -cause, or which is likely to cause, any officer, soldier, sailor or airman, in the Army, Navy or Air Force [* *]1 to mutiny or otherwise disregard or fail in his duty as such; or

[1] Section 124 A of the Penal Code, 1861.
[2] Section 292 (a) of the Penal Code, 1861.
[3] Section 295A of the Penal Code, 1861.
[4] Section 499 of the Penal Code, 1861.
[5] Section 501 of the Penal Code, 1861.

(b) with intent to cause, or which is likely to cause, fear or alarm to the public or to any section of the public whereby any person may be induced to commit an offence against the State or against the public tranquility; or

(c) with intent to incite, or which is likely to incite, any class or community of persons to commit any offence against any other class or community,

shall be punished with imprisonment which may extend to two years, or with fine, or with both."[1]

All above provisions of the Penal Code can control the publication as a censorship. And the Official Secret Act 1923 applies as the political censorship for media men.

Section 3 of the Official Secret Act 1923 provides that;

"(1) If any person for any purpose prejudicial to the safety or interests of the State—

(a) approaches, inspects, passes over or is in the vicinity of, or enters, any prohibited place; or

(b) makes any sketch, plan, model, or note which is calculated to be or might be or is intended to be, directly or indirectly, useful to an enemy; or

(c) obtains, collects, records or publishes or communicates to any other person any secret official code or password, or any sketch, plan, model, article or note or other document or information which is calculated to be or might be or is intended to be, directly or indirectly, useful to an enemy;

he shall be punishable with imprisonment for a term which may extend, where the offence is committed in relation to any work of defense, arsenal, naval, military or air force establishment or station, mine, minefield, factory, dockyard, camp, ship or aircraft or otherwise in relation to the naval, military or air force affairs of the State or in relation to any secret official code, to fourteen years and in other cases to three years.

(2) On a prosecution for an offence punishable under this section with imprisonment for a term which may extend to fourteen years, it shall not be necessary to show that the accused person was guilty of any particular act tending to show a purpose prejudicial to the safety or interests of the State, and, notwithstanding that no such act is proved against him, he may be convicted if, from the circumstances of the case or his conduct or his known character as proved, it appears that his purpose was a purpose prejudicial to the safety or interests of the State; and if any sketch, plan, model, article, note, document, or information relating to or used in any prohibited place, or relating to anything in such a place, or any secret official code or password is made, obtained, collected, recorded, published or communicated by any person other than a person acting under lawful authority, and from the circumstances of the case or his conduct or his known character as proved it appears that his purpose was a purpose prejudicial to the safety or interests of the State, such sketch, plan, model, article, note, document or information shall be presumed to have been made, obtained, collected, recorded, published or communicated for a purpose prejudicial to the safety or interests of the State.[2]

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[1] Section 505 of the Penal Code, 1861.
[2] Section 3 of the Official Secret Act, 1923.

In September 2018, the journalists, *U Wa Lone and U Kyaw Soe Oo 2018*[1] were sentenced to 7 years in prison by Yangon's Northern District Court under the Myanmar Official Secrets Act, 1923. After a trial that lasted more than eight months, a judge in Yangon's Northern District Court found the two reporters of the Reuters News Agency guilty of possession of classified documents. Wa Lone and Kyaw Soe Oo were arrested in December 2017. The judge said most of the counter-arguments by the defendants' lawyers and the journalists were "irrelevant" or "illogical." "Instead of acting like ordinary reporters, they are found to have tried to intentionally damage the security of the country," Judge U Ye Lwin said. They did not follow media ethics endorsed by the Myanmar Press Council, the judge said, before sentencing the two journalists to 7 years in prison. The judge said that if the secret documents detailing the status of security forces in Rakhine had fallen into the hands of armed ethnic groups fighting the government, it would have put the "lives of security forces" in danger.

Under Section 11 (c) of the Control of Smoking and Consumption of Tobacco Product Law 2006, "Whoever commits any of the following acts to publicize for wide distribution and sale of cigar and tobacco product shall, on conviction, be punished with a fine from a minimum of kyats 20,000 to a maximum of kyats 50,000, for the first offence and be punished with imprisonment for a term which may extend to 2 years and shall also be liable to a fine from a minimum of kyats 50,000 to a maximum of kyats 200,000 for second and subsequent offences:

(c) describing by publishing in newspapers, journals, magazines and pamphlets or distributing the same."[2]

For News Media, there is no prior censorship system under the News Media law but there are many other existing laws that can regulate the news media men. Some provision can punish long terms imprisonment as serious crime and apply all people including media men.

Entertainment Media Regulation

Radio service in Myanmar first came on air in 1936 and regular programming by Myanma Athan (voice of Myanma) began in February 1946. Until the launch of Yangon City FM, Myanma Radio was the only radio station in the country. Myanmar Radio (state -owned station) had stood as the only radio station for over 60 years. Myanmar radio broadcasting started in the early 20th century but use only state-owned radio broadcasting was used until the 21st century. Nowadays, private broadcasters have been allowed to operate on a joint-venture basis with government broadcasting.

In Myanmar, a television service was introduced in 1979 as a trial test in Yangon and the Myanmar Radio and Television (MRTV) service was first launched on 3 June 1980, with regular television service being formally launched in 1981. In 1990, this was followed by the TV Program Delivery to Remote Station via Satellite system.[3] After putting out a call to tender on private TV broadcasting licenses in 2016, 29 proposals were put forward. Five companies were awarded TV licenses in 2017, including former exile organizations DVB and Mizzima, as well as the privately-

[1] Lieutenant Colonel Yu Naing v U Wa Lone and U Kyaw Soe Oo 2018.

[2] Section 11 (c) of the Control of Smoking and Consumption of Tobacco Product Law, 2006.

[3] Dr. Cho Cho Thwin, Media and Communication Systems in Myanmar, pp-5 and 7.

held Fortune International, Kaung Myanmar Aung, and Young Investment Group. All five selected companies had to pledge to follow MRTV's rules and regulations, as well as editorial policy.[1]

In Myanmar, the Ministry of Information controls licensing for all broadcasting media. The Television and Video Law 1996 provides not only Licence for Possession but also Video Business Licence. Under Section 4 of the Television and Video Law 1996, "any person who holds and uses a television set or a video cassette recorder shall apply for licence for possession, in accordance with the stipulations to the relevant post office within 30 days from the date of receipt of the same."[2]

Section 9 of the Television and Video Law 1996 states that;

"A person desirous of operating any one of the following video business for a commercial purpose shall apply for the business licence for each type of the business to the relevant State or Divisional Video Business Supervisory Committee in the prescribed manner: -

(a) production of video;

(b) videotaping;

(c) editing of video;

(d) copying of video tape;

(e) distribution of video tape;

(I) hiring of video tape;

(g) exhibiting by video."[3]

And the video censor board formed under Section 22 of the Television and Video Law and under Section 24, "when application is made for video censor certificate in respect of Myanmar Video tapes produced and submitted or video tapes which have been imported or brought from a foreign country, the Video Censor Board, after examining as to whether it is in conformity with the policies laid down: -

(a) may permit exhibition to the public or for a family show;

(b) may prohibit public exhibition of the video tape and may seize or destroy such video tape;

(c) may permit public exhibition or family show of the video tape after making excision, amending or erasing the portion which is not suitable for public exhibition or family show;

(d) shall issue the video censor certificate after causing payment of the prescribed fee to be made if the video tape is permitted for public exhibition and family show."[4]

The same as the Television and Video Law, the the Motion Picture Law 1996 provides for Motion Picture Business License and Motion Picture Censor Board.

Under the Motion Picture Law 1996 Section 13, when application is made for a Motion Picture Censor Certificate in respect of Myanmar motion picture films and motion picture films

[1] Kayleigh Long, Myanmar-Media Landscape, 2018, p- 4.
[2] Section 4 of the Television and Video Law, 1996.
[3] Section 9 of the Television and Video Law, 1996.
[4] Section 24 of the Television and Video Law, 1996.

which have been imported, the Motion Picture Censor Board, after examining as to whether they are in accordance with the policy laid down or not-

(a) may permit exhibition to the public or to a reserved audience;

(b) may permit public exhibition of the Myanmar motion picture film, after causing excision and modification to be made of the portion which is not suitable for public exhibition and may retain or destroy such excised portion;

(c) may permit public exhibition of the imported motion picture film, after making excision of the portion which is not suitable for public exhibition and may retain or destroy such excised portion;

(d) may prohibit public exhibition of the Myanmar motion picture film and may retain or destroy such motion picture film;

(e) may prohibit public exhibition of the imported motion picture film and may cause to be returned or retain such motion picture film;

(f) shall issue the Motion Picture Censor Certificate, on payment of the prescribed fee, if the motion picture film is permitted for public exhibition.[1]

Therefore, the prior censorship has been using for television, video and motion picture and also licensing censor have for all media types. Both the Television and Video Law and the Motion Picture Law were enacted since 1996. The Television and Video Law was amended in 2018 but just amended for fine. Some provision from these laws need to amend in accordance with the current situation such as license for possession.

For broadcasting, Section 31 of the Broadcasting Law 2015 enacts that;

"(a) A person desirous to carry out broadcasting service:

(i) may apply for licence to the Council before starting relevant industry.

(ii) is an organization, representative of such organization may apply for licence."[2]

As the program standards, Section 69 of the Broadcasting Law, 2015 states that

"(a) The broadcasting programmes broadcasted aiming for the children and youths, women, the aged and the disabled person shall be the programmes that protect and promote their rights. The programmes for the children and youths shall be broadcasted at specific time. When broadcasting such special programmes, the type of audience for those programmes shall be described.

(b) In some programmes, sign-language and caption may be used for hearing-impaired persons."[3]

And under the Broadcasting Law, the Broadcasting Council shall draw up Code of Conduct for all broadcasting services and the Council is responsible for monitoring whether or not the broadcasting services comply with and implement fully the code of conduct. Under Section 77 (c), new rating system was provided as classification of programmes, including films, according to the

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[1] Section 13 of the Motion Picture Law, 1996.

[2] Section 31 of the Broadcasting Law, 2015.

[3] Section 69 of the Broadcasting Law, 2015.

recommended age of viewers. As the same as the News Media Men, the Code of Conduct serves as the self-censorship for all broadcasting services and the decisions of the Council regarding code of conduct abide on broadcasting service.

Under Section 11 (b) of the Control of Smoking and Consumption of Tobacco Product Law 2006[1], "Whoever commits any of the following acts to publicize for wide distribution and sale of cigar and tobacco product shall, on conviction, be punished with a fine from a minimum of kyats 20,000 to a maximum of kyats 50,000, for the first offence and be punished with imprisonment for a term which may extend to 2 years and shall also be liable to a fine from a minimum of kyats 50,000 to a maximum of kyats 200,000 for second and subsequent offences:

(b) broadcasting or displaying by radio, film, television and video or by communication system using high technology from the mass media channel."

The same as the news media, Section 124 A, Section 295 A, Section 499 and Section 505 also cover the entertainment media as a censorship. Every movie screened at a public cinema in Myanmar needs to be approved by a censorship board comprising ministry officials and members of the Myanmar Motion Picture Organization. The Goethe-Institute in Yangon cancelled the screening of an Austrian movie about the life of painter *Egon Schiele* one day before the event, after Myanmar's censorship board banned scenes in the film containing nudity. Schiele was famous for his provocative display of female nudity and there are scenes in the film that portray this, though it does not include any sex scenes. Initially, the censorship board wanted to censor the scenes involving nudity on-site, during the screening of the film.[2]

The censor can allow, cut or ban absolutely the content of any work. Some countries make sole use of the suppression of work practice but others use it in combination with the classification or rating system. But in Myanmar, the prior examining censorship system is still using. And the censor board can cut, edit or ban the films or movies or songs or any programs. And else the exclusion system such as age ratings is also using in order to protect the children from inappropriate contents.

New Media Regulation

"New media" are all the communications and data transfer made possible by the internet. "Social media" are the communications that occurs amongst and between people who belong to a self-selected community.[3] In Myanmar, the first Internet connection was available in 2000, but at that time the use of social media, Google and YouTube etc. was not allowed. However, internet censorship was reduced in September 2011.

The Myanmar Computer Science Development Law 1996 requires registration of all computers and computer networks. Failure to do so could result in imprisonment of up to 15 years. Although personal computers and Internet-enabled phones fall under the provisions of this law, the vast majority of these devices are unregistered and enforcing is lacking.[4] Under Section 5 of the Telecommunication Law 2013, any person, department or business organizations, inside the

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[1] Section 11 (b) of the Control of Smoking and Consumption of Tobacco Product Law, 2006.
[2] https://frontiermyanmar.net/en/goethe-institut-pulls-egon-schiele-movie-after-censorship-board-intervention
[3] International Executive Media and Television Workshop, Special UN Myanmar, 2012, p-27.
[4] Assessment of Media Development in Myanmar, UNESCO and IMS, 2016, p-42.

Republic of the Union of Myanmar or from abroad, willing to provide the following facilities and/or telecommunication services shall apply to the Department for permission and license in accordance with the provisions-

(a) Network facility services;

(b) Network services;

(c) Application services.[1]

Section 66 of the Telecommunications Law 2013 enacts that;

"Whoever commits any of the following acts shall, on conviction, be liable to imprisonment for a term not exceeding three years or to a fine or to both.(a)Accessing and disturbing a Telecommunications Network, altering or destroying the determination of technical standards or the original form without the permission of the owner or a person who has the administrative right.(b)Releasing a virus or using any other means with an intention to cause damage to the Telecommunications Network.(c)Stealing, cheating, misappropriating or mischief of any money and property by using any Telecommunications Network.(d)Extorting, coercing, restraining wrongfully, defaming, disturbing, causing undue influence or threatening to any person by using any Telecommunications Network."[2]

In Myanmar, there is no specific internet censorship system or filter system. But it doesn't mean, there is no censorship for internet media. Many proceedings occur through using internet media. The Telecommunication Law knows as internet censorship law.

Chaw Sandhi Tun 2015 is one of several people arrested for "insulting" public institutions or persons on Facebook. In response to media reports, the government explained on 20 October that the arrests were to *"*protect the honour of someone who has been insulted.*"* In Lieutenant Colonel Kyaw Htin v Chaw Sandhi Tun 2015,[3] Chaw Sandhi Tun posted an image montage on her Facebook page, showing that the Myanmar military's re-designed uniform matches the colour of Aung San Suu Kyi's dress. On the montage were the words *"*if you like her [dress] so much, why not put it on your head*"*.[4] Ma Chaw Sandi Htun was sentenced to 6 months in prison by the court of the Maubin Township of the Ayeyarwady Delta Region in Myanmar on December 28, 2015. She was found guilty of defamation under the broad Section 66(d) of Myanmar's Telecommunications Law stipulating that extorting, coercing, restraining wrongfully, defaming, disturbing, causing undue influence or threatening any person by using media platforms. [5]

In 2017, as the result of many criticisms, this law was amended as follows:

Section 66 shall be replaced with the following:

"66. Whoever commits any of the following acts 66(a), (b) and (c) shall, on conviction, be liable to imprisonment for a term not exceeding three years or to a fine or to both, and whoever commits act of 66(d) shall, on conviction, be liable to imprisonment for a term not exceeding two years or to a fine not more than one million or to both."

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[1] Section 5 of the Telecommunication Law 2013.
[2] Section 66 of the Telecommunication Law, 2013.
[3] Lieutenant Colonel Kyaw Htin v Chaw Sandhi Tun 2015
[4] https://www.article19.org/resources.php/resource/38158/en/myanmar:-facebook-arrests-violate-international-law
[5] https://globalfreedomofexpression.columbia.edu/cases/case-chaw-sandi-htun-myanmar/

Section 66(d) shall be replaced with the following:

"(d). extorting, defaming, disturbing or threatening to any person by using any telecommunications network."[1]

In every State legal action against all forms of media is taken in accordance with statute laws. The penalties may be imprisonment or a fine or an injunction. Nowadays, as electronic media has gained in popularity, action taken by electronic law, cyber law or telecommunication law is also becoming more frequent and these laws determines as censorship for news media.

Findings

In Myanmar, there are many specific laws for press media, broadcasting media and digital media. And else many other national laws are also covered the media. The media man can get legal proceedings not only under media laws but also under other enacted laws. Some provisions can punish as the serious crime for example under the Official Secret Act 1923. The media man can be punishable with imprisonment for a term which may extend to fourteen years. This law has the nature of military censorship type. And under Penal Code 1861, there are many provisions that can be moral censorship, religious censorship and so on. Although the Press Law 2014 canceled the censorship system but the Printing and Publishing Enterprise Law created the recognizing system the same as the licensing system. The licensing for broadcasting media is considered to ensure technical quality and allocation of spectrum. But the licensing for press media has different ideas. For press media, the licensing assumes as the censorship, especially when the government control the licensing power. In Myanmar, the Press Council was created under the Press Law 2014 as self-regulatory body. But the Press Council has the status as the representative of the media men. There is no power for licensing or for taking legal action. If the Press Council will get the power for licensing system, it will be more comply with the democracy standard. In the media sector, censorship is the essential tool. Censorship may be through prior censorship system or licensing or creating code of conduct. The main function of censorship is to protect people from the harmful contents of the media. For entertainment media, the censor board organized under the Motion Picture Law 1996 and the Television and Video Law 1996. The censor board examines the film or movie before exhibition to the public and they can edit, cut or totally ban the film. That censorship system is the strictest one. But The rating system was also introduced under the Broadcasting Law 2015. So the Motion Picture Law 1996 and the Television and Video Law 1996 need to change the censorship system as the same as the new Broadcasting Law. New media or digital media is the popular one and these are very difficult to regulate. Most of country use cyber law to regulate and in Myanmar the Telecommunication Law 2013 was enacted. Myanmar has no sufficient filter system and registration system. People can make fake account and create fake news very easily. Therefore, there are many proceedings under the Telecommunication Law. Practically, in order to change media regulation systems, respecting code of conduct and media liabilities are also vital. On the other hand, effective technical system, fair policies and laws are essential. Some provisions that do not relevant the modern time need to amend and to create fair and effective media regulation.

[1] Amendment of the Telecommunications Law, 2017.

Conclusion

While changing the world, the kinds of media are also transforming and improving. Creation of new media styles brings the different media regulation systems. From print media to currently internet media can influence the public. The media can report the news to the public and also can be entertainment for public. The media can support for education, economic and political affairs and social. And it can easily affect the public. In order to refrain the negative effects, the media need to regulate under national laws and policies. In Myanmar, the media regulation bases on hard laws and also uses soft law. Under the related laws, Myanmar media regulation systems are various ways. The first one is taking legal actions, especially concerned with defamation, sedition, insulting religious beliefs and official secret. The second one is applying license for business or license for possession of a television set, a video cassette recorder and computer. The third one is video censor board for examination the contents. This is the old system and is using until now. The last one is creating code of conduct. The respective council had already created code of conduct for press media and broadcasting media. Both media and media regulation are important for the society. The media can control the government and the government can control the media regulation system. Therefore, if the government uses the unfair media regulation system, the media is impossible to control the government. The fair media regulation is the image of the democracy country. To create the democracy society, the government needs to support the fair, unbiased media regulation systems.

Acknowledgements

I would like to acknowledge particular mention here. I express my deepest gratitude to Dr Khin Chit Chit, Professor and Head, Department of Law, University of Yangon for her great guidance and continuing support on this paper. I have got a great ideas and suggestions. My sincere thanks also go to Dr Khin Phone Myint Kyu, Professor, Department of Law, University of Yangon, as well as Dr Khin Khin Oo, Professor, Department of Law, University of Yangon for their help and encouragement in all the time of this paper. Besides, I special word of thanks to Dr Daw Than New and Dr. Khin Mar Yee for her cheerful encouragement and advice.

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J. Myanmar Acad. Arts Sci. 2021 **Vol. XIX. No.8**

COMPREHENSIVE STATE JURISDICTION OVER VESSEL-SOURCE OIL POLLUTION IN INTERNAL WATERS AND TERRITORIAL SEA

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Abstract

State has prescriptive and enforcement jurisdiction under international law to exercise over the vessel for the prevention of vessel-source oil pollution within internal waters and territorial sea. A state may operate in the United Nations Convention on Law of the Sea 1982 as the 'flag State', the 'coastal State' or the 'port State' with the subject of obligation to protect and preserve the marine environment. Vessel-source oil pollution may be caused by shipping activities and accidents at sea. Vessel-source oil pollution is one of the major issues for the protection of the marine environment. This paper analyses the role of the State jurisdiction to control the vessel-source oil pollution by implementing the provisions of the United Nations Convention on the Law of the Sea 1982, International Convention for the Prevention of Pollution from Ships (MARPOL73/78), and other regulatory conventions. States need to enact sufficient national laws by ratifying the international conventions on marine pollution to protect vessel-source oil pollution. When exercising jurisdiction, to effective control over vessel source oil pollution, all of the Coastal/ port and flag State need to cooperate on that matter. In addition, States need to manage the navigational system to protect the collisions and grounding.

Keywords: Vessel-Source Oil Pollution, Jurisdiction, Coastal State, Flag State, Port State

Introduction

State Jurisdiction over vessel-source oil pollution deals with prescriptive and enforcement jurisdiction intends to prevent, reduce, and control oil pollution in the marine environment. Vessel-source oil pollution may arise as a result of collisions and groundings, but also in the course of ordinary cargo operations, such as loading and unloading or bunkering activity at sea. The major international legal framework of vessel-source oil pollution is the UNCLOS 1982, MARPOL 73/78, and other international instruments under the auspices of the International Maritime Organization. Coastal State jurisdiction is exercisable in the internal waters, territorial sea, and Exclusive Economic Zone in respect of maritime safety and marine pollution matters. Nevertheless, this paper focus on the jurisdiction of the State over vessel-source oil pollution within internal waters and territorial sea. This paper also provides not only the ineffective control of flag State jurisdiction to their registered ships but also the complement of the port /coastal States enforcement jurisdiction to control the vessel-source oil pollution. Therefore, this paper analyzes the coastal State jurisdiction together with the port and flag State jurisdiction. The Coastal States have jurisdiction over foreign-flagged vessels navigating in its internal waters and territorial sea. Port States have jurisdiction to inspect vessels voluntarily visiting their ports and internal waters to enforce internationally recognized and generally accepted standards for the protection of the marine environment. Flag States have exclusive jurisdiction over vessel-source pollution concerning vessels flying their flags, irrespective of the location of the vessel.

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Aims and Objectives

The purpose of this paper is to analyze the extent to which the States can exercise their jurisdiction over vessel-source oil pollution in internal waters and territorial sea. It aims to explore how to cooperate by the coastal State/ port State and flag State exercising their effective jurisdiction for the protection and prevention of vessel-source oil pollution.

Material and Methods

To achieve the goal of this paper, UNCLOS 1982, MARPOL 73/78, and regulatory conventions under the auspices of the IMO Conventions are studied. This paper applies a qualitative research method by using primary and secondary data. As a primary source, domestic laws, international conventions, and in-depth interviews with experts from the Department of Marine Administration, Ministry of Transport and Communication, Republic of the Union of Myanmar. As a secondary source, uses scholar's articles, and cases.

Causes of Vessel-Source Oil Pollution

Vessel-source oil pollution within the maritime zones of coastal States can cause serious damage to the marine environment and the shores of the coastal States. Vessel-source oil pollution due to even one vessel incident can harm the marine environment of many coastal States.

Shipping introduces many pollutants to the marine environment, as a result of the normal operation of vessels and also from marine casualties following collisions and groundings.[1]

Accidental oil spills from tanker such as the Torrey Canyon 1967, the Exxon Valdez 1989, Alaska in 1989, and the Prestige 2002, have attracted a great deal of attention. However, oil spills account for only about 10 percent of the oil released into the environment each year. A much greater volume of oil entering the marine environment comes from discharges from the normal operation of vessels.[2]

Operational vessel-source pollution is produced by the normal operation of ships. For example, vessels with oil-burning diesel engines discharge some oil with their bilge water. Oil tankers washed their oil tanks using jets spraying seawater and disposed of the oily residue at sea.[3]

Besides, empty tankers also use seawater as ballast, and this water, containing residues of oil, has of course to be pumped out before a new cargo can be taken on board.[4] Therefore, considerable amounts of operational discharge of oil caused oil pollution at sea.

Major maritime disasters, such as the sinking of the oil tanker the Torrey Canyon raised public awareness of the risks of accidental pollution. The international rules and standards regarding the prevention of pollution of the sea by vessels are developed in conventions drawn up under the auspices of the IMO, ILO, and UNCLOS 1982.

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[1] Rothwell, Donald R, Alex G Oude Elferik, Karen N Scott, Tim Stephens, The Oxford Handbook of the Law of the Sea, 1st Edition, Oxford University Press, 2015, p.376.

[2] Rothwell, Donald R. and Tim Stephens, The International Law of the Sea, Oxford and Portland, Oregon, Heart Publishing, 2010, p.339.

[3] Tanaka, Yoshifumi, The International Law of the Sea, 1st Edition, Cambridge University, 2012, p.257.

[4] Churchill, R.R. and A.V. Lowe, The law of the Sea, Manchester University, 3rd Edition, 1983, p.339.

Regulations under MARPOL 73/78 Regime

MARPOL (73/78) is the most important multilateral convention under IMO auspices designed to reduce pollution from ships.

MARPOL 73/78 seeks to achieve the complete elimination of international pollution of the marine environment by oil and other harmful substances and the minimization of accidental discharge of such substances.[1]

Following the wreck of the Liberian oil tanker the **Torrey Canyon** off the coast of the United Kingdom in 1967, the international shipping community recognized the need to regulate shipping to reduce the incidence of oil pollution.

The liability regime did not sufficiently promote preventive action. The IMO's response to tackling incidents of oil pollution (both accidental and operational) has been the formulation of MARPOL Annex I, which is intended to improve tanker safety. Relating to the monitoring and handling of oily water, the segregation of ballast tanks, as well as crude-oil washing systems are provided Annex I [2].

Crude oil washing was made mandatory under MARPOL73/78 which states that every crude oil tanker which is 20000 dwt and above must be fitted with COW system for every cargo hold tank.[3]Annex I of MARPOL 73/78 also provides that a tanker must not discharge any oil whatsoever within fifty miles of the nearest land or in certain special areas.[4]

Under Article 198 of UNCLOS 1982 and Article 8 and Protocol 1 of the MARPOL (73/78), a ship involved in a pollution incident must report the details to the authorities of a States party, to the flag State, and any other State likely to be affected.[5] Under the terms of the MARPOL 73/78 tanker must be equipped with oil discharge monitors and control (ODM#C) systems. The system must effectively monitor the effluent discharge through those overboard outlets permitted by MARPOL 73/78 and also cover the gravitational discharge of ballast water from cargo tanks.[6]

Under Article 4(1) and Article 6(4) of the MARPOL Convention, a flag State is obliged to institute criminal proceedings against any of its vessels suspected of having violated the Convention.[7] Concerning the enforcement jurisdiction of the coastal State over pollution from ships, Article 4(2) of the MARPOL 73/78 provides that whenever violations have occurred within their jurisdiction, enforcement shall be in form of either the institution of proceedings by national law or referring the related information and evidence to the flag State.[8]

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[1] Tanaka, Yoshifumi, The International Law of the Sea, 1st Edition, Cambridge University, 2012, p.277.

[2] Eddings, George, Andrew Chamberlain and Holly Colaçm, Shipping Law Review, Tom Barnes, 6th Edition, 2019, p-1.

[3] Annex 1, regulation 13 of International Convention for the Prevention of Pollution from ships 1973/1978

[4] Abdulla, Ahmed Adham, Flag, coastal and port State jurisdiction over the prevention of vessel source pollution in International Law: Analysis of Implementation by the Maldives, University of Wollongong, 2011, p.102.

[5] Churchill, R.R. and A.V. Lowe, The law of the Sea, Manchester University, 3rd Edition, 1983, p.355.

[6] Kasoulides George C., Port State Control and Jurisdiction: Evolution of the port State Regime, Martinus Nijhoff Publishers,1993, pp.139-140.

[7] Churchill, R.R. and A.V. Lowe, The law of the Sea, Manchester University, 3rd Edition, 1983, p.345.

[8] Yang, Haijiang Jurisdiction of the Coastal State over Foreign Merchant Ships in Internal Waters and the Territorial Sea, Springer Berlin, 2006, p.228.

MARPOL 73/78 is very important for the elimination of international pollution of the marine environment.

The Allocation of State Jurisdiction under the UNCLOS 1982

A State can exercise a different range of functions in the UNCLOS 1982 as the flag State, the coastal State, or the port States. Flag State jurisdiction is exercised based on nationality. Port State may exercise jurisdiction over vessels visiting its ports. The Coastal States have jurisdiction over foreign-flagged vessels navigating in its national waters.

Under the UNCLOS 1982, vessel-source pollution is regulated by flag States, coastal States, and port States.[1] States shall establish international rules and standards to prevent, reduce and control pollution of the marine environment from vessels and promote the adoption of routing systems designed to minimize the threat of accidents that might cause pollution of the marine environment.[2]

Flag State Jurisdiction over Vessel-Source Pollution

The flag State has the primary responsibility to regulate vessel-source marine pollution. Flag states are required to adopt laws to regulate pollution from their vessels which at least have the same effect as those international regulations for vessels flying their flag.[3]

Flag States are assigned a very important role in the protection of the marine environment and the punishment of pollution violations. Failure by the flag State to exercise criminal prescriptive jurisdiction over ship-source pollution will result in serious discharge violations falling outside the reach of criminal law altogether unless such violations may be prosecuted in a non-flag State. International law is rather vague on flag State's obligations to adopt sanctions for environmental violations.[4]

Under UNCLOS 1982, the flag State has primary responsibility for its ship, including criminal jurisdiction, even when the ship is outside the flag State's territorial waters.

Flag States have an obligation to take necessary measures to ensure safety at sea concerning the construction, equipment, and seaworthiness of ships, the manning of ships, labor conditions and the training of crews, the use of signals, the maintenance of communications, and the prevention of collisions.[5]

Flag States have to ensure that each ship is in charge of master and officers who possess appropriate qualifications, in particular in seamanship, navigation, communications.[6] MARPOL73/78 and Safety of Life at Sea 1974 require flag States to inspect and survey ships and issue certificates of seaworthiness.[7]

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[1] Tanaka, Yoshifumi, The International Law of the Sea, 1st Edition, Cambridge University, 2012, p.280.
[2] Article 211 (1) of the United Nations Convention on the Law of the Sea 1982.
[3] Tanaka, Yoshifumi, The International Law of the Sea, 1st Edition, Cambridge University, 2012, p.280.
[4] Pozdnakova, Alla, Criminal Jurisdiction Over Perpetrators of Ship-Source Pollution, Martinus Nijhoff Publishers, 2013, p.29.
[5] Article 94 (3) of the United Nations Convention on the Law of the Sea 1982.
[6] Rothwell, Donald R, and Tim Stephens, The International Law of the Sea, Oxford and Portland, Oregon, Heart Publishing, 2010, p.361.
[7] Ibid, p.360.

Inadequately trained or unqualified crews are a major factor in the cause of shipping accidents. Therefore, Flag States require inspecting the vessel whether it may observe international rules and standards contained in Standards of Training, Certification and Watchkeeping for Seafarers 1978 for maritime safety.

Flag State may exercise judicial jurisdiction in respect of violations committed anywhere by its vessels. Where the vessel is in the territorial sea or port of another State, the flag State may not arrest it, but may nevertheless institute criminal proceedings against it before its own courts provided the ship-owner or master is within the State, or the vessel returns to the flag State.[1]

Flag State shall, at the written request of any State, investigate any violation alleged to have been committed by vessels flying their flag. If satisfied that sufficient evidence is available, flag State shall without delay institute such proceeding by their laws.[2]

Flag State and other State shall co-operate in the conduct of any inquiry held by that other State into any such marine casualty or incident of navigation.[3] The repeated disregard by a flag State of its obligations to supervise the vessels flying its flag may grant the coastal or port States enforcement jurisdiction.[4]

Flag States have a primary role to play in maritime safety but the power of flag State control is often weakened by the practice of flags of convenience (FoC). [5] In the case of **Erika 1999,** It was clear that the Maltese authorities had given a certificate to a ship whose condition was not sufficiently safe; the French courts could not hold the flag State liable for the harm caused along its coasts.[6] It was evidenced that the deficiency of inspection on the vessel and the use of FoC.

The **Nottebohm case** demanded the presence of a genuine link between the flag State and the ship bearing its nationality and required the flag State to exercise effective jurisdiction over its ships.[7]In such cases, effective controls being exercised by port States can be very useful for the aim of marine environment protection, as specified in the UNCLOS 1982.[8]

The increasing of substandard ships is one of the major issues to cause maritime disasters. Therefore, combating substandard shipping and reinforcing flag State control has become a primary objective of ocean policy at the global and regional levels.[9]

Flag State has to ensure safety at sea concerning the seaworthiness of ships. It needs to exercise effective jurisdiction by the flag State to control the substandard ship for the protection of pollution to the vessel flying its flag. The failure to reduce the use of the flag of convenience has

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[1] Churchill, R.R. and A.V. Lowe, The law of the Sea, Manchester University, 3rd Edition, 1983, p.345.
[2] Article 217 (6) of the United Nations Convention on the Law of the Sea 1982.
[3] Article 94(7), Ibid.
[4] Article 228, Ibid.
[5] Faure, Michael G. and James HU, Prevention and Compensation of Marine Pollution Damage: Recent Developments in Europe, China and the US, Kluwer Law International, 2006, p.8.
[6] Erika case 1999.
[7] ICJ Reports 1955, p.23.
[8] Faure, Michael G. and James HU, Prevention and Compensation of Marine Pollution Damage: Recent Developments in Europe, China and the US, Kluwer Law International, 2006, p.8
[9] Frank, Veronica, The European Community and Marine Environmental Protection in the International Law of the Sea, Martinus Nijhoff, 2007, p.190.

led to the development of port State control as a means of strengthening the weak jurisdiction of flag States.

Port State Jurisdiction over Vessel-Source Pollution

Port State has three major jurisdictional powers concerning the protection and preservation of the marine environment in the port and internal waters such to regulate port entry, undertake port State control and port enforcement, and the duty to cooperate with port States to maintain uniform regional standards.

Port State enforcement jurisdiction in the UNCLOS 1982 is an innovative expansion of jurisdiction in international law. Prevention and punishment of marine pollution incidents left exclusively to the discretion of the flag State are now delegated to a truly universal system of control and surveillance.[1]

The port State is always a coastal State although the reverse is not always true. UNCLOS 1982 has granted specific rights and obligations to this special category of a coastal State, especially in terms of enforcement action of the applicable rules and standards for the protection and preservation of the marine environment.[2] Port States have full jurisdiction to regulate issues of navigations, pilotage, and pollution and such laws are commonly enforced on all vessels in ports.[3]

The weakness of flag State enforcement of international rules and standards, primarily concerning safety, environment, and labor conditions, it has been found necessary to step up coastal/port State competence over foreign ships to ensure that the relevant rules and standards.[4]

Port State jurisdiction refers to the right of a State to exercise jurisdictional powers over vessels entering its ports and to deny such access. Such jurisdictional powers may allow a port State to exert legislative and enforcement powers according to the relevant provisions of the UNCLOS 1982. [5] UNCLOS 1982 authorizes a port State to undertake investigations and institute a proceeding in respect of discharges from a ship 'voluntarily within a port or at an offshore terminal' in violation of applicable international rules and standards.[6]

"Port State" is usually followed by "port State control" and "port State jurisdiction".[7] Port State may exercise enforcement jurisdiction in respect of discharges in the internal waters, territorial sea, or exclusive economic zone of another State, at the request of that State or the flag State or third State damage or threatened by discharge violation.[8]

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[1] Kasoulides, George C., Port State Control and Jurisdiction: Evolution of the port State Regime, Martinus Nijhoff Publishers, 1993, p.126.

[2] Gavouneli, Maria, Functional Jurisdiction in the Law of the Sea, Martinus Nijhoff Publishers,2007, p.44.

[3] Ibid, p.48.

[4] Yang, Haijiang Jurisdiction of the Coastal State over Foreign Merchant Ships in Internal Waters and the Territorial Sea, Springer Berlin, 2006, p.41.

[5] Keselj, Tatjana, Port State Jurisdiction in Respect of Pollution from Ships: The 1982 UNCLOS and the Memoranda of Understanding, 1999, p.128.

[6] Article 218(1) of the United Nations Convention on the Law of the Sea 1982.

[7] Pamborides, G.P., International Shipping Law: Legislation and Enforcement, ANT.N. Sakkoulas Publishers, 1999, p.47.

[8] Gavouneli, Maria, Functional Jurisdiction in the Law of the Sea, Martinus Nijhoff Publishers, 2007, p.45.

Port States may detain a foreign vessel that violates applicable international rules and standards relating to seaworthiness and the threatened damage to the marine environment.[1]

Port State control has become increasingly familiar to the public with the advent of the Paris Memorandum of Understanding 1982. Port State control is a regime designed to help ensure, by inspection and detention in ports where necessary that foreign merchant ships comply with international standards in respect of ship safety, environmental protection and labor conditions mainly laid down by the IMO and the International Labor Organization.[2]

As to the regional cooperation, the EU legislation concerning port State control is built on IMO Resolutions and the Paris Memorandum of Understanding.[3] EU share information between the regional States and they can know much rapidly which vessels could be unseaworthy.[4] It gives the port State a legal basis for refusing entry to the substandard ship. Port State may check to visit foreign ships and may refuse entry to substandard ships in its ports.

The EU legislation is concerning prevention and liability for marine oil pollution. When the States do not apply the rules, they will have to appear before the court of justice and maybe convicted and failure to comply will lead to penalties.[5] The EU has significant power to regulate the national laws and policies of the member States for maritime safety and the protection of the environment.

In the case **Commission of European Communities V. Italian Republic** 1998 before the European Court of Justice (ECJ)[6], the court concluded in the case that by not adopting the laws, regulations, and administrative provisions necessary to implement the Directive 95/21 EC, Italy had failed to fulfil its obligations under that Directive and the EC Treaty.[7]

Myanmar signed Indian Ocean MoU on Port State Control in 1-August-2017 to increase maritime safety and the protection of the marine environment and the importance of improving living and working conditions on board ships.[8]

Enforcement jurisdiction is still weak to combat marine pollution, especially since flag States are not held responsible for damages incurred by their registered vessels. Port State enforcement is not sufficient to combat all forms of pollution and its role should be supplemented by a rigid coastal State enforcement regime and effective traffic control systems, offshore monitoring stations and surveillance systems.[9]

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1 Article 219 of the United Nations Convention on the Law of the Sea 1982.

2 Yang, Haijiang Jurisdiction of the Coastal State over Foreign Merchant Ships in Internal Waters and the Territorial Sea, Springer Berlin, 2006, pp.97-98.

3 Faure, Michael G. and James HU, Prevention and Compensation of Marine Pollution Damage: Recent Developments in Europe, China and the US, Kluwer Law International, 2006, p.8.

4 Rodriguez, Ronald Becerra, Flags of Convenience Regulation within the European Union and its Future on International Trade, No.11, 2011, p.21.

5 Faure, Michael G. and James HU, Preventiona and Compensation of Marine Pollution Damage: Recent Developments in Europe, China and the US, Kluwer Law International, 2006, p.22.

6 Case C-315/ 98, ECJ.

7 Yang, Haijiang Jurisdiction of the Coastal State over Foreign Merchant Ships in Internal Waters and the Territorial Sea, Springer Berlin, 2006, p.107.

8 Department of Marine Administration, Ministry of Transport and Communication, Republic of the Union of Myanmar.

9 Kasoulides, George C., Port State Control and Jurisdiction: Evolution of the port State Regime, Martinus Nijhoff Publishers,1993, p.129.

Port States jurisdiction is a major role to play in combating sub-standard vessel operations and reducing vessel source oil pollution. Port States may inspect and detention the vessels for violation of international pollution standards laid down by the IMO and the ILO.

Coastal State Jurisdiction over Vessel-Source Oil Pollution

Intending to complement the flag State's responsibility for vessels, UNCLOS 1982 allows coastal States to exercise legislative and enforcement jurisdiction to regulate vessel-source pollution.

In the marine pollution regulation, 'jurisdiction' refers to the competence of States to prescribe and enforce legislation against vessels engaged in pollution. Thus, legislative jurisdiction relates to the State's competence to enact or promulgate substantive pollution control standards. These standards are often internationally agreed upon, even though international law may also endorse the prescription of national standards under certain circumstances.[1]

There are three general types of vessel-source pollution standards: (1) discharge standards (2) construction, design, equipment, and manning standards, and (3) restrictions and regulations related to navigation. The principal international discharge standards are contained in the MARPOL 73/78.[2]At the international level, navigation standards have been limited to ship routing measures, traffic separation schemes (TSS), speed limits, and general safety measures.[3]

Concerning marine pollution control, States may generally prescribe their own discharge standards for their internal waters and territorial seas, subject only to the general right of ships to the innocent passage in the territorial sea.[4] Coastal State needs to adopt the vessel-source pollution standards and CDEM standards under the international standards for control of vessel-source oil pollution.

Concerning navigation, one of the most important aspects of COLRGE 1972 relates to TSS. TSS and other systems for routing ships have been adopted by the IMO in most major congested shipping areas, resulting in significantly fewer collisions and casualties.[5] TSS is also important as the collision and maritime casualties may cause vessel-source oil pollution.

Article 211 (4) and Article 21 (1) (f) of the UNCLOS 1982 empower coastal States to adopt laws to regulate vessel-source pollution within their territorial sea. Such laws and regulations must not hamper the innocent passage of foreign vessels.[6]

Coastal State may require vessels in its internal waters or port to comply with international standards impose national CDEM or discharge standards or prohibit access by foreign ships altogether, except those in distress.[7]

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[1] Tan, Alan Khee-Jin, Vessel-Source Marine Pollution: The Law and Politics of International Regulation, Cambridge University Press, 2005, p.176.

[2] Bodansky, Daniel M., Protecting the Marine Environment from Vessel Source Pollution: UNCLOS III and Beyond, Ecology Law Quarterly, Vol. 18:719, University of Georgia School of Law, 1991, P.728-729.

[3] Ibid, p.730.

[4] Ibid, p.177.

[5] Rothwell, Donald R. and Tim Stephens, The International Law of the Sea, Oxford and Portland, Oregon, Heart Publishing, 2010, p.362.

[6] Tanaka, Yoshifumi, The International Law of the Sea, 1st Edition, Cambridge University, 2012, p.281.

[7] Bodansky, Daniel M., Protecting the Marine Environment from Vessel Source Pollution: UNCLOS III and Beyond, Ecology Law Quarterly, Vol. 18:719, University of Georgia School of Law, 1991, p.745.

When a vessel is voluntarily within a port or at an offshore terminal of a State, that State may institute proceedings in respect of any violation of the laws and regulations of that State concerning vessel-source pollution when the violation has occurred within the territorial sea or the EEZ that State.[1]

A question arises as to whether the coastal States can exercise jurisdiction on the matter in marine spaces beyond their territorial sovereignty, on the high seas. This question was vividly raised in the 1967 Torrey Canyon incident. In response to this question, IMO adopted the International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties 1969 (High Seas Intervention Convention 1969).[2]

Article I (1) of this convention explicitly allows the parties to take such measures on the high seas as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or threat of pollution of the sea by oil following upon maritime casualty.[3]

According to this convention, If the vessel is in the territorial sea, the coastal State can take any measures it considers appropriate. [4] In this situation, the vessel will have ceased to enjoy the right of innocent passage and will be subject to the sovereignty of the coastal State.

In the Prestige incident 2002, it appears that moves by coastal States to ban sub-standard ships from entering their ports may progressively extend the event to denying passage through the territorial sea, even if the ship is ostensibly still in innocent passage.[5]

Where several coastal States have been affected by a discharge violation involving the same vessel, all asserted jurisdiction to punish the perpetrator. An example of this is the sinking of the Prestige.[6]Eurojust concluded that Spain was better suited to prosecute than France.[7]

Regarding pollution, the passage is non-innocent if the vessel, while in the territorial sea, engages in any act of willful and serious pollution contrary to the Convention.[8] Minor discharges but intentional may warrant an immediate response by the coastal authorities.[9]

Infringements of MARPOL 73/78 provisions, particularly for intentional violations or falsification of records, can result in both the vessel Management Company and seafarers being liable to criminal prosecutions. If found guilty, large fines amounting to millions of dollars may be imposed under applicable national laws, and in serious cases perpetrators may even face imprisonment.[10]

In **M/V Pac Antares 2019** case, Pacific Carriers Limited was sentenced on 1st Dec 2020 in federal court before U.S District Court Judge Louise Flanagan in New Bern, North Carolina.

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1 Article 220 of the United Nations Convention on the Law of the Sea 1982.
2 Tanaka, Yoshifumi, The International Law of the Sea, 1st Edition, Cambridge University, 2012, p.287.
3 Tanaka, Yoshifumi, The International Law of the Sea, 1st Edition, Cambridge University, 2012, p.287.
4 Churchill, R.R. and A.V. Lowe, The law of the Sea, Manchester University, 3rd Edition, 1999, p. 353.
5 Tan, Alan Khee-Jin, Vessel-Source Marine Pollution: The Law and Politics of International Regulation, Cambridge University Press, 2005, p.209
6 Pozdnakova, Alla, Criminal Jurisdiction over Perpetrators of Ship-Source Pollution, MartinusNijhoff, 2013, p.156.
7 Ibid, p.157.
8 Tan, Alan Khee-Jin, Vessel-Source Marine Pollution: The Law and Politics of International Regulation, Cambridge University Press, 2005, p.207.
9 Pozdnakova, Alla, Criminal Jurisdiction over Perpetrators of Ship-Source Pollution, MartinusNijhoff, 2013, p.102.
10 Abdulla, Ahmed Adham, Flag, coastal and port State jurisdiction over the prevention of vessel source pollution in International Law: Analysis of Implementation by the Maldives, University of Wollongong, 2011, p.48.

PCL was sentenced to pay a fine of $ 12,000,000.00 placed on probation for four years and ordered to implement a comprehensive Environmental Compliance Plan as a special condition of probation.[1]In this case, it was convicted for concealing the illegal discharge of oil-contaminated waste and falsified entries in the ship's official oil record book. Therefore, the coastal State, U.S has jurisdiction to punish the PCL company for the violation of the Act to prevent pollution from ships in the U.S.

In practice, many States have imposed criminal liability for serious pollution violations, including discharges from ships. States are free to enact criminal sanctions for pollution and related offences committed by foreign vessels within their internal waters, ports and the territorial sea.[2]

In Myanmar, offences and penalties relating to oil pollution are provided in section 88 of Myanmar Port Authority Law 2015.[3] In the Myanmar Territorial Sea and Maritime Zones Law 2017**,** there is no enforcement mechanism relating to vessel-source oil pollution within the territorial sea by marine casualties. The Myanmar Merchant Shipping Act [INDIA ACT XXI, 1923.] need to amend, it is a supportive law to solve the shipping and pollution problem.

Monetary penalties only may be imposed for violations of national laws and regulations or applicable international rules and standards committed by foreign vessels in the territorial sea, except in the case of a willful and serious act of pollution.[4] UNCLOS 1982 does not limit the imposition of monetary penalties or pollution fees over vessels that have caused major damage to the marine environment of the coastal State.

The International Convention on Civil Liability for Oil Pollution Damage of 1992 and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage of 1992 attempted to overcome the difficulties which may be faced by the victims of oil pollution.[5]

In 2003 a supplementary fund was established by a protocol to the 1992 Fund Convention, increasing the limit for any one incident to 750 million SDR, or around US$ 540 million, inclusive of liability under the 1992 CLC.[6] The 1992 CLC Conventions govern the liability of ship-owners for oil pollution damage. The CLC 1992 is implemented in most coastal States, although the United States remains a notable non-signatory.

The Bunker Oil Pollution Convention 2001 is the ship owner's strict liability for bunker oil pollution and the compulsory insurance requirement, providing victims with an easy footing to obtain the compensation that is comparable to the CLC regime.[7]

Myanmar has acceded to the MAROPL Convention Annex I and II since 1988 and has recently deposited for acceptance to Annex III, IV, and V on 5th April 2016. Myanmar has acceded to the CLC 1992 on 12 July 2016. But Myanmar has not yet acceded to the Fund Convention 1992.

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[1] https://www.justice.gov/opa/pr/singaporean-shipping-company-fined-12-million-multi-district-case-concealing-illegal?fbclid=IwAR2iJmgOb0An63I0Bd9Q309kwQQ5cuZfW-MFRk8s04Bap_53YErCbu-Bybc

[2] Pozdnakova, Alla, Criminal Jurisdiction over Perpetrators of Ship-Source Pollution, MartinusNijhoff, 2013, p.314.

[3] Section 88 of Myanmar Port Authority Law 2015.

[4] Article 230 of the United Nations Convention on the Law of the Sea 1982.

[5] Churchill, R.R. and A.V. Lowe, The law of the Sea, Manchester University, 3rd Edition, 1983, p.359.

[6] Rothwell, Donald R, Alex G Oude Elferik, Karen N Scott, Tim Stephens, The Oxford Handbook of the Law of the Sea, 1st Edition, Oxford University Press, 2016, p.397.

[7] Gahlen, Sarah Fiona, Civil Liability for Accidents at Sea, Springer-Verlag Berlin Heidelberg, 2015, p. 170.

Myanmar has acceded to the BUNKER Convention 2001 on 19 January 2018 and SOLAS 74 on 11 November 1987 and COLREG 72 on 11 November 1982 and STCW 78 on 4 May 1988.

Myanmar acceded to the International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC 1990 Convention) on 15 December 2016. The treaty will require Myanmar vessels and operators of offshore units to carry an oil pollution emergency plan or similar arrangements co-ordinate with national systems for oil spill responses.[1]Therefore, DMA submitted the National Contingency Plan to the President's office to implement the contingency plan.

As ASEAN cooperation, on 28 November 2014, Ten ASEAN countries signed the Memorandum of Understanding on ASEAN Cooperation Mechanism for Joint Oil Spill Preparedness and Response 2014 in Mandalay. The Regional Oil Spill Contingency Plan provides for a mechanism whereby the ASEAN Member States can request and provide mutual support in response to any oil spills.[2]

In Myanmar, Fortunately, there has been no major disastrous pollution incident recorded yet in any port of Myanmar other than that some minor incidents in the Yangon River and off the coast of Myanmar. Even though very few oil spill accidents have happened in the Yangon River and Myanmar waters, monetary compensation nor legal action for any single case has ever been recorded.[3]

The oil spill accidents within the Yangon area and off the coast of Myanmar are; M.V Satyavati in 1995, M.V Asean Liberty in 2001, M.V Cosmic Leader in 2008, M.V PhucHai Moon in 2011, OSV Penrith in 2013, M.T MyanAung in 2013, M.V Aziza in 2015, M.V Dong Thien Phu Silver in 2016. These cases have not been heard in court but are recorded in the history of marine pollution incidents.[4]

China has finished constructing a deep-sea port for oil tankers on Madae Island, Kyaukphyu, and Rakhine region since 2013.[5]The crude oil tanker, United Dynamic docked at Made Island in Rakhine State on 9 April 2017.[6] In such a way that, from 2015 onwards, Myanmar become an oil receiver country in million tons per annum, consequently, oil pollution risk is likely to be significant.[7]

Deep-sea port is oil or natural gas import or export facilities. Therefore, deep-sea port law should enact in Myanmar. Accessing of very large oil tankers entering Myanmar's waters may cause serious pollution problems. The mainly facing problem is how to solve if there were serious oil pollution happened in Myanmar waters. Nowadays, vessel-source oil pollution is a contemporary issue not only seaports but also coastline would cause marine environmental problems.

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[1] Albert Embankment International Maritime Organization, London SE1 7SR, OPRC.1/ Circ.80, 15 Dec 2016, p.1.

[2] https://worldmaritimenews.com/archives/265874/asean-member-states-adopt-regional-oil-spill-contingency-plan/

[3] Department of Marine Administration of Myanmar.

[4] Naing, CAPT KoKo, Director, Maritime Safety, Security and Environmental Protection Division, Department of Marine Administration, Ministry of Transport and Communication, Republic of the Union of Myanmar.

[5] https://consult-myanmar.com/2013/09/01/myanmar-deep-sea-port-to-dock-300000-tonne-oil-tankers-on-madae-island/

[6] Myanmar Times Journal, January 6, 2019, p.1.

[7] Naing, CAPT KoKo, Director, Maritime Safety, Security and Environmental Protection Division, Department of Marine Administration, Ministry of Transport and Communication, Republic of the Union of Myanmar.

In comparison, the US is still a party to the 1958 Conventions; the US is not a party to the UNCLOS 1982. But the US enacted many national laws to solve the pollution problem within its national waters. US is a party to the OPRC 1990 Convention. The U.S had implemented a National Contingency Plan (NCP) before the UNCLOS 1982 negotiations began. The Clean Water Act 1972 and the Oil Pollution Act 1990 all assigned responsibility for the NCP to the US. The US enacted the Deepwater port Act 1974. The OPA 1990 extends to all oil pollution in the United States, including incidents occurring within its territorial sea.

In the US, Port and Tanker Safety Act 1978 prohibits tank vessels from operating in U.S navigable waters if they have a history of accidents or pollution incidents, fail to comply with applicable laws or regulations, discharge oil or hazardous substances in violation of the law of treaty, fail to comply with VTS requirements.[1]The U.S Coast Guard is also the regulatory and enforcement agency for the safety of life and property at sea and protection of the marine environment.[2]

China is the world's largest net crude oil importer. China has ratified several international conventions relating to pollution liability arising from accidents, e.g.2001 Bunker Convention, and the 1992 CLC. Application of the 1992 Fund Convention is limited to the Hong Kong Special Administrative Region, and China established a separate domestic fund in 2012, the China Oil Pollution Compensation (COPC) Fund. [3] China has developed national legislation on ship-source pollution, response and compensation.

Under the Marine Environmental Protection Law 1999 of China, In the case of severe pollution, those responsible for the pollution will be prosecuted under criminal law.[4]

In 2002, tanker TASMAN SEA was involved in a collision at the entrance to the port of Tianjin, spilling over 200 tons of Champion Export crude. The Court of Appeal and the Supreme Court of China held that many environmental items claimed were not in line with the principles stipulated in CLC 92. As such, a final settlement of approximately CN¥ 24 million was made in 2010, including lost income and environmental damage.[5]

Small tanker SHAN HON 12 (336 GT) sank at the mouth of the Yangtze River on 30th December 2012, while carrying approximately 400 MT of sludge oil cargo. Shanghai Maritime Court confirmed the owner of SAN HONG 12 was financially incapable to meet the financial liability for pollution damage. As such, claims for clean-up and restoration costs were submitted to the COPC Fund. These payments make SHAN HONG 12 the first case received compensation for coastal environmental restoration work following a shipping incident in China.[6]

UNCLOS 1982 merely allows States to regulate pollution from vessels and limits their jurisdiction to the application of generally accepted international rules and standards contained in

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[1] 33 U.S.C. S. 1228 of the Port and Tanker Safety Act 1978.

[2] Final Report of the U.S. Commission on Ocean Policy, The Evolution of Ocean Governance Over Three Decades, Review of U.S. Ocean and Coastal Law, Appendix 6 to An Ocean Blueprint for the 21st Century, Washington, D.C., 2004, pp.136-137.

[3] Zhang, Ann Shengwen, Environmental Damage Compensation in China following Ship Sourced Oil Spills, Retrieved from: https://www.itopf.org/fileadmin.

[4] Yang, Haijiang Jurisdiction of the Coastal State over Foreign Merchant Ships in Internal Waters and the Territorial Sea, Springer Berlin, 2006, p.232.

[5] Tianjin Maritime Bureau Vs Infinite Shipping Co. Ltd, Tianjin Maritime Court, December 25, 2004.

[6] Zhang, Ann Shengwen, Environmental Damage Compensation in China following Ship Sourced Oil Spills, Retrieved from: https://www.itopf.org/fileadmin

the relevant multilateral agreements. UNCLOS 1982 does not provide specific standards for forms of vessel-source oil pollution. Standards for vessel-source oil pollution are provided by international conventions. The Coastal States may prescribe their discharge and navigational standards for their internal waters and territorial sea. The exclusive jurisdiction of the flag State is not absolute therefore coastal and port States are granted in varying degrees a share of legislative or enforcement jurisdiction with the flag State. Concerning vessel-source oil pollution, when the violation has occurred with the internal waters and territorial sea, the coastal State may take physical inspection and may institute proceedings, including the detention of the vessel relating to the violation. Coastal states have jurisdiction to intervene in incidents occurring beyond their territorial sea following the grounding of the Torrey Canyon, and resulted in the conclusion of the 1969 Intervention Convention.

Findings

Safety of navigation at sea is a very important role in the prevention of vessel-source oil pollution. Flag States are assigned a vital role in the protection of the marine environment and the punishment of pollution violations. The flag State is responsible for the inspection of the vessel and its seaworthiness, ensure safety, pollution prevention, and the certificate of the crew. Failure by the flag State to exercise jurisdiction over vessel-source oil pollution will result in serious discharge violations. Port State enforcement is not sufficient to combat all forms of pollution. It needs to supplement by a rigid coastal State enforcement jurisdiction. Collisions and groundings of ships severely damage the marine environment of the coastal States. Thus, States need to implement effective navigational systems. Besides, inadequately trained, or unqualified crews are a major factor in the cause of shipping accidents. Therefore, Seafarers need to be cautious to evade marine harm and losses. The increasing of substandard ships is one of the major issues to cause maritime disasters. These phenomena may cause serious vessel-source oil pollution. The failure to reduce the use of flag of convenience has led to the development of Coastal /port State jurisdiction as a means of strengthening the weak jurisdiction of flag States. When exercising jurisdiction, to effective control over vessel source oil pollution, all of the Coastal/ port and flag States should cooperate. The States need to enact effective national laws in line with international standards and implement enforcement mechanisms to control vessel-source oil pollution. To respond, vessel-source oil pollution, laws and procedures adopted by the States are to be re-examined from time to time, as necessary. States need to effort to strengthen the jurisdiction to reduce vessel-source oil pollution. Myanmar is a member of many IMO conventions relating to marine pollution however the problem is weak in national legislation and enforcement in Myanmar.

Conclusion

Vessel-source oil pollution is considered not only a national but also an international problem. Oil pollution due to the oil spill and shipping accident may impact the sustainable development of the marine environment. In the vessel-source oil pollution, jurisdiction is the competence of States to prescribe and enforce legislation against vessels involved in pollution. States generally enjoy prescriptive jurisdiction within their internal waters and territorial sea. Concerning vessel-source oil pollution, enforcement jurisdiction may be conferred on one or more of the flag, coastal, or port State. Coastal State may institute proceedings in respect of any violation of national laws enacted based on UNCLOS 1982, or applicable international rules and standards

relating to vessel-source oil pollution. Flag states have exclusive jurisdiction over vessel-source oil pollution to vessels flying their flags. However, where its vessels are in the internal waters or territorial sea of another State, there exists concurrent jurisdiction with that State. The Port States have a major role to play in combating sub-standard vessel operations and reducing vessel source pollution in the ports and internal waters of States. The weakness of UNCLOS 1982 relating to the vessel-source pollution is supported by the various IMO conventions and other regulatory convention. Ship-owner is liable but the pollution damage exceeds his liability and to relieve ship-owner liability and to get sufficient compensation for oil pollution, Myanmar needs to accede to the Fund 1992. As a member of OPRC 1990, Myanmar needs to implement the national and regional oil spill contingency plan for responding promptly and effectively control to any oil spills within Myanmar's waters. Therefore, the National Contingency plan has been approved by the National Disaster Management Committee chaired by Vice- President and submitted to the president's office for official promulgation. Additionally, Deep-sea port law needs to be enacted in Myanmar. The Coast guard is also required to effectively control Myanmar's waters and facilitate law enforcement in the coming future.

Acknowledgements

I would like to express my sincere thanks to Prof. Dr Thwin Pa Pa, Head of Department of Law, University of Mandalay, for encouraging me to pursue my research goal. I am greatly indebted to Prof. Dr Khin Chit Chit, Head of Department of Law, University of Yangon, for her valuable advice. Special thanks are due to Prof. Dr Daw Than Nwe, Professor (Head) Retd, Department of Law, University of Yangon, for kind support and guidance to completing this paper. Moreover, I am very thankful to my parents and all of my teachers for their valuable support.

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LEGAL STUDY ON QUASI-CONTRACT

Khin Hninn Wint Kyaw[1]

Abstract

The foundation of quasi-contracts is based on the principles of Equity, Justice and Good Conscience, which requires that nobody shall benefit himself unjustly, at the cost of others. This is known as the Principle of Unjust Enrichment. A contract is an agreement enforceable by law. Mere statement which cannot give rise to legal consequences, and there is no intention to be legally bound. Although the absence of an agreement between the parties the law creates the obligation. A quasi-contract is a contract which exists by order of a court not by agreement of the parties. Courts create quasi-contracts to avoid the unjust enrichment of a party in a dispute over payment for a good or service. In some cases a party who has suffered a loss in a business relationship may not be able to recover for the loss without evidence of a contract or some legally recognized agreement. To avoid this unjust result, courts create a fictitious agreement where no legally enforceable agreement exists. Courts also use the term *quantum merit* to describe the process of determining how much money the charging the party may recover in an implied contract. In short, the liability of the party who has enjoyed unjust benefits to the value of that benefit only.

Keywords: quasi-contract, unjust, principle, agreement, remedies

Introduction

Quasi-contract is an obligation invoked by law in the absence of an agreement. The express contracts are approved by parties as a matter of law both sharing equal interests with equal consequences though the conditions are stated expressly while in the case of quasi-contracts the law imposes obligations taking into view the conduct of the parties in order to prevent undue advantage to one party at the cost of another. The plaintiff must show not only that the benefit received by the defendant is legally sufficient but also that retention of the benefit by defendant at the expense of the plaintiff is unjust. For example, intimates that plaintiff's recovery in quasi-contract does not require a showing that plaintiff's loss corresponds precisely to defendant's gain.

Quasi-contracts or implied-contracts are based on equitable considerations that such obligations should be fairly compensated, in other words, a person receiving a benefit must compensate the person losing the benefit. The circumstances are such that although there is no actual contract between the parties the law implies a contract and imposes duties on the person receiving bound as if a contract had been made. Though no contract has been made by the parties, law makes out a contract for them, and such a contract is termed a contract implied by law.

Aims and Objectives

The purpose of this paper is to examine the differences between the contract and quasi-contract. It aims to understand the effectiveness of quasi-contract and to know the principle and doctrine applies in quasi-contract. This paper provides a fair outcome in a situation where one party has an advantage over another party. The other party must pay restitution that is suffered to cover the value of something to it. It deal with the issues of quasi-contract between the parties who

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have no previous obligations to one another, the court imposed to prevent unfairly benefiting at another party, even though no contract exists.

Methodology

It analyses the perspectives under the different meaning, legal provisions with example and elements of quasi-contract. Then, this paper discusses how actions grounded in quasi-contract serve as alternatives to proceedings in both tort and contract. This paper is categorized as a qualitative research paper using scholar's articles, laws, order and judgments of the courts.

Findings

According to the case study, most American courts have followed the English precedent and have allowed a quasi-contract action as an alternative to a tort action in conversion. The plaintiff's right to waive the tort remedy and sue in quasi contract has not been so obvious when the defendant converter has not resold the wrongfully acquired goods but instead has consumed or retained them. Most jurisdictions allow quasi-contractual recovery from a converter in the absence of resale. By definition, the situations are ones where there is no contract governing the relationship. This will generally be either ineffective contract, as a result of a mistake or illegality, or some other vitiating factor, while negotiating towards a contract between the parties. In respect of particular problems there are gaps and inconsistencies, in what the actions for recovery of money paid are much better than those for compensation for work done. It needs general principles to provide a framework for quasi judicial requirement. It depends on the nature and subject matter of the contract.

Nature of Contract

A contract is a legally binding agreement between two or more persons. In order to constitute a contract, two distinct parts is required. Firstly, there must be an agreement. Secondly, such agreement must be enforceable by law. Mere statement which cannot give rise to legal consequences, and there is no intention to be legally bound.

To be an enforceable contract, the following basic requirements must be met. However, "Nothing here in contained shall affect the provisions of any Statute, Act or Regulation not hereby expressly repealed, nor any usage or custom or trade, nor any incident of any contract, not inconsistent with the provisions of this Act".[1]

One party makes an offer that is accepted by other party that is agreements between the parties. Proposal and acceptance may take place by words or without express words. A proposal when accepted becomes a promise. A promise without consideration is not enforceable by law. The agreement must have been made with free consent of the parties. The parties to a contract must either perform, or to offer to perform their respective promise, unless such performance is dispensed with or excused under the provisions of this Act or of any law. Thus, performance of contract means the carrying out of obligations, which arise out of the contract.

[1] Section 1 of the Contract Act, 1872.

In a contract, both terms and representations provide a remedy for the aggrieved party. It is allows for a claim for damages if it can be proven that the statement was made fraudulently or negligently, an innocent representation will not result in a claim for damages. Damages will be based on an expectation measure – the claimant will be put into the position they would have been in had the contract been properly performed. Damages will be limited and will allow for a claim for all direct loss by the claimant, irrespective of foreseeability.

If the individual making the statement has some specialist skill/knowledge of the contractual subject matter, or claims to have such knowledge, the presumption is that the statement is more likely to be a term. Once a statement has been identified as a term of a contract, it is not the case that this will always be binding on the parties; the term must have been successfully incorporated into the contract. A term may be incorporated into the contract either expressly or impliedly. Express terms are those which have been explicitly communicated between the parties orally or in writing.

The general law of contract as opposed to the special law largely laid down in statutes, that applies to specific types of contract, such as contracts of sale, insurance contracts, contracts for the carriage of goods, contracts of employment, construction contracts, and arbitration agreements. Dealing with specific types of contract and which contained in the Myanmar Contract Act 1872 and the Specific Relief Act 1877. The Sale of Goods Act 1930 is scheduled on the English Sale of Goods Act 1893 (now superseded by Sale of Goods Act 1979).[1]

Section 68 to 72 of the Contract Act, 1872 deals with certain transactions which could not strictly be called contracts but which created obligations which are known as Quasi-contract. There are five kinds of this situation recognized by contract Act. Under Section 68 to 72 namely-

(1) Claim for necessaries supplied to persons incapable of contracting, or on his account.

(2) Reimbursement of person paying money due by another in payment of which he is interested.

(3) Obligation of person enjoying benefit of non gratuitous act.

(4) Rights and liabilities of finder of goods.

(5) Liability of person to whom money is paid, or thing delivered, by mistake or coercion.

Definition of Quasi Contract

Salmond defines quasi-contracts: “there are certain obligations which are not in truth contractual in the sense of resting on an agreement, but which the law treats as if they were”.

Professor Woodward defines quasi-contracts as "legal obligations arising ... from the receipt of a benefit the retention of which is unjust, and requiring the obligor to make restitution."

A “quasi” or constructive contract is an implication of law. An “implied” contract is an implication of fact. In the former, the contract is a mere fiction, imposed in order to adapt the case to a given remedy. In the latter, the contract is a fact legitimately inferred. In one the intention is

[1] Burrows Andrew, Understanding the Law of Contract in Myanmar, University of Oxford, Fellow of All Souls College, pp-1-14.

disregarded; in the other, it is ascertained and enforced. In one, the duty defines the contract; in the other, the contract defines the duty.[1]

Implied terms are those terms which fill the gaps in the contract. Terms can be implied in the following ways: custom, law and fact. If the term is not inconsistent with any of the express terms, both parties must be involved in the trade context in such a way that they would be expected to be aware of the term being custom in that context. Terms in law can be implied irrespective of the intentions of the parties, they relate to legal obligations imposed either by the courts or by statute. The basic requirements for a term to be implied by courts are: the term is implied in all contracts of that type, as a policy matter. Terms implied by statute, where it has been deemed necessary by the legislature, certain terms have been implied into contracts by statute. The most obvious example of this relates to the sale or supply of goods.[2]

Quasi-contracts sometimes are called implied-in-law contracts to distinguish them from implied-in-fact contracts. An implied-in-law contract is one that at least one of the parties did not intend to create but that should, in all fairness, be created by a court. An implied-in-fact contract is simply an unwritten, non explicit contract that courts treat as an express written contract because the words and actions of the parties reflect a consensual transaction. Even in the absence of an agreement which occurs when a person retain money or benefits that in all fairness belong to another, would exist without judicial relief. This type of contract is called quasi-contract or restitution.

Contractual Obligations

Contract obligations are those duties that each party is legally responsible for in a contract agreement. In a contract, each party exchanges something of value, whether it is a product, services, money, etc. On both sides of the agreement, each party has various obligations in connected with this exchange.

If either party fails to perform their contractual obligations according to the contract terms, it will usually result in a breach of contract. This may result in a damages award to reimburse the non-breaching party for their economic losses.

Any contract has two essential features i.e. agreement and obligation. Agreement arises when a party puts forwards a proposal and when that proposal is accepted by the other party. Obligation comes into the picture as law imposes it over the parties but is linked to the agreement between the parties. Therefore, a contract is a legally enforceable agreement.

Basically, contracts are express or implied by law. The former comes into the picture by the conduct or words or negotiations between the parties. The contract that implied by law is not a real contract. It would be unfair to term it a contract. It arises when law irrespective of agreement aims at meeting the ends of justice.

The express contracts are approved by parties as a matter of law both sharing equal interests with equal consequences though the conditions are stated expressly *while in the case of quasi*

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[1] https://legal-dictionary.thefreedictionary.com/Quasi+Contract
[2] https://www.lawteacher.net/modules/contract-law/construction/terms/lecture.php

contracts the law imposes obligations taking into view the conduct of the parties in order to prevent undue advantage to one party at the cost of another.[1]

"…There are many a situation in which law, as well as justice, requires that a certain person is required to confirm an obligation, although he has not broken any contract nor committed any tort. A person cannot entertain unjust benefits at the cost of some other person. Such kind of obligations is generally described, for the want of better or more appropriate name, as Quasi-Contractual Obligations. This would be better to explain it up that Quasi-contract consists of the Contractual Obligation which is entered upon not because the parties have consented to it but because the law does not allow a person to have an unjustified benefit at the cost of another party."[2]

The liability exists in quasi-contracts on the basis of the doctrine of unjust enrichment. For example: a person in whose house certain goods have been left incidentally, so that person is bound to restore them. There will be an obligation on the house owner to restore the goods safely that is imposed by law rather than any agreement between the parties. Such type of contractual obligations is termed as quasi-contractual obligations.

In general, the quasi-contract doctrine is applied in disputes regarding payment of goods delivered or services rendered. If there is no valid contract between the parties, the main question that arises in such situations is the liability of the defendant.

Lord MANSFIELD who explained such obligations based upon the law as well as justice to prevent undue advantage to one person at the cost of another.

"Liability of this kind is hard to classify. Since it partly resembles liabilities under the law of tort and partly it resembles contract since it owed to only a party and not a person or individual generally. Therefore, it comes within the ambit of an implied contract or even natural justice and equity for the prevention of unjust enrichment."

If a person, incapable of entering into a contract, or any one whom he is legally bound to support, is supplied by another person with necessaries suited his condition in life, the person who furnished such supplies is entitled to reimbursed from the property of such incapable person.[3] It was held in the case of *"Maung Ba Tha, Ma sein Yin vs. Daw Set"*[4] that a buyer of the property from a person who has no power to sell is entitled to reimburse from the extent of the value of the benefit received by such owner.

The second kind of Quasi-contract applies only to payments made *bona fide* for the protection of one's own interest. Under Section 69 of the Contract Act 1872, if a man be interested in the payment of money and has proper ground for thinking that, another who is bound to pay the money either cannot pay or does not intend to pay, he himself is entitled to pay the money and should be allowed to recover it.

Ma Ngwe Shin and one vs. Gaung Boke (a) Maung Laung Kyamar and one [5] Facts of the case were that the appellants leased out a place of land to the respondents at a monthly rent of K 30. Subsequently, the area was occupied by the K.N.D.O, and the appellants evacuated to

[1] Neerja Gurnani, **Vikesh Kumar, Dr. Ram Manohar Lohiya National Law University, Lucknow, "Contracts and Quasi-Contracts"**

[2] Ibid.

[3] Section 68 of the Contract Act, 1872.

[4] 1974 B.L.R.P.491

[5] 1955 B. L.R (H.C) 283

Yangon. The appellants used the respondents for arrears of rent accrued due amounting to Ks.411 during their absence. The respondents pleaded that they had paid Ks. 360 to the K.N.D.O, authorities during their occupation and as such they were entitled to be reimbursed under Section 69 of the Contract Act.

Section 70 of the Contract Act, 1872 requires three conditions, that a thing must be done lawfully, that it must not be done gratuitously and the person sought to be charged must have enjoyed the benefit.

Consent of the Parties

In relation to formation of contracts, the intention to create legal obligations is important. A quite common in a contract, the intention and consideration is linked question. The consideration need not be adequate but must be sufficient in a valid contract.

There are two basic rules: if the contract is a 'domestic' agreement, then there is a presumption that there is no intention to create legal relations (*Balfour v Balfour*); and if the contract is 'commercial' in nature, then there is a presumption that it is intended to be legally binding (*Edwards v Skyways*).

In *Balfour v Balfour*[1], a husband and wife had to separate because the wife was not well enough to travel back to the husband's place of work (Ceylon). The husband promised to pay her £30 per month. When he failed to keep up the payments, she sued. The court held that she could not succeed because there had been no intention to create legal relations.

Lord Atkin said that, in the case of social and domestic arrangements, there was a presumption against there being an intention to create legal relations. This presumption could be rebutted but in this case there was no evidence to suggest that it should be, and the wife's action therefore failed.

In *Edwards v Skyways*[2], however, the presumption operated in the opposite way. An airline pilot who was made redundant was offered what was described as an *ex gratia* payment by way of compensation. When this was not paid, the pilot sued. It was held that in commercial relationships there was a strong presumption that there was an intention to create legal relations, which it would be difficult to overturn. In this case, the mere use of the phrase *ex gratia* was not sufficient to rebut the presumption, and the pilot's action succeeded.[3]

For past consideration in Myanmar, s 25 of the 1872 Act lays down that 'An agreement made without consideration is void unless… (2) it is a promise to compensate, wholly or in part, a person who has already voluntarily done something for the promisor or something which the promisor was legally compellable to do…' One of the requirements of consideration is sometimes said to be that it must be of some economic value. if it is decided that there is no consideration and, therefore, no binding.[4]

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[1] [1919] 2 KB 571

[2] [1969] 1 WLR 349

[3] Richard Stone, Contract Law, 5th Edition, Cavendish Q&A Series, 2003, pp- 225-235, www.cavendishpublishing.com

[4] A Burrows, Understanding the Law of Contract in Myanmar, University of Oxford, Fellow of All Souls College, pp-1-14.

Ordinarily, the law will imply a promise to pay for services rendered and accepted. The rule is founded upon a presumption and may be rebutted by proof of a special agreement to pay either a particular amount or in a particular manner; or by proof that the services were intended to be gratuitous, either as an express gift or under circumstances from which the law will raise the counter presumption that the services were not intended to be a charge against the party who was benefited thereby.[1]

In such cases the law will not imply a promise of compensation for certain services rendered; the reason being that there exists a domestic relationship, the incidents of which include an exchange of such gratuities.

The real question is whether the parties intended to contract or not. In the case of parent and minor child the court's statement may apply quite generally; but here there is the family or domestic relationship, as well as the obligation attached to the relation. No implied contract would ever be raised to pay in such a case in the face of the duties required by the relation.[2]

Thus far mentioned it may be said that there is truly a quasi-contractual relationship, in which the intention of the parties is entirely disregarded. If the circumstances in which the services are rendered are such as to show a reasonable and proper expectation that compensation is to be made, plaintiff will be entitled to recover even in the absence of an "express" contract.

Doctrine of Unjust Enrichment

Basically, the most fundamental principle to make quasi-contract come in existence is upon the principle of justice to ensure no one ought to have unjustly enrich himself at the expense of another.

The unjust principle came from the old maxim of Roman law '*Nemo debet locupletari ex aliena jactura' that means no man must grow rich because of one's personal loss.*

In ***Mahabir Kishore v. State Of Madhya Pradesh***,[3] the requirements of the principle of unjust enrichment were laid down by the Hon'ble Supreme Court as follows:

- The defendant has been 'enriched' by the receipt of a benefit.
- This enrichment is at the expense of the plaintiff
- And the retention of unjust of the enrichment is unjust.

The principle of unjust enrichment requires: first, that the defendant has been 'enriched' by the receipt of a "benefit"; secondly, that this enrichment is "at the expense of the plaintiff"; and thirdly, that the retention of the enrichment be unjust.

Essential elements of a quasi-contract are; it is imposed by law. It is not created by contract; *right in personam*. The person who incurs expenses is entitled to receive money (unjust enrichment); and rise by a legal fiction.

[1] Quasi-Contracts: Blood Relationship: The Presumption of Gratuitous Services by Relatives Author(s): M. H. V. G. Source: California Law Review, Jul., 1919, Vol. 7, No. 5 (Jul., 1919), pp. 357-360 Published by: California Law Review, Inc. Stable URL: http://www.jstor.com/stable/3473879

[2] M. H. V. G. Source: California Law Review, Jul., 1919, Vol. 7, No. 5 (Jul., 1919), pp. 357-360.

[3] 1989 Law (SC)

The category of "unjust enrichment" (also called "restitution" and "quasi-contract") can justify recovery for interactions that did not even involve a promise. Unjust enrichment is an equitable doctrine, or set of doctrines, that starts from a vague injunction: that someone who is unjustly enriched at the expense of another person must compensate that person. For example, there are special sets of rules for when someone can recover for emergency health care or the emergency saving of property. As with the cause of action of unjust enrichment as a recourse available in cases of extreme injustice, but one that courts will be reluctant to use in less extreme cases, for fear of upsetting reliance and predictability. Among the contract-like settings in which some courts have allowed unjust enrichment recovery are (1) subcontractors who have not been paid for their work (by their contracting partners, the general contractor), suing owners who have not paid the general contractor or anyone else for the work in question, and (2) contractors who had not been paid by the tenants who hired them, then suing the owners of the property – but even with these sorts of claims courts are far more likely to deny recovery than to grant it. [1]

Restitution is also important as a basis of recovery for breaching parties or for parties in contracts that would have lost money.

The law of unjust enrichment is a newly recognised subject in English law. It covers, for example, the recovery of money paid, or the value of work done or the value of goods supplied, by mistake or under duress or under a contract that is void or voidable or anticipated or that has been discharged for breach or frustration. The bulk of the subject comprises that area of the common law that used to be called quasi-contract.[2]

English law, like Myanmar, traditionally did not recognise unjust enrichment. So on the traditional approach, the above areas were treated as having no relationship to each other; and spurious theories, like the fictional implied contract theory were put forward to explain much of the law. If C paid D £2000 under a mistake of fact, his legal remedy to recover the £2000 was said to rest on D's implied promise to him to pay it back.

Professor A Burrows, who denoted that, "this is fictional in failing to explain why the promise should be implied or why there is liability because the relationship resembles contract. There precisely is no contract governing this situation. The best answer, accepted now in English law and in most common law and civil law jurisdictions, is that the defendant has been unjustly enriched at the expense of the claimant and restitution is concerned to reverse that unjust enrichment".

Remedies or Compensation as to Avoid Unjust Enrichment or Unjust Benefit

Actions to Recovery of Money

In respect of the recovery of money paid, where the courts will allow recovery is where there is a contract, but there has been a total failure of consideration. This was the situation in *Fibrosa Spolka Akcyjna v Fairbairn Lawson Combe Barbour Ltd* (1943), Where in the case of the contract was frustrated. The House of Lords held that, because the plaintiffs had received no part

[1] Brain H. Bix, Contract Law, Rules, Theories and Context, Cambridge Introduction to Philosophy and Law, 2012, www.cambridge.org/9780521615532

[2] A Burrows, Understanding the Law of Contract in Myanmar, University of Oxford, Fellow of All Souls College, pp-1-14.

of what they had contracted for, they were entitled to reclaim all the money they had paid towards the contract.

In relation to sale of goods contracts where the seller has no title to the goods. In *Rowland v Divall* (1923), the plaintiff was a car dealer who bought a car from the defendant. Neither party knew that the car had previously been stolen. The plaintiff resold the car to X from whom, after some months, the true owner reclaimed it. The plaintiff repaid the purchase price to X and sued the defendant for the price he had paid to him. Despite the fact that the car was now valued at considerably less than the plaintiff had paid, he was allowed to recover the full amount, because there had been a total failure of consideration. The essence of the sale of goods contract was the transfer of legal title to the goods, and this is the defendant had failed to do.

The decision, which was to some extent understandable on the basis that the plaintiff, as a dealer, was primarily interested in rights of ownership which he could resell, was applied in a different situation

In *Butterworth v Kingsway Motors* (1954). In this case, the plaintiff was a private individual who had used the car for nearly a year before it was discovered that it had been sold in breach of a hire purchase agreement. The defendant, who was again innocent of the defect in title, was nevertheless compelled to repay the full purchase price to the plaintiff. The plaintiff had thus had the free use of the car for nearly a year. Money will also be recoverable where it is paid under a mistake of fact. The mistake must be as to a fact which, if true, would have obliged the claimant to pay the money:

"Where both parties to an agreement are under a mistake as to a matter of fact essential to the agreement, agreement is void. There is an explanation that – an erroneous opinion as to the value of the thing which forms the subject matter of the agreement is not to be deemed a mistake as to a matter of fact".[1]

A contract is not voidable because it was caused by a mistake as to any law in force in the Union of Myanmar, but a mistake as to a law not in force in the Union of Myanmar has the same effect as a mistake of fact. For example, A, and B, make a contract grounded on erroneous belief that a particular debt is barred by the law of limitation, the contract is voidable.[2] The effect of mistake of one party as to a matter of fact: "A contract is not voidable merely because it was caused by one of the parties to it being under a mistake as to a matter of fact.[3]

This has changed as a result of the decision of the House of Lords in *Kleinwort Benson Ltd v Lincoln City Council* (1998). The House could see no reason why there should not be recovery where the recipient would otherwise be unjustly enriched. If the recipients of the money had changed their position in reliance on the payment, this might preclude recovery. On the other hand, the fact that the mistake was based on a view of the law, which appeared to be settled at the time, but which the courts later ruled was incorrect, would not prevent recovery.

A further situation where recovery of money may be possible is where the claimant has paid money to a third party for which the defendant is liable.

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[1] Section 20 of the Contract Act, 1872.
[2] Section 21 of the Contract Act, 1872.
[3] Section 22 of the Contract Act, 1872.

In *Exall v Partridge* (1799), for example, Exall paid the arrears of rent owed by Partridge, in order to prevent Exall's carriage, which he had left on Partridge's premises, being seized by bailiffs. The money must be paid under an obligation or constraint, rather than voluntarily, for this action to succeed. Moreover, the defendant must have been under a legal obligation to pay the money.

In *Metropolitan Police District Receiver v Croydon Corp* (1957),4 a police authority had paid the wages of an injured policeman, as it was obliged to do under statute. The policeman sued and recovered damages for negligence from the defendants. These damages did not include any element for lost wages, because these had been paid by the police authority. The police authority sought to recover the amount of the wages from the defendants. It was held that they could not succeed, because the defendants had no legal liability as regards the wages of the policeman, only as regards his losses. Since he had been paid his wages, he had suffered no loss in this respect.

Availability of Compensation

The situation where the claimant is trying to recover, not a particular sum of money paid, but compensation for some benefit conferred on the defendant. The claim will be for a *quantum meruit* payment, that is, a sum equivalent to the value of the benefit conferred. Such a claim may, of course, arise within a contract where no price has been fixed for work to be done. Generally, the defendant will be expected to pay a 'reasonable' price.

A good example is *Planché v Colburn* (1831). The plaintiff had agreed to write a book for the defendant. After the plaintiff had done a considerable amount of work, the defendant pulled out of the project. It was held that, independent of any contract,6 the plaintiff should be able to recover on a *quantum meruit* basis. There was no longer any contract in existence, and the plaintiff should not be deprived of the 'fruit of his labour'. A payment of 50 guineas was ordered. A further situation where such a sum may be recovered is where services have been performed under a void contract. It was noted above that money paid under such a contract is recoverable. It is, therefore, not surprising that an action for compensation for work done may also be successful.

An example of this is the case of *Craven-Ellis v Canons Ltd* (1936). The plaintiff had been appointed managing director of a company under a procedure which was invalid. He sought to recover either the money due under his contract with the company, or on a *quantum meruit* basis. It was held that he could not recover under the contract, since it was void, but he was allowed to recover reasonable remuneration for the work he had done.

In more recent cases that work done under an anticipated contract which never actually comes into existence may be compensated in a similar way. In *British Steel Corp v Cleveland Bridge and Engineering Co* (1984), Robert Goff J7 held that the plaintiffs were entitled to reasonable compensation for work done, at the defendants' request, in manufacturing items which were to be used in the construction of a building. Although there had been extensive negotiations, no contract had ever been finalised. The action succeeded as a restitutionary *quantum meruit* claim.

The above shows that in a number of areas English law has found sufficient flexibility to provide compensation so as to avoid unjust enrichment or unjust benefit. As a result, there are gaps and inconsistencies in what it provides. The actions for recovery of money paid, for example, are much better developed than those for compensation for work done. There is also only a very slow development of general principles to provide a framework for future development.

Conclusion

No single comprehensive definition of benefit in quasi-contract is possible. Unlike actions grounded in quasi-contract serve as alternatives to proceedings in both tort and contract. In the contract category alone, quasi-contract principles may be utilized in cases having their origin in express contract and also in actions where no explicit consensual agreement between the parties exists.

Childres and Garamella's analysis also addresses the question of whether an aggrieved party suing in quasi-contract after part performance can recover only according to the underlying contract rate. The question of when and to what extent recovery should be allowed in excess of the contract rate relates directly to the concept of benefit in quasi-contract, since courts implicitly must determine the extent of the defendant's benefit in deciding whether recovery should exceed the contract rate.

This states that if a promise is made after work has been done, or some other benefit conferred, that work or benefit is not consideration for the promise, which is therefore unenforceable. This is a result of the idea of contract involving a mutual exchange. Common law systems all accept that where the relationship between the parties resembles a contractual one, the rules of private international law which apply to it, and to the parties to it, and to the existence, content, and consequences of it, are the contractual ones.

Acknowledgements

I would like to thank Dr. Theingi Shwe (Rector, Dawei University) for her kindly support to do research. Moreover, I would like to express my sincere thanks to Dr. Sein Lei Lei Aung (Professor, Head of Department of Law) for encouraging me to work at my research. I would like to appreciate and thanks to Prof. Dr Khin Chit Chit (Head of Law Department), University of Yangon, Prof. Dr Khin Phone Myint Kyu and Prof. Dr Khin Khin Oo, for their kind encouragement and valuable suggestions for my paper. Finally, I am really indebted to Professor Dr. Daw Than Nwe (Member, Myanmar Academy Arts and Science) for her great guidance, immense of knowledge, and continuing support on this paper. I have got a great ideas and suggestions. If any mistake is established, is neither from the sources, it is from my own responsibility.

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J. Myanmar Acad. Arts Sci. 2021 **Vol. XIX. No.8**

PROTECTION OF THE RIGHTS OF PERSONS WITH DISABILITIES IN MYANMAR

Khin Mar Lar[1], Tin Lay Thwe, Myo Ma Ma and Hnin Hnin Nge

Abstract

In Myanmar, the Right of Persons with Disabilities Law was enacted in 5th Jun 2015 and the Rule on the Right of Persons with Disabilities in 2017. In order to fully participate in community by disabled persons living in Myanmar, the public buildings, transportation and telecommunication should be adapted and changed into the most reasonable accommodation for the disabled persons within a period of five years after this Law was enacted. Moreover, the State should instruct the relevant Ministries to train teacher and educational staffs systematically about the educational techniques and materials for the educational rights of the disabled persons like normal children depending on their learning scale without discrimination and neglect. And also the health information related to the disabled persons should be widely disseminated to protect the disability. Furthermore, this Law of Myanmar was enacted that the employers who appointed the specified proportionate number of disabled employees set by National Committee have tax free allowance. However, the number of disabled employees to be appointed was not mentioned. All the facts above including the appointment member of the disabled employment of disabled persons lives, communication and protection for the obstacles in the society.

Introduction

The Republic of the Union of Myanmar signed the Convention on the Rights of Persons with Disabilities in December 7, 2011, for the protection of rights of disabled persons. In Myanmar, for protection and safeguarding the right to education, health service, participation in political and civil, employment opportunity and registration of disabled persons, the Pyidaungsu Hluttaw enacted the Right of Persons with Disabilities Law in 5th June 2015 and Rule on the Right of Persons with Disabilities in 27 December 2017. According to this Law and Rule, good relationship between disabled and non-disabled and peaceful society for disabled persons appeared. By enacting Law and Rule relating to rights of disabled persons in Myanmar, the standard of living, raising moral standard including barrier free environment and participation in society of the disabled persons can be protected and implemented effectively.

Materials and Methods

- studying on Laws relating to Disabled Persons
- rights given under Laws relating to Disabled Persons
- studying on reasonable accommodation for disabled persons

Findings

Although Law and rule relating to the Right of Disabled Persons in Myanmar enacted there are many weaknesses in the implementation of the medical treatment, educational sectors, employment component and social participation component. If the requirements fulfill to ensure

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by relevant ministries and the government, it will be appropriated and better for their development of the disabled.

1. Disabled Persons

People may be caused the long-term physical, mental, intellectual or sensory impairments because of the various situations.

According to Article-1 of the Convention on the Rights of Persons with Disabilities, Persons with disabilities includes those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.

In Myanmar, Persons with Disabilities (disabled persons) means a person who suffers long-term the physical, visual, utterance, hearing, intellectual, mental, intelligent, one or more sensory impairment by birth or not.[1]

Dr. U Tha Moe, Senior Medical Officer of a hospital for persons with disabilities defines them as follows;[2]

A disability is any restriction or loss of ability to perform an activity in the manner or within the range considered normal for a human being as a result of impairment. Impairment is any loss or abnormality of psychological, physiological or anatomical structure or function. A handicap is a disadvantage for a given individual, resulting from an impairment or disability, which limits or prevents the fulfillment of a role that is normal (depending upon age, sex, and social and cultural factors), for that individual.

There are two kinds of disabilities such as physical and mental disabilities. Physical disabilities include deaf-blind, hearing, physical, speech or language and vision disabilities. Mental disabilities include intellectual or developmental, learning and mental health disabilities.

The disabled persons feel always discrimination, exclusion and denial from participation in society including housing, employment, transport, cultural life and access to public services. And then, the disabled persons do not have full enjoyment their human rights because they will not get access to reasonable accommodation.

In Article-2 of the CRPD provided that Discrimination on the basis of disability means any distinction, exclusion or restriction on the basis of disability which has the purpose or effect of impairing or nullifying the recognition, enjoyment or exercise, on an equal basis with others, of all human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field. It includes all forms of discrimination, including denial of reasonable accommodation.

Discrimination means the distinction, exclusion not to be participated in a society, and restriction of participation that are hindered recognition and equal enjoyment as others in politics, economics, social, education, health, culture, public affairs and any other field on the basis of disability.[3]

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[1] Section 2(a) of the Rights of Persons with Disabilities Law, 2015.

[2] Japan International Cooperation Agency Planning and Evaluation Department, Union of Myanmar, Country Profile on Disability, March-2002, p.5.

[3] Section 2(e) of the Right of Persons with Disabilities Law, 2015.

There are three types of discrimination such as direct discrimination, indirect discrimination and the denial of reasonable accommodation.

Direct discrimination is when someone is treated unfairly because of their sex, race, etc as listed on the previous page, compared to someone else who does not have that characteristic, in the same or similar circumstances.[1]

According to Section-11(1) of the Anti-Discrimination Act, 1991 of the Queensland, indirect discrimination on the basis of an attribute happens if a person imposes, or proposes to impose, a term-

(a) with which a person with an attribute does not or is not able to comply; and

(b) with which a higher proportion of people without the attribute comply or are able to comply; and

(c) that is not reasonable.

To eliminate discrimination, countries shall take the provision of reasonable accommodation which is defined in Article-2 of the CRPD. Reasonable accommodation means necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms.

Reasonable accommodation might include, for example, making the workplace accessible for wheelchair users or providing a reader or interpreter for someone who is blind or hearing impaired. The disabled persons must feel surely a lot of discriminations in society and environments.

2. Rights to Medical Service

Medical Service is very important for all human being but disabled persons are frequently denied access to the kind of care for their physical, mental and emotional disabilities. Disabled persons need to be able to access health right on an equal with non-disabled persons.

Health care services for all children, including children with disabilities, are accessed through township hospitals, station hospitals, rural health centers, and sub-rural health centers, but separate health care services for children with disabilities are not available at township level. Health concerns of all children, including children with disabilities, are part of the Ministry of Health's (MoH) five-year strategic plan. The MoH provides a range of services, including rehabilitation, while especially services are provided in some hospitals.[2]

The families of disabled persons in both urban and rural locations should have access to health checks and education during the pre-natal, natal and post-natal periods. There is no universally accepted system for disability diagnosis, however, both national and international approaches to classification exist and are practiced in many countries in Asia. Singapore and Thailand have particularly strong systems for diagnosis and training of medical personnel. Healthcare providers need to receive more specialized training on maternity care, as well as

[1] Board of New South Wales, "Discrimination and the Anti-Discrimination", Discrimination factsheet, Reprinted May, 2014, p.2.

[2] Unicef, Situation analysis of children with disabilities in Myanmar, 2016, p. 45.

on children with disabilities. Mothers and care-givers need awareness training on hygiene and medical care, health promotion training and home-based intervention training.[1]

States Parties shall provide those health services needed by persons with disabilities specifically because of their disabilities, including early identification and intervention as appropriate, and services designed to minimize and prevent further disabilities, including among children and older persons.[2]

The Ministry of Health shall carry out laying down the plans that ensure a minimum of disability prevalence rate at pregnant woman and infants, children, women and elder person and determining the duties and functions by forming the disability degree classification body by responsible persons from the relevant Ministries and organizations, experts from disabled organizations for examining, evaluating the category of disability and degree of disability in accordance with the guidance of the National Committee.[3]

In Myanmar, some hospital or rehabilitation centers for disabled persons have opened. But the medical system to base diagnosis of disability within the pre-natal, natal and post-natal period is weak it to develop in Myanmar. The most mothers from the Myanmar have need to access health education and information because of disability is not public-health problem.

3. Rights to Educational Service

The education is of the utmost important for PWDs in creating the foundation for social skill, academic skills, economic skills, independent living and vocational training. There are few educational institutions for the disabled in Myanmar able to offer components of this range of education, those that do exist being located in Yangon. Additionally, the national education system is not, on the whole, inclusive for disabled students, and presents many difficulties and obstacles to those PWDs who attempt to access mainstream education. Consequently, the majority of PWDs in other areas of country, where the only other alternatives are limited adaptive community education, have little access to either formal or informal education. But even where PWDs have geographical access to institutions and special schools, many families who believe in the value of education (51%) for PWDs still cannot access it as they are unable to support the expensive school fees, accommodation and transportation fees. In fact, the high expense of most special schools means that many PWDs rarely attend higher education, which is contributed to by scarcity of scholarships. Consequently, the education of many children with disability depends on their family's economic status.[4]

PWDs face many barriers to access education mainstreaming system such as ignorance of the community, poverty and remoteness. While some of these barriers are liked to their disability, others are simply the result of social prejudices. Because of these barriers, one third of the PWDs are illiterate in Myanmar. In this condition, as people without a formal education, they have access, if any, only to unskilled jobs and low income.[5]

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[1] Salai Vanni Bowi, Understanding the Challenges of Disability in Myanmar, 2012, p-28.
[2] Article 25 (b) of the Convention on the Rights of Persons with Disabilities, 2008.
[3] Section 27(b) and (c) of the Right of Persons with Disabilities Law,2015.
[4] Salai Vanni Bowi, Understanding the Challenges of Disability in Myanmar, 2012, p-18
[5] http:www.ukessay.com/essay/education-and-people-with-disabilities-in-myanmar-education-essay.php.

According to Section 20 of the Right of Persons with Disabilities Law stipulates accessible education to disabled students not only from government schools but also private and non-government owned schools.

Under Article 24 of the Convention, State parties recognize the right to education of persons with disabilities. But, State Parties shall ensure that persons with disabilities are not excluded from the general education system on the basis of disability and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability.

States Parties shall take appropriate measures to employ teachers, including teachers with disabilities who are qualified in sign language and to train professionals and staff who work at levels of education. Such training shall incorporate disability awareness and the use of appropriate augmentative and alternative modes, means and formats of communication, educational techniques and materials to support persons with disabilities.[1]

State Parties shall ensure that persons with disabilities are able to access general tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others. To this end, State Parties shall ensure that reasonable accommodation is provided to persons with disabilities.[2]

Under the above Articles of the Convention, State Parties shall ensure an inclusive education system and lifelong learning.

The National Committee on the Rights of Disabled Persons empowered to make arrangements for learning from the basic level education to the university level education and to teach all inclusive education systems by persons with disabilities.[3]

Moreover, the right to education of persons with disabilities stipulates in Chapter 13 of the Child Rights Law, 2019.

Mostly children with disabilities are still enrolled in special schools or institutions. According to the Ministry of Education report from 2010-11,“ there were 801 disabled children in formal schools, 1450 children in special schools for the blind and the deaf, 30 disable students in universities and colleges and 6 disabled students in master degree courses”.[4]

As a primary medium for online learning, the internet offers disabled students the convenience that comes with being educated. With computer-based learning and with online learning, disabled students gain easy access to all educational materials right at the comfort of their home. This online learning set–up significantly removes the hassle of physical exhaustion for mobile-impaired students, while also making life easier for the visually-impaired or hearing-impaired ones. This allows them to explore the world in a much freer environment, removing the discouragement of learning and enticing them to participate more actively instead.[5]

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[1] Article 24 (4) of the Convention on the Rights of Persons with Disabilities, 2008.
[2] Article 24 (5) of the Convention on the Rights of Persons with Disabilities, 2008.
[3] Section 21 and 22 of the Right of Persons with Disabilities Law, 2015.
[4] Sida, Disability Rights in Myanmar, 2014, p-2.
[5] https://www.online-bachelor-degrees.com.

It is recommended to develop training programs on disability, to increase skills and raising awareness of teacher to work effectively with PWDs, to initiate vocational training for PWDs and to establish educational institutions for disability.

To sum up, education is important for PWDs in creating the foundations for skill, training and living. Ignorance of the community, poverty and remoteness etc. are barriers to access education. Accessible education to disabled students is stipulated in Section 20 of the Right of Persons with Disabilities Law, 2015. Under Article 24 of the Convention on the Right of Persons with Disabilities guarantees the right to education of persons with disabilities, without discrimination and on an equal basis of others. Online learning offers disabled easy access to all educational materials right at the comfort of their home.

4. Right to Employment Component

The job opportunities are an important sector for disabled persons for their life. "Access to employment for persons with disabilities" and sets out obligations for employers provides in Chapter 10 of the Right of the Persons with Disabilities Law of Myanmar, 2015 imply with the Convention. Government, Organizations and Employers shall provide any job opportunities for disabled people.

According to Section 35 of the Right of Persons with Disabilities Law, 2015,the National Committee shall lay down, implement and supervise the policies and plans concerning the equal right to work for persons with disabilities as the others, creation of employment opportunities, nondiscrimination in employment process, prevention of forced labour, obtaining wages, salaries and benefits based on working capacity in accord with the existing law, enjoyment of the right to participate in the relevant labour organizations, enjoyment of the right to access the vocational educations, enabling to operate the self-employments, enjoyment the right to work in government departments, government organizations and private enterprises, accessibility in the workplace, taking measure of suitable accommodations or arrangements, and rehabilitation in coordination with relevant Union Ministries. And also National Committee shall carry out for enabling to conduct the private special vocational training schools with the government departments and government organizations for employment opportunities of persons with disabilities in coordination with relevant Union Ministries and shall coordinate with the relevant Union Ministries, Region or State Governments to submit for obtaining tax exemption, tax relief and right to import in accord with the existing tax law, rules, and procedure.

People with mild intellectual disabilities want to be able to communicate with their peers and to be part of the community. Yet, a lack of peer workshops or shelter workshops for PwDs will continue to make institutions attractive not just to child orphan PwDs and PwDs with moderate or severe disability, with or without families. Families of PwDs unable to benefit from livelihoods provision, such as those with intellectual disability and other moderate or severe disability, expressed a need for access to indirect livelihood support to reduce financial pressure to the families, enabling them to better support their disabled family member.[1]

With respect to the Co-operative Sheltered Workshop and suitable employment for disabled persons, the employers shall employ persons with disabilities who are able to work based on the

[1] Salai Vanni Bawi, Understanding the Challenges of Disability in Myanmar, Internships Asia and Hussman Foundation, 2012, p.19.

type of work in appropriate job as quota specified by the National Committee , shall perform appropriate programmes for persons with disabilities including interviewing and employing based on capacity, enjoying the same wages and salaries and labour rights, promotion, job retention and obtaining the right of accessing free vocational education.[1]

In Myanmar, the blind disabled persons created now Myanmar's Pronunciation System. It is a great job for disabled persons. At past, the blind disabled persons used computing with Jaws Software System in English. The Ministry of Social Welfare, Relief and Resettlement will support for disabled persons in new law and new system. The disabled persons should prepare their abilities.[2]

5. Rights to Social Participation Component

Many disabled people become lonely and have feelings of depression. They feel ostracized from their communities, with few people trying to help or encourage them.

Although some community members will acknowledge and assist disabled people, often the attention they receive is unwelcome, hurtful, or confined to looks and expressions of pity. Bullying is also a major factor facing disabled people in Myanmar, with name-calling and the disabled person are finding a source of amusement commonplace. Some families view their disabled child as a burden, a child that they cannot rely on, nor depend on in the future for income or opportunities. Although many families choose to keep their child and care for them as best they can, some families will go so far as to abandon their child disabled. Where cultural beliefs suggest that to have a disabled child is good luck, and a sign of prosperity for the family, the disabled child is not abandoned. They do not lead a normal life however, and are treated as differently from others in the community.[3]

In Myanmar, someone with disabilities might face discrimination on many levels, within their families and communities, both the regional level and the national level. Most disabled people suffer from some discrimination and exclusion, but the degree and severity often depends on the nature of their impairment and their varying personal situations. Disabled children and women are particularly vulnerable.[4]

The National Committee shall coordinate and implement to perform disability activities for ensuring accessibility of persons with disabilities at public places in cooperation with the relevant Union Ministries, Development Committees and Development Bodies, Region or State Governments, nongovernment organizations, private organizations and persons.[5]

According to Article 28 (1) of the Convention on the Rights of Persons with Disabilities, 2008, State Parties recognize the right of persons with disabilities to an adequate standard of living for themselves and their families, including adequate food, clothing and housing, and to the continuous improvement of living conditions, and shall take appropriate steps to safeguard and promote the realization of this right without discrimination on the basis of disability.

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[1] Section 36 (b) and (d) of the Right of Persons with Disabilities Law ,2015.
[2] The Mandalay Daily Newspaper, Vol-19, No.13, p.15 (12, 12, 2015).
[3] http://rehmonnya.org/archives/106.
[4] Salai Vanni Bawi, Understanding the Challenges of Disability in Myanmar, Internships Asia and Hussman Foundation, 2012, p.7.
[5] Section 28 of the Right of Persons with Disabilities Law, 2015.

Moreover, under Section 29 and 31 of the Right of Persons with Disabilities Law, the persons with disabilities who are eligible to vote under the Law shall have the right to vote a secret ballot for any Hluttaw and then the National Committee shall coordinate with the Union Election Commission to take appropriate measure in accord with the rules and procedures issued by this Law to facilitate for the person with disability in voting; and make appropriate measures to participate persons with disabilities in traditional and cultural events, entertainment programmes, sports trainings and competitions related to the public.

Conclusion

The disabled persons are entitled not only the rights to participate in the workplace, education, cultural and social security but also to get the basic needs, such as, accessibilities, personal mobility, habilitation and rehabilitation of disabled persons to live independently and fully participate in all aspects of life. In order to safeguard and protect the disabilities issues, Myanmar enacted the Right of Persons with Disabilities Law in 5 June 2015 and Rule on the Right of Persons with Disabilities in 27 December 2017. Although the Right of Persons with Disabilities Law of Myanmar enacted the medical service for disabled persons, there are many weaknesses in the implementation of the treatment facilities and dissemination of health information. In the educational sectors, teachers and educational staffs also have to need the special resources or training to teach the disabled students by their disabilities. So, the government should instruct the relevant Ministries to give the systemic training and instructions to teachers and educational staffs. The employment of disabled persons should be needed to have safe and comfortable workplace. Moreover, the relevant ministries should instruct the number of disabled employees to appoint in the employments. Although, the Ministry of Social Welfare, Relief and Resettlement cooperate and coordinate with respective ministries and Region and State government effectively carry on the implementation respect to the rights of disabled persons, the disabled persons faced with the barrier in their society and environment concerning transportation, telecommunication and health information knowledge in Myanmar. Therefore, it will be appropriated and better for their development of the disabled persons if the above matters fulfill to ensure by relevant ministries and the government.

Acknowledgement

First and foremost, I would like to thank Executive Committee, Myanmar Academy of Arts and Science for celebration of the Paper Reading Session. Furthermore, our greatest thanks go to our Rector and Pro-Rectors of the Taungoo University for giving this great chance. And then our special thanks are due to Dr. Hnin Hnin Saw Hla Maung, Professor (Head) and Dr,Wah Wah Tun, Professor, Department of Law, Taungoo University for kind support and guidance to completing this paper.

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SUBJECT MATTERS DEALING WITH COPYRIGHT INFRINGEMENT IN MYANMAR

Khin Thandar Tin[*]

Abstract

Recently, Myanmar passed a new Copyright Law on 24 May, 2019 with updated rules. It will be enforced after publishing with notification by the President of Republic of the Union of Myanmar. The implementation of new rules is an important part for achieving the objectives of the new law. The comprehensive interpretation is also a particular way to reach effective decision when copyright owners claim the authorship for their works at the court. In the field of copyright, especially in literary, disputes many arise among the authors dealing with a perception on using prominent phrases or words in their works whether the authorship of copyright or not in Myanmar. If prominent phrases or words used by someone, it may or may not lead to copyright infringement account of reasonable. This paper will find out relevant results by taking into may or may not too in your more language findings.

Keywords: Copyright, Copyright Owners, Works, Authorship, Copyright Infringement

Introduction

Copyright grants an exclusive right to the copyright owner or holder to create jobs employment opportunities. The owner has the right to do particular acts with regard to that work as well as the right to prevent others from doing those acts. The law provides the copyright owner to enjoy two types of right; they are economic rights and moral rights. Whereas someone violates the owner's exclusive right, it will constitute an infringement because it is an unauthorized act in which someone used the copyrighted work without the consent of original owners or right holders under the limitation of copyright. It is noted that the infringement includes copy, reproduce, adapt, perform, broadcast, distribute or communicate to the public from original works belonging too the copy right holders. In Myanmar, like other countries, copyright infringements are found by the act of making copies without permission from the real owner. However, some matters constitute as copyright infringement because the situations might not have clear evidence to give infringement regarding economic right or moral right. Thus, in order to overcome ambiguous matters, the implementation of rules and comprehensible interpretation are vital in achieving in enforcing the copyright law in a country.

Objectives of the Study

- To be a genuine deterrent for copyright infringements and repeated offenses
- To find out the effective rules for deterrence on copyright infringement
- To examine infringement matters in order to prove offensive facts
- To ensure that legitimate owners are in a position to enjoy the benefits of exclusive rights

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Materials and Methods

In this research paper, relevant data were collected by conducting surveys with some personnel's concerned with copyright. Materials from relevant documents, facts, **inclining** primary and secondary sources from librarieswere by utilized.

Copyright Infringement in Myanmar

At present, the scope of legal protection is still needed to control copyright infringements and to prevent third parties from commuting illegitimate activities. In these situations, the legitimate copyright owners have faced many problems of copyright infringements problems regarding to their rights been enacted in the country because the new copyright law has not yet been enacted by President of Republic of the Union of Myanmar. In Myanmar, there are many reasons for copyright infringements: Higher technology, development of the media environment, economic gap between Myanmar and advanced countries, and the dissimilar cultural policy, etc.[1]

Infringement of Economic Right

Two types of rights are provided under the copyright Law[2]: the first type is economic rights which are given to the authors or creators who have the right to reproduce, translate, adapt, exhibit or perform in public, distribute, broadcast or communicate to the public.[3] If someone accessed the work or substantial part of it which belongs to the right holder, the right holder would have to prove that the infringer did the act without his/her permission to do the act and show that his/her exclusive rights are infringed.[4]In Myanmar, Section 18 of the new Copyright Law, 2019 provides the rule of economic right and most of the infringement problems of economic rights can be found in the fields of publishing journals books or novels, music, motion picture and online piracy, etc.

Field of Literary

In the field of book or novel, copyright infringements include, without the consent of the author, the use of novel to produce as a video/movie or plagiarize or the scripts that is copied from the plots of original novel essence or the infringer who pretends as a new creator by changing the story frame but most are very similar to the plots of original novel.[5]

Most of the disputes found that, without the consent of original writer, unauthorized using a novel to perform a film/video was found or sometime legally permission of a novel which was agreed from writer to make a video, but the writer did not know concerning with further making a DVD Film of such novel. Moreover, the user knowingly used the copyrighted novel for production a film/video by changing the title only or by the act of plagiarizing the whole novel and etc. For example, in the changed title, a director used a novel without the consent of writer, Tat KaThoKhinMaung Aye who wrote “Kant Kaw Taw Zat Lann 8”. The director changed

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[1] Masaki Tosa, Public Significance of Cultural Piracy in the Global Flow of Popular Culture, http://www.a-jrc.jp/pdf/ajj/039_046_tosa.pdf
[2] Article 6[bis] of the Provisions of the Bern Convention for the Protection of Literary and Artistic Works (1886)
[3] Learn from the Past, Create the Future: The Arts and Copyright, WIPO Publication No. 935, 2007, p.25-27.
[4] David Vaver, Principles of Copyright: Cases and Materials, (WIPO) Geneva, 2002, p.128.
[5] By Interview Survey, 15-16 Dec 2016

novel's title but all the plots of a film were wholly same as novel. Finally, he admitted his infringement and the case was amicably succeeded between them.[1]

Moreover, some cases might claim to have fantastic creative title which has an impressive word, prominent and distinctive character created by an original writer or a creator. For example, a novel's title named "Yay PwatPa Mar" and "Pann Myaing Lai Mha Oo Yin Mhuu", all of which were used by directors to make films without legally claiming from writers. After submitting the cases for settlement of a dispute, the writers gave permission for shooting films and they won their rights to ownership.

Another settlement case was found for copying and producing a video first without the consent of the author and director. In fact, a novel was sold by the author to a director who claimed to have rights and got legal permission for producing a video. In a case, firstly, the infringer disputed that the story was created by himself i.e. his own idea. However, most of the plots of film were wholly similar with the author's novel. Lastly, an infringer did not deny the facts of his infringement and the case was decided by giving compensation to the author and by making apology to the director in the newspaper for wrong doing.[2] . Most of the cases are settled amicably, and all those involved are satisfied without recourse to the court system.[3]

In literary, some argument is peculiarly initiated that whether using same description of phrases would be an ownership of copyright or not. An example is concerned with using the title which was published as a novel in 2012 and posted online date on 10 April 2013. The name of author is "Thu Way" who wrote a novel, the title is "Thu Mae Ne Tè Thit Pin" (The Tree That He Forgot).[4] A few years later, another person, the composer, used similar phrases as a title of a song which was named "Thu Mae Ne Tè Thit Pin" in one album. He argued that his title came from his poem which he wrote with his own idea.[5] In here, according to the copyright concept concerning with "originality", "first", it must be "independently created". A work can be original even if it is strikingly similar or identical to that of another. For example, if two authors independently write novels that are strikingly similar, each will have copyright protection, it assumes that there is no copying.[6]

However, according to the above case, the authors' concept or the literary group thinks that the phrase "Thu Mae Ne Tè Thit Pin" is a spark of creative co indene and no one can be similar in it.[7] Now, the case was solved by the settlement of Myanmar Music Association amicably.[8] Nevertheless, the general principle is that the copyright does not extend to headings, names, titles and lists of ingredients.[9]

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[1] By Interview Survey with author Lal Twin Thar Saw Chit, 16 Dec 2016

[2] "Lawn Zay Ti Nae San Yay Kyi" case, by Interview Survey with author Lal Twin Thar Saw Chit, 16 Dec 2016

[3] By Interview Survey with author Lal Twin Thar Saw Chit, 16 Dec 2016

[4] Myanmar Book Download-->Authors-->Thu Way, www.freelibraryonline.com

[5] Problem Source, 10 Nov 2016, https://web.facebook.com/photo.php?fbid=1547895781903792&set =pb. 100000501558971.-2207520000.1481367081.&type=3&theater

[6] Deborah E. Bouchoux, Intellectual Property: The Law of Trademarks, Copyrights, Patents and Trade Secrets, 4th Edition, 2013, p.193

[7] Problem Source, 11 Nov 2016, https://web.facebook.com/photo.php?fbid=1548458605180843&set =pb. 100000501558971.-2207520000.1481367081.&type=3&theater

[8] By Interview Survey with the staff of Myanmar Music Association, 14 Dec 2016

[9] Deborah E. Bouchoux, Intellectual Property: The Law of Trademarks, Copyrights, Patents and Trade Secrets, 4th Edition, 2013, p. 193

But, some authors[1] in Myanmar agree with the concept that their fantastic creative title would have copyright protection while the other is using same title or same phrases. This concept is their literary ethic which they accept each other and it has not been included in the legal rules yet.[2] In the concept of literary group, they agree if the title includes creative combination phrase with impressive words, the author can claim his/her works of copyright because it does not use common words, it has distinctive character, and then, the appearance title with the soul of author covers the whole novel essence in which no one can have same expression due to the artistic creation.[3] For example, the novel "Pan Myaing Lèi Mha U Yin Mhu"(The Gardener among the Flowers) by author "Led win thar Saw Chit", a retired chairman of Myanmar Writers Association (2010-2016), who said either "Pann Myaing Lè" phrase or "U Yin Mhu" phrase could not be owned by author, because all are known that each word is in common use. But, in this novel, the author combined each word which represented that "Pann Myaing Lè" stands for "Children" and "U Yin Mhu" stands for "Teacher". After the combination of such words as a phrase "Pan Myaing Lè Mha U Yin Mhu" this becomes impressive words like a new phrase and covers the whole essence of novel. Thus, no one can deny that it has a peculiar creation. Another example is "Yae Kyaung Laung Thaw Mi" novel, in which the story started "tease affectionately with love", it stands for "Yae", by a King, Na Ra Thiha Pa Tae Min, in Bagan dynasty. But the story ended with anger and greed, it stands for "Mi". So, the author named such title to give a message, which is sometime 'love' turn to 'fire'. Thus, each word has its own idea and peculiar creativity with fantastic expressions. Besides, the meaning of title covers the whole of the novel essence splendor, then, becomes as a "new" and it derives from critical creation with artistic. That's why it becomes intellectual property and thus it has copyright.[4]

At this juncture, most Copyright Laws of some ASEAN countries, the law does not interpret the meaning of "literary" in detail. Also, the Copyright Laws from other developed countries indicate a very low threshold. Essence of the whole novel of originality is in order to extend the umbrella of copy right protection to works of extensive creativity. But, one country states that the title of a work will be protected in a similar manner to the work itself if the title is 'original in character'. Besides, a protected title cannot be used to distinguish a work of the same kind, even if the entitled work is no longer protected, while such use is liable to create confusion.[5] In this regard, to be measured upon the level of creativity, the sufficient requirement is that the work must contain at least certain minimum amount of original expression.[6] Moreover, if the owner had copyright registration of his/her distinct phrase, the owner could claim authorship against illegal use.[7]

Field of Music

In the field music, the main problem is a lack of a copyright system for albums and videos under the Copyright Act, 1914 because it did not have updated procedures. Because of the law

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1 Authors: Ledwinthar Saw Chit and Way Khaun.

2 Problem Source, 11 Nov 2016, https://web.facebook.com/photo.php?fbid=1548458605180843&set =pb.10000050 1558971.-2207520000.1481367081.&type=3&theater

3 By Interview Survey with authors, 15-16 Dec 2016

4 By Interview Survey with author Ledwinthar Saw Chit, 16 Dec 2016

5 Graham Dutfield and Uma Suthersanen, Global Intellectual Property Law, 2008, pp.80-81

6 Deborah E. Bouchoux, Intellectual Property: The Law of Trademarks, Copyrights, Patents and Trade Secrets, 4th Edition, 2013, p.193

7 Anna Assad, How to Find Copyrighted or Trademark Phrases, https://bizfluent.com/12717085/how-to-find-copyrighted-or-trademark-phrases

economic, remuneration benefits, people cannot afford to buy original albums as much as they wish. At the same time, some television channels and radio stations launch broad case the music videos without transmit broadcast paying fees or royalties to the artist, even though the Music Association has adopted measures concerning with fees or royalties to musicians artists.[1]

Due to royalty problem, there is no security for copyright owners against street vendors or infringers who keep copying music videos without permission. Many pirated CDs and DVDs can be seen everywhere on the streets of many cities in the country. Equally, there are also copies of international songs dub changing them into Myanmar lyrics. This is also a problem for foreign copyright owners whose works are infringed even if authentic proofs of new versions or new lyrics or else new creations from creators in Myanmar.[2]

Producers are unwilling to make albums and music videos for distribution because they not make enough money. Vocalists could not produce their own albums due to as well as launching new albums through media is also expensive. It takes so hard to increase market share for music around the country. Besides, some companies use music/song for events or marketing to promote their products without the consent of the artists/musicians; it is in face one of the infringement problems.[3]

Music albums were the most commonly pirated. One of the singers said that pirated copies were the cause for the damage to the musicians' survival. A lot of pirated copies are available it is difficult to purchase purchasing genuine albums are very rare. It has adversely affected that tax revenue, and at the same time it tends to increase the survival Purchas low-priced copies of music albums. It means that the illegal products of gradually be substituted by high quality genuine albums. As a result, musicians cannot survive in their world their career. In the innovative industries, many talented individuals would have to face with menace of privacy.[4]

Some problems are found in the music area such as using ringtone and song without the consent of original owner or music composer and broadcasting music without the consent of original singer.[5]

Fields of Films and Movies

Recently, in Myanmar, it is found that some people involved in protests are engaged in trading unauthorized copies of foreign movies, films, VCDs and DVDs. Their complaints, claimed to amend and change strict rules into soft rules in the Myanmar Television and Video Law, 1996; to enjoy foreign copyright products cheaply for users; to provide punishment with regard to commercial trading in local pirated products or local movies, films, VCDs/DVDs merely and to give permission with sympathy for their commercial trading in unauthorized copies of foreign movies, films, VCDs and DVDs.[6]

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[1] ZinnZinn, Lack of Copyright Plagues Myanmar Musicians, 02 June 2016, http://www.mmtimes.com/index.php/lifestyle/20630-lack-of-copyright-plagues-myanmar-musicians.html

[2] Ibid

[3] ZinnZinn, Lack of Copyright Plagues Myanmar Musicians, 02 June 2016, http://www.mmtimes.com/index.php/lifestyle/20630-lack-of-copyright-plagues-myanmar-musicians.html

[4] Aung Si Hein, Tackling Film and Music Piracy, 11 Feb 2013, http://www.mmtimes.com/index.php/special-features/159-digital-communications/4099-tackling-film-and-music-piracy.html

[5] By Interview Survey with the staff of Myanmar Music Association, 14 Dec 2016

[6] Problem Source, Yangon, 16 Oct 2016, https://web.facebook.com/popularnewsjournal/posts/1495826610433129?pnref=story.

In this situation, protesters, street vendors, believe that earnings from pirated copies do not hurt anyone if they are merely trading in unauthorized copies of foreign copyrighted works. In fact, such trading is a way of theft which is reaching into someone's pocket and taking his or her money. Although creators are from foreign countries, they have invested line and money for their copyright materials. Thus, they deserve to receive any relief or compensation for their efforts.[1] In truth, such unauthorized copies including foreign pirated products appear from the small groups who initiated unauthorized products and distributed them to street venders so that they could rights make profits by obtaining money through illegal activities, i.e. stolen intellectual property. These groups were though small as can be defined "organized crime" that involves enduring networks of actors engaged in ongoing and continuous money-raising activities as well as their goal is driven by financial motives.[2]

Field of Online Piracy

Concerning with online piracy, the problem arises when films or movies are streaming on the cinemas or channel; the features were stolen from the screen and then distributed over the Internet or online. Besides, most of the music owners are being exploited by unauthorized by users over the internet via online infringement. Again, at the Television Channel, although the agreement for music entertainment is to launch through these the music channel for only a day, however it was stolen by technology means and got transited online immediately.[3]

Ambiguous Concept relating to Infringement of Moral Right

The second type is moral right which provides the right to claim authorship and the right to object the modification as well as it is an offensive action of the author's work.[4]The Moral rights include (a) the author has the right of patentee in which author can decide to sign their names or to remain anonymous, or to sign a pseudonym on their works and (b) the author has the right of integrity due to author's honor or reputation can be damaged by modifying to the work from others.[5] In Myanmar, although it can be said that many infringements are concerned with economic rights, some arguments exist whether moral right is infringed or not under Section 20 of the new Copyright Law, 2019 for the Law has not been enforced yet with president's notification.

Too Poh Case

One of the cases can be found the use of 'Too Poh' phrase in the branding material for Tuborg beer from Carlsberg Co. Ltd, Jan 2016. The 'Too Poh' phrase was composed by well-known Myanmar composer Myo Ma Nyein that represents Myanmar's traditional Thingyan Festival. In this issue, in fact, the family of composer refused to allow the use of 'Too Poh' phrase when making four-time negotiations between both sides. However, the company distributed the product to the market. So, the composer's grandson U Myo Zaw Oo made a press conference in Mandalay city for the announcement that he will sue the Carlsberg Group to settle

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[1] Deborah E. Bouchoux, Intellectual Property: The Law of Trademarks, Copyrights, Patents and Trade Secrets, 4th Edition, 2013, p.186

[2] Gregory F. Treverton, Carl Matthies, Karla J. Cunningham, Jeremiah Goulka, Greg Ridgeway and Anny Wong, Film Piracy, Organized Crime, and Terrorism, 2009, pp.12-13 and15

[3] Linn Aetkaya, Speech by Myint Moe Aung, 18 Nov 2016, http://www.popularmyanmar. com/archives/1185

[4] David I. Bainbridge, Intellectual Property, 8th Edition, 2010, p.120

[5] Learn from the Past, Create the Future: The Arts and Copyright, WIPO Publication No. 935, 2007, p.25-27.

the issue in the court for using the Myanmar phrase.[1] From the Carlsberg Group side, the reason for using 'Too Poh' is that "fun and music is part of Tuborg's DNA. Tuborg has been brewed since 1875, and Carlsberg's creative aspiration was to create a tagline that conveys the spirit of fun and music which is what the Tuborg brand communicates globally". Finally, the Carlsberg Group announced that they will put an end to the use of 'Too Poh' words as a brand material for Tuborg beer. And then, "they are taking immediate steps to implement the necessary modifications and will endeavor to have this completed before Thingyan" in its statement which was released on19 January, 2016.[2]

Thu Tae Wa Da Case

Another issue for moral right happened recently. The problem is concerning with the "Thu Tae Wa Da" song in the music album of "Yaw Tha Ma Tat Mhwe" which was performed by a singer, TharSoe. After releasing such album, 10 days later, the objection for using the song "Thu Tae Wa Da" was pronounced by the family of Nan taw shae Saya Tin who wrote the song. The problem was negotiated, between singer Thar Soe and Daw Nan Khin Aye, granddaughter of Nan taw shae Saya Tin, by the settlement of Myanmar Music Association (Central) on 29 March, 2017. So, singer Thar Soe apologized his apology on the national newspaper in which when he offered the permission, there were defects that he played different version and he did not get the permission for not using all lyrics that made disgraceful to the moral right of Nan taw shae Saya Tin and his family. Besides, he made his official apology to the family of Nan taw shae Saya Tin at the hall of Myanmar Music Association (Central) on 4th April 2017.[3]

Bo Aung Din Case

Recently, the song writer Tha Ha Aung apologized to the family of Shwe Don Bi Aung who was a director of "Bo Aung Din" film since 1939 and it is nearly 97 years old (now, it is 100 years already). The problem concerns with the using of "Bo Aung Din" words as a title of a song, "Bo Aung Din Lo Lu Kyan", in "Chan Myaè Pa Sae" Ablum. The family of Shwe Don Bi Aung sent a letter to Myanmar Music Association (MMA) to solve the problem and claim the copyright. The case was amicably settled by the MMA and the song writer made an apology announcement on the national newspaper.[4] In fact, "Bo Aung Din" words are a kind of name and it is common words as well as it is difficult to say that Director Shwe Don Bi Aung created the words with impressive and inventive artistic creation. As a result, it is difficult to give copyrighted work upon the words "Bo Aung Din" that created by the Director Shwe Don Bi Aung. It is because name of a novel, title of a film, name of a song or phrases of an advertisement are not as a kind of original innovative and creative work. Although name of a business or name of a brand will be protected under the right of trademark, according to the 1914 Copyright Law or new Copyright Law, and the duration of copyright of original work is the life

[1] Kay Khaing, No 'too poh' for you, New Light of Myanmar, 21 Jan 2016

[2] Coconuts, Only One Tu Po: Carlsberg to Scrap Myanmar Spelling of Tuborg after Copyright Dispute, 20 Jan 2016.https://coconuts.co/yangon/news/tu-po-wins-carlsberg-scrap-myanmar-spelling-tuborg-after-copyright-dispute/

[3] Zwe Nyan, Apologizing by Singer TharSoe to the Family of NantawshaeSaya Tin, 4 April 2017, http://www.7daydaily.com/story/93399 (ဇွဲညာဏ်-နန်းတော်ရှေ့ ဆရာတင်၏ မိသားစုဝင်များကိုနိုင်ငံပိုင်သ တင်းစာကဒ နတောင်းပန်တဲ့ သားစိုး)

[4] EiThandar Moe, Apology upon Using "Bo Aung Din" Words by Tha Ha Aung, The Standard Time Daily Journal, April 25, 2017. (အိသန္တာမိုး - ဗိုလ်အောင်ဒင်စကားလုံးသုံးစွဲမှု အပေါ် သဟာအောင်တောင်းပန်)

of author plus 50 years after the death of author. If the duration time did not expire, the owner would have the copyright. Thus, there is a question to consider whether the Director Shwe Don Bi Aung has the copyright upon the character of "Bo Aung Din". Some countries provide the copyright upon the 'character' of a film though, some countries do not provide it. Accordingly, 1914 Copyright Law or new Copyright Law in Myanmar did not definitely provide for the protection of copyright in the 'character'. It is provided that the original owner has the right to claim for copyright if he/she proved the evidence of his/her original work, but the dispute of "Bo Aung Din Lo Lu Kyan" song was not copied of the melody and lyrics from the original work. Therefore, it is difficult to decide that the work of Director Shwe Don Bi Aung was infringed in this case.[1]

Findings

Concerning with the above problems, it is considered that the reasonable evidence for short phrases or words will be copyright materials when short phrases or words are created with fantastic expressions. In order to prove copyright, the copyright holders should make the registration upon such short phrases or words if they think it has distinct or impressive or inventive phrase or peculiar creativity with fantastic expressions and if they think it is not common use or it is not similar to the other's work (this suggested rule did not include in the new Copyright Law yet). Again, the person who claims the old incomparable words or short phrases for copyright, but those are under the public domain because they beyond the duration time according to the new Copyright Law, 2019, should give the evidence that such words or short phrases are famous or well-known words (this suggested rule did not also provide in the new Copyright Law yet) as well as if someone uses the words, it will have the damage of author's honor and reputation under Section 20 and Section 86 of the new Copyright Law, 2019. It means that the copyright holder should prove that using those famous or well-known words will be disgraceful of moral right. If not, it is difficult to say that the family members of the deceased author can claim the old words as the copyrighted words. On the other hand, it is needed to recognize the rule of 'public domain' under Section 86 of the Copyright Law and the rule of copyright terms under Section 17 (a) (1) which provides that the author can only enjoy the economic rights of the work within a duration time that extends to 50 years after the author's death.

Conclusion

Therefore, according to the above facts, there are several things to be considered to explore the situations. Firstly, relating to street vendors or sellers and infringers, it is needed to control the unauthorized selling by giving the copyright awareness and education to those who will be brought by civil and criminal proceedings. Besides, it is suggested that the policy relating to the power of police should be provided in the rule in order to seize, detain and, if any, to destroy the unauthorized copyright works when such works found in everywhere without the complaint of original owner although the new Copyright Law, 2019 provides that the criminal offenses shall be deemed to be cognizable offenses under Section 94.

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[1] Lawyer Mg Kan, Copyright Problem of Bo Aung Din, The Standard Time Daily Journal, June 6, 2017.(ရှေ့နေမောင်ကံ - ဗိုလ်အောင်ဒင်မှုပိုင်ခွင့်ပြဿနာ)

Secondly, concerning with copying of international songs, foreign copyright owners will have the protection of their works under Section 8 (e) of the new Copyright Law, 2019. So, under the provision, the person who want to change new version or new lyric or some else would need to notice the foreign copyright before composing and to obey the rules of foreign copyright, in Myanmar. The suggestion is that the new Law should be included the detail rules for foreign copyright infringement both in civil and criminal.

Third, it is related to people who are struggling for earnings by trading in pirated copies. Actually, their jobs can earn little income and they cannot become rich because they are only buyers and sellers and they do not produce such pirated products. Selling pirated products is the only way to earn money easily for survival because of rare job opportunity for them. In this point, the situation is widely connected with the country's Government and it is necessary to consider how Government can maintain their public policy legalize. It means this situation is one of the important matters for Government to find the reasonable ways to control the making profits from illegal products and to deter the illegal productions from organized crime. The reasonable means should be included that Government needs to consider the ways for creating job opportunities to those low income people as well as the ways for deterrence to stop the illegal productions of registered goods with brand names.

This is also one of the problems for the country because the claim for giving permission on unauthorized copies of foreign movies is not possible in the legal perspective and it makes the country's image to reach inferior level at international position. Thus, to reveal the correct way concerning with illegal claiming in above mentioned facts, the awareness is an important matter for copyright protection and it is necessary to educate to the people who need to figure out what is copyright infringement and why such making money by pirated products is illegal. Also, it is needed to investigate the sources of violation of "organized crime" for commercially profits and to explore the measurement for legal penalties upon such crimes.

The last point is concerned with the production and distribution sources of illegal products. It is necessary to think that who produces the illegal products and where the source comes from. Big financial distributions of copyrighted products by illegal are criminal because it is theft. It is critical affairs for the country and no matter how it takes; it cannot deny that the Government and legislators have to try to impose the rules for copyright protection which provide effective procedures for copyright infringement both civil and criminal. According to the provision of new Copyright Law, Section 74 (a) (1) provides that the court can make an order for border measurement to prevent infringing copies which imports by trading from other countries to Myanmar country. But, the above facts, it should be included a relevant detailed rule like as "the court seeks the order to give injunction as well as the order to search, detain and seize the infringing copies by importing from the country's boundaries under the provision of border measurement".

However, concerning with the moral right infringement, in the civil proceeding, it did not afford to consider for the remedies of moral right infringement although the new Copyright Law, 2019 described the provisions of moral right and its benefit. Thus, new Copyright Law, 2019 should be added the civil remedies for the infringement of moral right which described under Section 20 (a) (b) and (c) of the new Law.

Acknowledgments

I would like to express my deep gratitude to Dr Thwe Linn Ko, Pro-Rector, for her kind permission and encouragement to do this paper. I would like to show my sincere gratitude to Prof. Dr. Tin Myo Myo Swe, Head of Department of Law for her guidance throughout this study. I am also thankful to Prof. Dr Hlaing Aung Tun, Department of Law, Pyay University for his suggestion to carry out this paper. I would like to give my sincere thanks to Chairperson, Prof. Dr Khin Mar Yee (Rtd), for her kind advice and suggestions. My deepest gratitude goes to members of Myanmar Academy of Arts and Science (MAAS) for their valuable supports. My special thanks are due to everyone who supports with precious suggestions to complete this research paper successfully.

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J. Myanmar Acad. Arts Sci. 2021 **Vol. XVIV. No.8**

THE SIGNIFICANCE OF INTERNATIONAL LAW FOR THE MINIMUM AGE OF MARRIAGE IN MYANMAR

Zin Mar Htoo[1]

Abstract

Child marriage or early marriage is a phenomenon that affects many countries. The causes of child marriage are various and complex. The impacts of child marriage which threaten child's health, growth, education, social development and increase the risk of exposure to violence and abuse. Child marriage is a violation of human rights and is prohibited by various international conventions such as the Convention on the Rights of the Child (CRC) and the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). The State parties need to take into account the best interest of the child. Then it is necessary to establish a minimum age of marriage in order to reduce the occurrence of early marriage. Domestic Laws should comply with international conventions ratified by the country. Myanmar is a member of CRC and CEDAW. This paper will explain how Myanmar's domestic laws on minimum age of marriage address Myanmar's international legal obligations in child marriage.

Keywords: Child, Child marriage, International Law and Minimum age of marriage.

Introduction

The legal framework of marriage in Myanmar is complex. According to Section 13 of the Burma Laws Act, 1898, the customary laws have the force of law. The Burma Laws Act included customary law for religious communities: Buddhists, Christians, Mahomedans and Hindus. All of these customary laws establish a marriageable age but they are not identical. The definitions of child are different under the various areas of law in Myanmar. Pursuant to the Article 1 of the Convention on the Rights of the Child (CRC), 1989, a child means every human being below the age of eighteen years unless under the law applicable to the child, majority is attained earlier. Regarding child marriage, Art.16(2) of CEDAW states that the marriage of a child shall have no legal effect, and all necessary action, including legislation, shall be taken to specify a minimum age for marriage. Under the old Child Law, 1993, the definition of child is not conformity with the CRC and CEDAW. Myanmar has ratified both CRC and CEDAW. In order to specify a uniform minimum age of marriage in Myanmar, the new Child Rights Law was enacted by the Pyidaungsu Hluttaw in 2019. This research will examine Myanmar's domestic laws on minimum age of marriage and enforcement of laws relating to child marriage in practice and compare with relevant international conventions.

Materials & Methods

In drawing up this research, the domestic laws of Myanmar relevant to issues of minimum age of marriage including the Child Rights Law, 2019, the Myanmar Buddhist Women's Special Marriage Law, 2015, Myanmar Customary Law, The Christian Marriage Act, 1872, The Hindu Marriage Act, 1955 and Principles of Mahomedan Law are studied together with the relevant International Conventions such as Convention on the Elimination of All Forms of Discrimination

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against Women (CEDAW) 1979 and Convention on the Rights of the Child (CRC) 1989 which were ratified by Myanmar.

Causes and Impacts of Child Marriage

According to The United Nations Children's Fund (UNICEF)'s June 2019 report, 12 million girls are married before they turn 18 every year, and, in the developing world, one in nine girls is married before they turn 15. Around the world, 650 million girls and women alive today were married before they were 18.[1]

Child marriage is a far-reaching issue that affects not only the lives of the children who are married, but also the lives of those around them. When girls marry young, before their minds and bodies are fully developed, they often become pregnant long before they are ready. Pregnancy is the number one cause of death among girls aged 15-19 worldwide. Child marriage also reinforces the gendered nature of poverty, with limited education and skills bringing down the potential of the girl, her family, her community and her country. These impacts extend throughout a girl's adult life and into the next generation.[2]

In all regions of the world, the causes of child, early and forced marriage (CEFM) are complex, interrelated and tightly interwoven with social and economic circumstances and the cultural context. Gender inequality, poverty and insecurity in the face of war and conflict are some of the conditions identified as drivers of CEFM.[3]

Changes in circumstances, such as natural disasters and other emergencies, can lead to the increasing rate of child marriage in the practice. Weak and sometimes contradictory legislation, poor enforcement of existing laws and the coexistence of multiple legal systems within countries quite often make the fight to eliminate the causes of child, early and forced marriage (CEFM) even more challenging. In some countries, including several in the Asia-Pacific region, both statutory and religious law regulates marriage, in often inconsistent or contradictory ways.[4]

Similarly, there are causes of child marriage in Myanmar. In order to prevent child marriage, there should be a full and comprehensive approach which addresses the root causes of child marriage and an effective legal system for the reduction of child marriage.

When early marriage occurs to girls, they tend to miss important aspects of their lives particularly education and development. There are various aspects that girl children are expected to attend to, that are deemed more important to them, other than schooling. For instance, girls are

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[1] Katie Taylor, (2019), Child Marriage: Facts from around the World, (World Health Organization). https://www.worldvisionadvocacy.org/2019/07/31/the-facts-on-child-marriage/ [accessed 27 July 2020]

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[4] Pablo Diego-Rosell & Jacqueline Joudo Larsen, (October 25, 2017), Child Marriage Rates in Pakistan, Myanmar and Cambodia. https://news.gallup.com/opinion/gallup/221000/child-marriage-rates-pakistan-myanmar-cambodia.aspx, [accessed 10 August 2019]

expected to perform domestic chores and other responsibilities that end them to being married at a very young age.[1]

In some situations, adolescent girls may be unable to refuse unwanted sex or resist coerced sex, which tends to be unprotected. Sexual violence is widespread and particularly affects adolescent girls: about 20% of girls around the world experience sexual abuse as children and adolescents. Inequitable gender norms and social norms that condone violence against women put girls at greater risk of unintended pregnancy.[2]

In Myanmar, early sexual experience and accidental pregnancy were also found to be drivers of early marriage. In case that an unmarried girl becomes pregnant (whether as a result of consensual sex or rape) the primary response is to arrange for her marriage.[3]

As mentioned above facts, early marriage has a strong physical, intellectual, psychological and emotional impact, cutting off educational opportunities and chances of personal growth for girls.

The Legal Issues on Minimum Age of Marriage in Myanmar

The definitions of child are not same under the various areas of law in Myanmar. Before the Child Rights Law, 2019, Section 2 (a) of the Child Law, 1993 defines that "child" means a person who has not attained the age of 16 years. Section 2 (b) of the Child Law states that "youth" means a person who has attained the age of 16 years but has not attained the age of 18 years. Additionally, this law guarantees a large spectrum of rights to children. In the Child Law, 1993, there was no provision for the minimum age for marriage.

According to section 3 of the Majority Act, 1875, a person shall be deemed to have attained his majority when he shall have completed his age of 18 years and not before, and, a person for whom a guardianship is appointed by the court shall be deemed to have attained his majority when he shall have completed his age of 21 years and not before.

However, Section (2) (a) of the Majority Act specifically excludes the issues under the family law from its purview as follows;

"Nothing herein contained shall affect the capacity of any person to act in the following matters (namely) – marriage, dower, divorce and adoption; the religion or religious rites and usages of any class of person". So, there is no restriction on the marriageable age under this section.

In Myanmar, according to section 362 of the Constitution of the Republic of the Union of Myanmar, 2008 the Union recognizes Christianity, Islam, Hinduism and Animism as the religions existing in the Union. Therefore, there are four main religious communities: Buddhists, Mahomedans, Hindus and Christians.

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[1] Vhangani Richard Mafhala, (2016) Child Marriage Practice: A Cultural Gross Violation of Human Rights of Girls in a Free South Africa, P.25. https://repository.up.ac.za/handle/2263/53428. [accessed 1 August 2019]

[2] Adolescent pregnancy, WHO, (2018) https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy [accessed 7 May 2018)]

[3] Elizabeth Yarrow, (2016), The Causes & Consequences of Young People's Sexual, Reproductive & Maternal Health Behaviors, Northern Shan, Myanmar, P.30, Coram International at Coram Children's Legal Centre (CCLC). *https://coraminternational.org/wp-content/uploads/Myanmar-Report-Young-Parents-SRMH- behaviours.pdf.* [accessed 5 July 2019]

According to section 13(1) of the Burma Laws Act, 1898, customary and religious codes have the force of law and can be relied upon by the courts in decisions concerning succession, inheritance, marriage or caste, or any religious usage or institution.[1]

Regarding the marriageable age of Myanmar Buddhist boy, the court was decided in the case of *Mg Thein Mg vs. Ma Saw*[2] that a Myanmar Buddhist boy of any age can enter into a valid marriage without the consent of his parents or guardians when he attains puberty i.e. physically competent to marry.

Concerning with the marriageable age of Myanmar Buddhist girl, Full Bench decision of Rangoon High Court in *Ma Aye Sein vs. Maung Hla Min*[3] case, which declared that, except in the case of widows or divorcees, a girl under 20 years of age cannot contract a valid marriage without the consent, either express or implied, of her parents or guardians. These cases are still in force and there are no other leading cases regarding on these points up to now.

According to the above-mentioned facts, except in the case of widows or divorcees, a girl under 20 years of age cannot contract a valid marriage without the consent, either express or implied of her parents or guardians. A boy reaches his majority when he attains puberty and a girl child, except in the case of widow or divorcee, reaches her majority when she completes 20 years of age for the purpose of marriage under Myanmar Customary Law.

However, under section 4 of the Myanmar Buddhist Women's Special Marriage Law, 2015 a non-Buddhist man, who has attained the age of 18, and a Buddhist woman, who has attained the age of 18, may contract a valid marriage under this Law if the following facts are fulfilled:

(a) both parties shall not be of unsound mind;

(b) consent to marry shall be voluntary and free from seduction, inducement, coercion, undue influence, fraud or misrepresentation;

(c) if the woman has not attained the age of twenty, the consent of parents, or if they are dead, of the guardian de facto or of the guardian de jure, if any, shall be obtained;

(d) in the case of a woman, no valid marriage shall subsist;

(e) in the case of a man, no valid marriage shall subsist.[4]

Therefore, under the Myanmar Buddhist Women's Special Marriage Law, 2015, non-Buddhist boy can marry when he attains the age of 18 years and girl can marry when she completes 20 years of age but girl under 20 years of age needs the consent of her parents or guardians to contract a valid marriage.

With regard to the marriageable age of Christian, section 60 of the Christian Marriage Act, 1872 provides that the age of the man intending to be married shall exceed sixteen years, and the

[1] Melissa Crouch, (2015). "Constructing Religion by Law in Myanmar," The Review of Faith & International Affairs, Taylor & Francis Journals, Vol. 13(4), pages 1-11, December. https://www.tandfonline.com/doi/full/10.1080/15570274.2015.1104961[accessed 7 August 2019]

[2] 6 Ran (Indian Law Reports, 1928), p. 340.

[3] 3 Ran (Indian Law Reports, 1925), p.455.

[4] Section 4 of the Myanmar Buddhist Women's Special Marriage Law, 2015.

age of the woman intending to be married shall exceed fifteen years (Amendment of the Christian Marriage Act, 2017).

Provided that no marriage shall be certified under this Part when either of the parties intending to be married has not completed his or her eighteenth year, unless such consent as is mentioned in section 19 (consent of guardians for marriage) has been given to the intended marriage, or unless it appears that there is no person living authorized to give such consent.

As mentioned above, marriageable age of Christian girl is over 15 years and boy is over 16 years. However, either of the parties to which is a minor, the consent of the parents or guardians is necessary to become a valid marriage.

The old Hindu Law, not by the Hindu Code, governs the Hindu women in Myanmar. Hindu Customary Law gives no limit for the age of men to marry. However, this is not the case for women: the age of sixteen is defined as mature. Hindu parents sometimes arrange marriages for their children before puberty (at the ages of 10 or 12).[1]According to section 5 of the Hindu Marriage Act, 1955, adopted in India a man must be 21 and a woman must be 18 in order to marry. However, the Hindu Marriage Act, 1955 shall not be applicable to Hindu marriage in Myanmar.

Concerning with the Muslims' marriage, every Muslim of sound mind, who has attained puberty, may enter into a contract of marriage. No particular age has been fixed for the marriage however it has been recognized that the age of maturity is the same as the age of puberty. Where there is no evidence of the date of puberty, most of the schools accept a boy or a girl who reaches fifteen years of age shall be recognized as having the capacity of marriage. The Hanafi School of law presumes that unless there is no evidence to show the date of puberty, both parties either male or female complete the age of fifteen years may enter into the marriage contract.[2]

Though each of personal law consists marriageable age, there is no minimum age of marriage. According to these personal laws, every boy and girl can marry with the consent of their parents or guardians even though the boy and girl have not the capacity of marriageable age. Therefore, personal laws cannot reach the uniform minimum age of marriage.

The primary legislation in Myanmar concerning crimes and violence and the punishments associated with them is the Penal Code, 1860, which defines "women" as female persons of any age.[3] Section 375 of the Penal Code, which was revised in January 2016, raised the minimum age at which an individual can legally consent to sex with an adult from 14 to 16 years old (and from 13 to 15 years old if the couple are married). According to the amendment of Penal Code, it can be assumed that the minimum age of marriage is 16 years in Myanmar.

The laws relating to the marriage vary according to the personal law of the man and the woman and statutory law. A single standard age for consent by the parties would help to prevent coerced and underage marriages. In order to prevent child marriages, legislation should specify a uniform minimum age of marriage for personal laws in Myanmar.

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[1] Legal Issues on Burma Journal No. 9, August 2001, Burma Lawyers' Council, Women and Law in Burma, B.K.Sen, http://www.burmalibrary.org/docs/LIOB09-women_and_law_in_burma.htm.

[2] Mar Lar Than, Dr., Administration of Islamic Law of Marriage in Myanmar, 2017, p.2. https://www.academia.edu/8972861/The_Administration_on_Islamic_Law_of_Marriage_in_Myanmar [accessed 29 September 2019]

[3] Section 10 of the Penal Code, 1860.

New Domestic Law on Minimum Age of Marriage in Myanmar

Unfortunately, nationally representative surveys on child marriage are scarce, and measuring progress toward Sustainable Development Goals (SDG) Target 5.3 and other child marriage indicators is not easy. One major challenge is that many of the official surveys on child marriage are dated. To date, there are no official figures on the prevalence of child marriage in 74 countries, including large ones such as Argentina, China, Myanmar and Russia.[1]

According to the 2014 Myanmar population and housing census, some 1.4 per cent of children aged 10-17 were reported as having ever been married in Myanmar, with this proportion being slightly higher in rural areas (1.6 per cent) than in urban areas (1.1 per cent) and generally higher for females (2.3 per cent) than for males (0.6 per cent). There was little variation across States/Regions. The proportion ever-married was highest among females in rural Shan (3.7 per cent) and lowest among males in urban Kayah and Tanintharyi (0.3 per cent).[2]

Therefore, early marriage is more common in rural areas than in urban areas and, of course, more common for females than males under 2014 census of Myanmar.

Myanmar is not the country with the highest rate of child marriage, but still a country with the problems of it. As mentioned above, legislation should specify a uniform minimum age of marriage that applies to all citizens of Myanmar in order to prevent child marriage. Therefore, the Child Rights Bill was submitted by the Ministry of Social Welfare, Relief and Resettlement in 2017 to amend the minimum age at which boys and girls can marry shall be defined by existing laws.

After years of discussion, Myanmar has finally enacted the Child Rights Law in 23 July 2019 with the following objectives:

(a) To implement the rights of the child recognized in the United Nations Convention on the Rights of the Child;

(b) To carry out measures for the best interests of the child and protect in order that children enjoy fully their rights in accordance with law;

(c) To carry out necessary measures for the all-round development of children including primary health, adequate nutrition and right to education.

(d) To protect and care of children who are felt neglect, abuse, atrocity and exploitation by the State or voluntary social workers or non-governmental organization;

(e) To enable a separate trial of a juvenile offence and to carry out measures with the objective of reforming the character of the child who has committed an offence;

(f) To enjoy the right to equality before the law and equal protection of the law without discrimination.

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[1] Pablo Diego-Rosell & Jacqueline Joudo Larsen, (October 25, 2017), Child Marriage Rates in Pakistan, Myanmar and Cambodia, https://news.gallup.com/opinion/gallup/221000/child-marriage-rates-pakistan-myanmar-cambodia.aspx,[accessed 10 August 2019]

[2] Department of Population, Ministry of Labour, Immigration and Population, (2017), The 2014 Myanmar Population and Housing Census, Thematic Report on Children and Youth, Census Report Volume 4- M, Pages 117-118, https://reliefweb.int/report/myanmar/2014-myanmar-population-and- housing-census-thematic- report- children-and-youth-census. [accessed 7 August 2019]

Consistent with the United Nations Convention on the Rights of the Child, the new Child Rights Law defines a child as anyone younger than 18 years old.[1] This law provides that the minimum age of marriage is 18 years, regardless of gender in order to prevent early and forced marriage and protect traditional customs.[2] Regarding the penalty of early and forced marriage, the Child Rights Law provided as follows:

"Whoever commits early and forced marriage shall, on conviction be punished with imprisonment from a minimum term of one year to a maximum term of seven years. In addition to imprisonment, fine can be imposed from the minimum amount of 10 lakhs to the maximum amount of 20 lakhs."[3]

As the Child Rights Law is a special law on children, it will have an influence on the other laws relating to marriage. Therefore, if a person allows boys and girls to marry before the legal minimum age of marriage, the injured party may sue him/her who shall be punished in accordance with the Child Rights Law, 2019.

The Role of International Law on Minimum Age of Marriage in Myanmar

Like all other countries, Myanmar has duties under international human rights law to respect, protect and fulfill the human rights of all persons in its territory or otherwise within its jurisdiction, without discrimination on any grounds, including child, early and forced marriage (CEFM).[4]

Myanmar is party to four of the principal international human rights treaties: The Convention on the Elimination of All Forms of Discrimination against Women, 1979 (CEDAW); the Convention on the Rights of the Child, 1989 (CRC); the Convention on the Rights of Persons with Disabilities, 2006 (CRPD); and the International Covenant on Economic, Social and Cultural Rights, 2008 (ICESCR). These treaties enshrine international law obligations binding on Myanmar, and the treaty bodies monitoring implementation of each of these treaties interpret and provide guidance on their provisions, including through the adopting of concluding observations and general comments. Many of the rights reflected in the Universal Declaration of Human Rights, 1948 (UDHR). [5]

The right to "free and full" consent to marriage is recognized in Article 16 of the Universal Declaration of Human Rights, which specifies that marriage shall be entered into only with the free and full consent of the intending spouses.

The other human rights law instruments which address child marriage that will be scrutinized in this section are the CEDAW and the CRC. Myanmar acceded to the Convention on

[1] Section 3(b) of the Child Rights Law, 2019.
[2] Section 23 of the Child Rights Law, 2019.
[3] Section 105 (a) (5) of the Child Rights Law, 2019.
[4] International Commission of Jurists (ICJ), June 2019, Citizenship and Human Rights in Myanmar: Why Law Reform is Urgent and Possible, A Legal Briefing, p.5. https://www.icj.org/wp-content/uploads/2019/06/Myanmar-Citizenship-law-reform-Advocacy-Analysis-Brief-2019-ENG-pdf. [accessed 7 September 2019]
[5] International Commission of Jurists (ICJ), June 2019, Citizenship and Human Rights in Myanmar: Why Law Reform is Urgent and Possible, A Legal Briefing, p.5. https://www.icj.org/wp-content/uploads/2019/06/Myanmar-Citizenship-law-reform-Advocacy-Analysis-Brief-2019-ENG-pdf. [accessed 7 September 2019]

the Elimination of All Forms of Discrimination against Women (CEDAW) in 1997. The CEDAW addresses marriage in Article 16. Article 16 (1) requires state parties to take all appropriate measures to eliminate discrimination against women in all matters relating to marriage and family relations and in particular to ensure on a basis of equality of men and women the same right to enter into marriage and the same right freely to choose a spouse and to enter into marriage only with their free and full consent. The CEDAW also provides in Article 16 (2) that the betrothal and the marriage of a child shall have no legal effect, and all necessary action, including legislation, shall be taken to specify a minimum age for marriage and to make the registration of marriages in an official registry compulsory.[1]

The UN Committee on the Elimination of All Forms of Discrimination against Women (CEDAW), paragraph 36 of CEDAW General Recommendation No.21 on Equality in Marriage and Family Relations, 1994 stated as follows:

"In the Vienna Declaration and Programme of Action adopted by the World Conference on Human Rights, held at Vienna from 14 to 25 June 1993, States are urged to repeal existing laws and regulations and to remove customs and practices which discriminate against and cause harm to the girl child. Article 16 (2) and the provisions of the Convention on the Rights of the Child preclude States parties from permitting or giving validity to a marriage between persons who have not attained their majority. In the context of the Convention on the Rights of the Child, "a child means every human being below the age of eighteen years unless, under the law applicable to the child, majority is attained earlier". Notwithstanding this definition, and bearing in mind the provisions of the Vienna Declaration, the Committee considers that the minimum age for marriage should be 18 years for both man and woman."[2]

Myanmar ratified the CRC in 1991. Article 1 of the CRC states that for the purpose of the present Convention a child means every human being below the age of 18 years unless, under the law applicable to the child, majority is attained earlier. Under Article 4 of CRC, parties need to undertake all appropriate legislative, administrative, and other measures, for the implementation of the rights recognized in this Convention. Therefore, setting minimum age of marriage is the obligations of state parties.

Additionally, paragraph 55 (f) of Joint general recommendation No. 31 of the Committee on the Elimination of Discrimination against Women and general comment No. 18 of the Committee on the Rights of the Child on harmful practice recommends on the minimum age for marriage as follows:

"A minimum legal age of marriage for girls and boys, with or without parental consent, is established at 18 years. When a marriage at an earlier age is allowed in exceptional circumstances, the absolute minimum age must not be below 16 years, the grounds for obtaining permission must be legitimate and strictly defined by law and the marriage must be permitted only by a court of law upon the full, free and informed consent of the child or both children, who must appear in person

[1] Article 16 of CEDAW, 1979.

[2] UN Committee on the Elimination of All Forms of Discrimination Against Women (CEDAW), CEDAW General Recommendation No. 21: Equality in Marriage and Family Relations, 1994,par.36, https://www.refworld.org/docid/48abd52c0.html. [accessed 16 August 2019]

before the court."[1]As stated before that child is below 18 years of age and a minimum legal age of marriage for girls and boys are 18 years under CRC and CEDAW.

The enactment of the Child Rights Law demonstrates Myanmar's commendable efforts to align national policies and regulatory frameworks with the CRC and the CEDAW. Under the newly enacted Child Rights Law, a child is defined as anyone under the age of 18 and a minimum age of marriage is 18 years.[2] Therefore, it can be clearly seen that the provisions of Child Rights Law, 2019 relating to minimum age of marriage comply with CRC and CEDAW.

Conclusion

The new Child Rights Law, 2019 constitutes an important step towards preventing child marriage in Myanmar. The international human rights instruments could be applied to prohibit child marriage. However, they do not exactly identify child marriage in those provisions. Additionally, they cannot implement and enforce to each individual State. The implementation and enforcement of the Child Rights Law in Myanmar is part of Myanmar's obligation. The future practice of the new law is to be scrutinized by Government, members of Parliament, civil society and all citizens. Therefore, the Government, members of Parliament, civil society and all citizens have a duty to cooperate with each other in order to make an effective enforcement of the law for all citizens of Myanmar.

Acknowledgement

My sincere gratitude goes to Professor Dr. Khin Chit Chit, Head of Law Department, University of Yangon, for her kind advice and encouragement. I wish also to express my gratitude to Dr. Khin Phone Myint Kyu, Professor, Department of Law, University of Yangon, for her valuable guidance given for this paper. Special thanks are due to Professor Dr. Khin Khin Oo, Department of Law, University of Yangon, for her kind advice and suggestions during the course of the studies. I am greatly indebted to The Danish Institute for Human Rights (DIHR) for its supports and providing necessary guidance concerning implementation of my paper.

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[1] Joint General Recommendation/General Comment No. 31 of the Committee on the Elimination of Discrimination against Women and General Comment No. 18 of the Committee on the Rights of the Child on Harmful Practices, 14 November 2014, par 55(f). https://bettercarenetwork.org/library/socialwelfare-systems/child-care-and- protection-policies/joint-general-recommendationgeneral-comment-no31-of-the-cedaw-and-no-18-of-the-crc-on-harmful.[accessed 7 October 2019]

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J. Myanmar Acad. Arts Sci. 2021 **Vol. XIX. No.8**

ANALYSIS ON THE PRINCIPLES OF RESPONSIBLE BUSINESS CONDUCTS UNDER INTERNATIONAL AND NATIONAL CONTEXT

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Abstract

This paper attempts to analyze the Principles of Responsible business conducts in international legal framework and the enforcement of the principles in National Law. Responsible business is the business which operates responsibly and efficiently in accordance with Laws and it considers its impact on people and environment. Myanmar is a country which is welcoming the investments of Multinational Enterprises (MNEs) for the economic development of country. It requires to question whether the principles under the international instruments can be enforced effectively and to what extent the MNEs are responsible for the environmental and social impact of their business activities. This paper aims to provide knowledge of the international principles of responsible business and law enforcement for the irresponsible business practices of MNEs. In order to provide the knowledge of the principles of Responsible Business, it studies the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy (MNE Declaration), United Nations Guiding Principles on Business and Human Rights (UNGPs) and OECD Guidelines for Multinational Enterprises. It examines the leading cases that decides on the extent of responsibility of MNEs for the negative impact of their business practices and of their supply chain businesses. The study concludes that MNEs have responsibility not only for conduct of themselves but also for their supply chain businesses' irresponsible business conducts by means of enforcement the principles at national court.

Keywords: responsible business conduct, human rights, environment

Introduction

The concept of responsible business is existed century and there is no consensus for defining on the term 'responsible business conduct'. However, the term commonly refers to the practices of conducting business by doing no harm to people and environment in addition to being a good employer and attempting to make a profit. A strategic concept includes two dimensions. The first dimension is 'how companies make their profits in a responsible way'. The second dimension is 'how they provide benefits to stakeholders through their economic activities'. In other words, the way of managing their economic, social, and environmental impacts, as well as their business relationships in all key spheres of influence. Responsible business covers various areas, such as healthy work conditions for employees, social and environmental responsibility, contributing back to the community or corporate social responsibility (CSR), influencing others, and reducing risk around the workplace.

Nowadays, responsible business conduct becomes more and more important because it relates to the sustainable development goals (SDGs) 2030 adopted in the United Nations on September 25, 2015 by 193 countries as a follow up to the Millennium Development Goals. The SDGs focus to end poverty, protect the planet and ensure prosperity for all, as part of a new sustainable development agenda. A total of 17 goals and 169 targets are set to be achieved by 2030 and the realization of the same calls for a collective effort from the government, the corporates and the civil society organizations. Sustainable Development Goals have been defined as an instrument to maximize value creation and enhance knowledge of the impact of business activities on

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sustainable development. Responsible business conduct principles and standards emphasized the integration of environmental and human rights concerns within core business operations. For instance, a company set its CSR policy for enhancing livelihood. It implements the CSR policy by vocational training women and youths. Then, it achieves some of the goals of SDGs such as Zero Hunger, End Poverty; Quality Education, Gender Equality, and Decent Work. Thus, sustainable development goals can be achieved through the responsible business conduct.

Myanmar is a country in South East Asia and it is welcoming the investments of Multinational Enterprises (MNEs) to enhance the economic development of country. Many countries believe that Foreign Investments provide job opportunities for local people, transfer of skills and technology, and integrate the living standard of people. Achieving these positive impacts, however, depends on the quality of the investment as much as the quantity. Irresponsible business practices erode not only the investment but also business environment. If one MNE operates its business unethically, the violation of human rights can happen. Likewise, if one MNE does not consider the impact of it business on environment that will ruin the environment and people will suffer the negative impact severely.

This paper discusses on Principles of Responsible Business Conducts under Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy adopted by ILO (here in after the MNE Declaration), United Nations Guiding Principles on Business and Human Rights (here in after the UNGPs) and OECD Guidelines for Multinational Enterprises (here in after the OECD Guidelines). It evaluates the current situation of enforcement of the principles in US, UK and in Myanmar. It questions to what extent the MNE is responsible for its direct or indirect impact that cause harm to people or environment. By studying comparatively of the law enforcement in different countries and international business conducts, it will conclude by evaluation of the current situation of responsible business conduct globally and in Myanmar.

Aims and Purposes

This paper aims to analyze the core principles of responsible business conduct of MNEs in the MNE Declaration, the UNGPs, the OECD Guidelines and the enforcement of those principles in National Law. The purposes of this paper are to provide knowledge of the international principles of responsible business and legal action taken by National government for the irresponsible business practices of MNEs.

Methodology

To achieve the research goals, this paper discusses on the core principles of responsible business conducts mentioned in the MNE Declaration, the UNGPs and the OECD Guidelines. In addition, it uses comparative legal research methods to analyze the provisions of laws from Alien Tort Claim Act of the US, Company Act 2006 of the UK and Myanmar Environmental Conservation Law and related Rules and Procedure. Furthermore, the leading cases are carefully selected from the US, UK and Myanmar to be studied and analyzed which will reflect the enforcement of home countries and of host country.

Finding

Responsible Business Conduct becomes essential part of MNEs' policy and it extends the scope of business liability of enterprises. MNEs are not only responsible for its own conduct but also may be liable for its supply chains' conducts. Although MNEs do not directly incur responsibility under international human rights law and international environmental law, in practice, MNEs are sued before Civil Court for their human rights abuses and doing business harm to environment. In Myanmar, local community still face the challenges of environmental and human rights issues caused by the investment project, especially mining and hydropower projects. Their right to access to remedy is still uncertain and difficult.

Discussion

I. Sources of MNEs' Responsible Business Conduct

The principal sources of MNEs responsible business conduct are the MNE Declaration, the UNGPs and the OECD guidelines for MNEs. All are merely guidelines for governments and MNEs with respect of protection and respecting human rights and environment. They are however, implemented by the States domestic law and voluntary reporting system by the MNEs.

(a) ILO MNE Declaration

In 1977, the ILO working body adopted the Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy (MNE Declaration) and it was substantially amended in 2017. The MNE Declaration, therefore, provides an authoritative set of expectations of responsible business conduct that is universally applicable in a tripartite way: by governments and representatives of workers' and employers' organizations at the ILO. The principles adopted by the MNE Declaration offer guidelines to multinational enterprises, governments, and employers' and workers' organizations focusing on the areas of employment, training, conditions of work and life, and industrial relations. This guidance is substantially founded on principles laid down in international labor Conventions and Recommendations.[1]

(b) UN Guiding Principles on Business and Human Rights

The UN Guiding Principles on Business and Human Rights focus on avoiding and addressing adverse business-related human rights impact. They are founded on three pillars: (1) the State duty to protect against human rights abuses by third parties, including business enterprises, (2) the independent responsibility of business enterprises to respect human rights, which means that they should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved and (3) the need for those harmed by business-related activities to have access to effective remedy. These principles were unanimously endorsed in 2011 by the UN Human Rights Council.[2] Both the Office of the UN High

[1] ILO, (March 2017), Tripartite declaration of principles concerning multinational enterprises and social policy (MNE Declaration), 5th ed. available at https://www.ilo.org/empent/Publications/WCMS_094386/lang--en/index.htm (Last accessed on 9.6.2020)

[2] United Nations (2011), Guiding Principles of Business and Human Rights: Implementation of the United Nations Protect, Respect and Remedy Framework. Available at https://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf(Last accessed on 9.6.2020)

Commissioner for Human Rights (OHCHR) and the UN Working Group on Business and Human Rights (UN Working Group) are charged with promoting the UN Guiding Principles and their implementation, including by unpacking what the principles mean in practice with respect to different human rights issues, sectors and types of actors.[1]

(c) OECD Guidelines

The OECD Guidelines for Multinational Enterprises are recommendations from governments to businesses on how to act responsibly. They cover all areas of business responsibility, including labour and human rights issues, environment, disclosure, bribery, consumer interests, science and technology, competition, and taxation. The Guidelines were adopted in 1976 and last updated in 2011 to include a chapter on human rights aligned with the UN Guiding Principles. The chapter on Employment and Industrial Relations is aligned with ILO Labor standards. The Guidelines also include a unique non-judicial grievance mechanism: National Contact Points (NCPs). The OECD Working Party on Responsible Business Conduct brings together the governments that have adhered to the Guidelines,[2] whose mandate is to promote the implementation of the OECD, MNE Guidelines and Responsible Business Conduct (RBC) policies.

II. Core Principles of Responsible Business Conduct

Responsible business conduct core principles laid down in the international instruments are divided into four categories:

(a) Human rights,

(b) Labour rights,

(c) Environmental rights and sustainable development, and

(d) Anti-corruption.

(a) Human Rights

The UNGPs principle 11-15 laid down the duties of MNEs to respect human rights refer to the international Bills of Human Rights. The Human rights principles that MNEs must observe are (1) Businesses should support and respect the protection of internationally proclaimed human rights; and (2) Making sure that they are not complicit in human rights abuses.[3]Regarding the human rights principles, the OECD Guidelines expressly states that MNEs are required to have a policy commitment to respect human rights and act accordingly.[4]

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[1] United Nations (2011), Guiding Principles of Business and Human Rights: Implementation of the United Nations Protect, Respect and Remedy Framework. Available at https://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf(Last accessed on 9.6.2020)

[2] United Nation (2011), Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework, OHCHR, New York, pp.13-16. https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf(Last accessed on 9.6.2020)

[3] *Ibid.*

[4] OECD (2011), OECD Guidelines for Multinational Enterprises, OECD Publishing, p 34. http://dx.doi.org/10.1787/9789264115415-en (Last accessed on 9.6.2020)

Human right principles define the scope of the responsibility of MNEs to support and respect international human rights law. Theoretically, States are primarily subject of the international law and must observe the human principles laid down in international instruments. However, it is no doubt that without the cooperation of the powerful MNEs, states alone cannot perform these duties successfully, especially for developing and least developed countries. According to the human rights principles, , MNEs are responsible not only for supporting and respecting human rights but also for not involving and having relationship with the business partner that abuse human rights and making sure for effective remedies under principle 24 of the UNGPs.[1]

(b) Labor Rights

Both OECD Guidelines and the UNGPs focus on six core labor principles stated in MNE declarations of ILO. These are (1) freedom of association and effective recognition of the right to collective bargaining; (2) elimination of all forms of forced or compulsory labor; (3) effective abolition of child labor; (4) elimination of discrimination in respect of employment; (5) encouragement of human capital formation; and (6) observance of effective health and safety regulations.[2]

MNEs those operating businesses in development countries usually face the challenges of labour issues as the governments of those countries themselves abuse human rights. Poverty is one of the causes that create child labour market. Forced labor, freedom of association and rights of collective bargaining issues occurred in countries that governed by oppressive government. Therefore, MNEs shall caution on labour issues by avoiding violation of labor rights and operating their business while observing the ILO labor standard.

(c) Environmental Rights and Sustainable Development

The environmental rights and sustainable development principles derived from the UN Rio Declaration on Environment and Development. These are (1) Businesses should support a precautionary approach to environmental challenges (2) undertake initiatives to promote greater environmental responsibility; and (3) encourage the development and diffusion of environmentally friendly technologies.[3]

The OECD guidelines stress the duties of MNEs regarding to the environment and sustainable development as 'taking due account of the need to protect the environment, public health and safety, and generally to conduct their activities in a manner contributing to the wider goal of sustainable development'.[4] It also expresses that MNEs must make sure their activities are compatible with the science and technology policies and plans of the host countries and as appropriate contribute to the development of local and national innovative capacity.[5]

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[1] United Nation (2011), Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework, OHCHR, New York, p.24. https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf(Last accessed on 9.6.2020)

[2] OECD Guidelines for Multinational Enterprises; ILO's MNEs Declaration; UNGPs Principle 12, https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf(Last accessed on 9.6.2020)

[3] Principles 9 & 10 of Rio Declaration on Environment and Development, 1992.

[4] OECD (2005), Environment and the OECD Guidelines for Multinational Enterprises: Corporate Tools and Approaches, OECD publishing, p21.

[5] *Ibid* at p 93-95, 113-115.

Since environmental concerns due to the impact of industrialization alarm the climate change, the responsibility to protect environment is not only a burden of states but also on the MNEs those operating business which can harm environment severely. It is not sufficient for MNEs to precaution the environmental challenges. It required the MNEs to initiate the promotion of environmental responsibility and to develop the environmental-friendly technology. According to the OECD guidelines, MNEs must conduct business activities aiming for sustainable development goals by protecting environment, public health and safety.

(d) Anti-Corruption

The anti-corruption core principle is founded on the United Nations Convention against Corruption, which play a crucial role in business practice to achieve sustainable development goals. It states as 'Businesses should work against corruption in all its forms, including extortion and bribery'.[1]

The OECD guidelines set the principles for MNEs to avoid in all forms of corruption by means of avoiding, directly or indirectly, offer, promise, give, or demand a bribe or other undue advantage to obtain or retain business or other improper advantage.[2]

Corruption is an unethical business practice of corporate citizenship and the most hindrance of sustainable development goals. OECD expressly states all possible form of corruption and MNEs shall avoid all forms of those corruption.[3]

III. Scope of Business Responsibility

(a) Primary responsibility

According to General Policies stated in the OECD Guidelines, the enterprise is primarily responsible to avoid causing or contributing to adverse impacts on matters covered by the Guidelines, through their own activities. Besides the enterprises is responsible to address such impacts when they occur.[4] The activities that causing or contributing to adverse impacts on matters covered by the Guidelines through their own activities includes their activities in the supply chain, for example, franchising, licensing or subcontracting because their supply chain businesses are often multinational enterprises themselves and , those operating in or from the countries adhering to the Declaration shall be covered by the Guidelines.[5]

(b) Joint responsibility and Business Relationships

The enterprise is responsible to prevent, mitigate or adverse even though the impact is indirectly linked to its operations, products or services.[6]The OECD Guidelines recognize that there are practical limitations to the ability of enterprises to influence the conduct of their business partners. The extent of these limitations depends on various factors from types of business to product characteristics such as the number of suppliers or other business partners, the structure and

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[1] OECD (2011), OECD Guidelines for Multinational Enterprises, OECD publishing, p.47-50. Available at http://www.oecd.org/daf/inv/mne/48004323.pdf (Last accessed on 9.6.2020)
[2] *Ibid.*
[3] *Ibid.*
[4] Para 11 of General Policy of OECD Guidelines for Multinational Enterprises.
[5] Para 17 of the Commentary on General Policies of OECD Guidelines for Multinational Enterprises.
[6] Para 12, 13 &14 of General Policy of OECD Guidelines for Multinational Enterprises.

complexity of the supply chain. The market position of the enterprise vice versa its suppliers or other business partners are also required to be considered as relevant factors.[1]

IV. Enforcement of the International Principles

Since MNEs are not subject of international law,[2] they have no direct responsibility imposed by international law and there is no enforcement mechanism under international law as well.[3] However, according to the UNGPs, state is obliged to protect human rights and to make sure the victims are enabling to access to remedy.[4] Therefore, in the national level, MNEs have been sued for human rights abuses or for environmental harm. The first successful lawsuit against MNE for ethical wrong was ***Doe v Unocal*** **(1997)**[5] filed under the Alien Tort Claims Act, which was enacted in 1789. The Act provides district courts with jurisdiction *ratione materiae* for 'any civil action by an alien for a tort only, committed in violation of the law of nations or a treaty of the United States'[6].

In the Unocal case, Union Oil Company of California invested in "Yadana Field" (a natural gas field) in Myanmar. Before deciding to invest in the Yadana Field, Unocal hire consulting firm to evaluate the risk position, The Unocal was ignoring a major problem of Military government violate human rights stated in the report, it decided to invest in 'Yadana Field'. Unocal knew that army used forced labor and brutalized the Karen population to provide workers and security for Unocal to build the gas pipeline and Unocal however contributed to economic and social environments in Myanmar. In 1996, a group of Villagers filed a lawsuit against Unocal in US federal court, alleged that Unocal worked with State Law and Order Restoration Council (SLORC) and Myanmar Oils and Gas Enterprise (MOGE) pursuant to the Yadana gas pipeline agreement and were aware of and benefited from the alleged human rights violations.

The legal issue of this case was 'What is the legal standards of which a company can be held liable for human rights abuses committed by a partner military regime on the company's project.' Regarding the matter of Unocal's liability under the ATCA, the court analogized allegations of forced labor to slave trading, which give rise to a violation of international law capable of being perpetrated by private individuals. The court reasoned that since Unocal paid SLORC to provide labor and security for the Yadana project, it accepted and approved the use of slave labor. Therefore, the court recognized jurisdiction against the private defendants under the ATCA. In this case, the parties reached an out-of-court settlement and the case was closed on 13 April 2005. The out- of- court settlement was accepted by the court that agreed to compensate

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[1] Para 14 of the Commentary on General Policies of OECD Guidelines; OECD (2011), OECD Guidelines for Multinational Enterprises, OECD Publishing, p 19.

[2] José "E." Alvarez, (2011) "Are Corporations "Subjects" of International Law?" *Santa Clara Journal of International Law,* Vol.9. No.1, pp. 1-36. Available at https://www.law.nyu.edu/sites/default/files/ECM_PRO_069097.pdf (Last accessed on 9.6.2020)

[3] Jan Wouters and Anna-Luise Chané, multinational Corporation in international Law, *in* SSRN Electronic Journal, January 2013, p 21.DOI: 10.2139/ssrn.2371216

[4] *Infra* note 2 at p 5.

[5] Doe I v Unocal Corp. 963 F Supp 880 (CD Cal 1997), dismissed in part, 110 F Supp 2d 1294 (CD Cal 2000), aff'd in part, rev'd in part, 395 F3d 932 (9th Cir 2002), vacated, reh'g en banc granted, 395 F3d 978 (9th Cir 2003), dismissed, 403 F3d 708 (9th Cir 2005). Available at https://www.leagle.com/decision/20021327395f3d93211223 (Last accessed on 9.6.2020)

[6] 28 USC § 1350.

the plaintiffs, to provide funds for programmes in Myanmar to improve living conditions and protect the rights of people from the pipeline region.[1]

Although the court could not set the precedent for the future case because of out- court settlement, the Unocal case point out that MNEs is ethically wrong for enriching itself by violation of human rights and cannot use activities as allegations to defend companies' unethical decisions.

Another lawsuit filed in UK Court in 2015 extent the scope of responsibility of parent company for the activities of its subsidiary company. In Vedanta Resources PLC and another v Lungowe and others,[2] the Zambian farmers sued a U.K.-based mining company Vedanta Resources Plc., (Parent) and Konkola Copper Mines Plc (subsidiary), claim that the water pollution from the Nchanga Copper Mine damaged their lands and livelihoods. In this case, two legal issues to be answer are whether English Court has jurisdiction over the case in Zambia and whether a parent company can be liable for the operations of its subsidiary. Regarding the jurisdiction of English court, the Supreme Court ruled that the Zambian villagers' case against Vedanta Resources can be heard in English courts. For the second issue of whether a parent company can be liable for the operations of its subsidiary the Supreme Court answered that 'under certain circumstances, a parent company could owe a legal duty of care to employees of its subsidiaries.'[3]Although parent company and subsidiary are separate legal entity, the Parent company cannot avoid the irresponsible business practise of its subsidiary for violation of human rights and environmental law. This case highlights the development of concept of business liability of company and the scope of responsibility of business entity.

Myanmar is a country of where foreign Investments operate in the sector of mining and hydro power projects, there are many issues relating to the environmental damages. In order to tackle the environmental issues, Myanmar enacted Environmental Conservation Law 2012, and Rule 2014 and Myanmar Investment Law 2016. The aim to develop responsible investment businesses which do not cause harm to the natural and social environment is stated in section 3 (a) of the Myanmar Investment Law. Besides, according to section 7 of Environmental Conservation Law, the Ministry of Environmental Conservation and Forestry has the power to develop and implement a system of environmental impact assessment (EIA) and social impact assessment (SIA). In addition, it can enforce penalty on polluters for environmental impacts which is called administrative punishments. [4] Environmental impact can be the probable effects or consequence on the natural and built environment, and people and communities including occupational, social, cultural, socio-economical, public and community health, and safety issues.[5] Social impacts include Involuntary Resettlement of local people and relating to Indigenous People'.[6] Further action which the Ministry can take on Projects which continue to be non-compliant with this Procedure after the imposition of administrative punishment by contemplating criminal punishment provided for under Article 32 of the Law, and informing the relevant government

[1] Earth Rights International, Final Settlement Reached in Doe v. Unocal, http://earthrights.org/news/unocalsettlefinal.shtml (May 10, 2005); Unocal News Release Archive, Settlement Reached in Yadana Pipeline Lawsuit, http://www.unocal.com/uclnews/2005news/032105.htm (March 21, 2005).

[2] Vedanta Resources PLC and another v Lungowe and others [2017] EWCA Civ 1528; [2019] UKSC 20. Available at https://www.bailii.org/uk/cases/UKSC/2019/20.html

[3] Vedanta Resources PLC and another v Lungowe and others [2019] UKSC [55].

[4] Section 125 of Environmental Impact Assessment Procedure issued by Notification No. 616 / 2015 of Ministry of Environmental Conservation and Forestry on the date of 29-12-2015.

[5] Section 1(h) of Environmental Impact Assessment Procedure.

[6] *Ibid.*

departments and organizations having authority to issue licenses, permits or registrations, to take necessary action.[1] The payment of penalties does not bar claimant by third parties with respect to damage incurred and/or injury suffered arising out of the Project's performance or any breaches or performance defects by the Project.[2]

Some environmental claims before Myanmar Courts have been studied and it is rare case that the local people win the lawsuit against MNEs in Myanmar,[3] many remain unsolved issues like Myitsone Dam project.[4] Others still protested by local community against the operating business of MNEs.[5] Among the cases, unusually, the court favoured the plaintiffs who filed a civil suit against the mining companies (Myanmar Pongpipat Company and Eastern Mining Company), which operate mines in Dawei Township. In this case, Saw Dah Shwe, who is a villiger from Kin Baung Chaung, filed a civil suit at the Dawei District Court in 2015. The plaintiff claimed compensation for flooding from the firm's mine that destroyed and caused damages of 882 of his betel nut trees. The court ruled in his favour awarding him 114,800,000 Kyats for damages caused by the activities mining companies.[6] The defendant appealed to the High Courts of the Thaninthari Region for question of facts and that the suit was instituted after the limitation period. However, the Court of Appeal upheld the District Court's decree and dismissed the appeal.[7] Thus, the court decisions pointed that business entities can no longer avoid the responsibilities of violation of human rights and causing environmental harm.

Conclusion

The principles of responsible business conducts for MNEs to be obliged are principally set in UNGPs, OECD Guidelines for Multinational Enterprises and ILO MNE Declarations. UNGPs imposed the obligations of the states and MNEs which are founded on three pillars of Respect of Human Rights, Protect of Human Rights and Access to Remedy. Responsible Business Conduct becomes essential part of MNEs' policy and it extends the scope of business liability of enterprises. MNEs are not only responsible for its own conduct but also may liable for its supply chains' conducts. Based on the case study, although MNEs do not directly incur responsibility under international human rights law and environmental law, in practice, MNEs can be sued before the Court for their human rights abuses and doing business harm to environment. In Myanmar, local community still face the challenges of environmental and human rights issues caused by the investment project, especially mining and hydropower projects. Their right to access to justice is still uncertain and difficult.

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[1] Section 131 of Environmental Impact Assessment Procedure.

[2] Section 128 of Environmental Impact Assessment Procedure.

[3] **Saw Yan Naing, Villigers to sue companies over Destructive effects of Heinda Tin Mining Project on livelihood and Environment, The Irrawaddy (Myanmar) issued on 22 Dec 2016.**

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[5] Joun Liu, Groups reject Tigyit power plant's EIA report, demand suspension, Myanmar Times, issued on 20 Nov 2019, available at https://www.mmtimes.com/news/groups-reject-tigyit-power-plants-eia-report-demand-suspension.html (Last accessed on 9.6.2020)

[6] Saw Dah Shwe v Myanmar Pongpipat Co.Ltd, Dawei Civil regular Suit 50/2015.

[7] Myanmar Pongpipat Co.Ltd v Saw Dah Shwe, Taninthari Civil First Appeal 2/2020.

Acknowledgements

I would like to thank Dr. Aung Naing Soe and Dr. Thidar (Pro Rectors, Mandalay University of Distance Education) for their kindly support with research environment. Moreover, I would like to express my sincere thanks to Dr. Khin Swe Oo (Professor, Head of Department of Law) for encouraging me to pursue my research goal. Finally, I am really indebted to professors from Graduate School of Law in Kyushu University and Graduate School of Modern Society and Culture, Niigata University who guided the class for critical writing. If any error is found, it is neither from the guidance, comments, nor sources; it is from my own responsibility.

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J. Myanmar Acad. Arts Sci. 2021 **Vol. XIX. No.8**

SOCIAL IMPACT ASSESSMENT FOR AGRICULTURE LAND: PERSPECTIVE OF MYANMAR

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Abstract

The wealth of a nation greatly depends upon the agricultural lands, because the agricultural sector is the main route of gaining country income and economic interest. Based on the use of agricultural land from old ages to till present in Myanmar which applying fertilizers incompetently or not using fertilizer with the correct nutrient balance, partially due to lack of knowledge. From that result, the agricultural lands are losing every year. Besides, it was converted many forms of the way such as soil degrades, becomes unusable due to dissolution, used for highways, housing, factories, and other urban needs, and so on. So, this paper aims to examine social impact assessment on agricultural land and further suggestions for Myanmar will make. And also, it should be needed to make a sure assessment on agriculture land is the valuable interest for the country economics and but also preserves agricultural substantial development for the new generation.

Keywords: Agriculture, Farmland, Assessment, Social Impact, Myanmar

Introduction

Agriculture land is land that is called a farmland or cultivated land. It is the systematic and controlled use of other forms of life particularly the rearing of livestock and production of crops to produce food for humans. It is thus generally synonym crop land, as well as pasture or range land. It was enacted The Vacant, Fallow and Virgin Lands Management Law and The Farmland Law in 2012. The Law of Protection of the Farmer Rights and Enhancement of their Benefits was passed by Pyidaungsu Hluttaw.

Social impacts for agriculture land include incorporate farmers' way of life, their culture, community, environment, health and wellbeing, and property rights and their fears and aspirations. Social impact for agriculture land is to reduce poverty, improve health and education, promote peace and democratic governance, foster economic growth, and protect the environment in a country.

Social Impact Assessment is the processes of analyzing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions and any social change processes invoked by those interventions. Its most important purpose is to bring about a more sustainable and equitable biophysical and human environment.

Social impact assessment for Myanmar agricultural lands is the process of identifying and managing the social impact of industrial projects. Sustainable agricultural development has "the management and conservation of the natural resource base, and the orientation of technological and institutional change in such a manner as to ensure the achievement and continued satisfaction of human needs for current and future generations”. And it can protect the environment by reducing erosion and natural resource degradation air and water quality, increasing biodiversity. Because agricultural land is played an important role in preserving natural resources, reducing greenhouse gas emissions, halting biodiversity loss, and caring for valued landscapes of present and future generations.

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Materials and Methods

This paper utilizes of descriptive methods based on the information obtained from former publication researches and other data collection, and could include both present and historical information. This paper is come out from the analyzing of Farmland Law 2012, Fertilizer Law 2015, and Pesticide Law 2016. Especially Section 9 (a), (b), (c) of the Farmland Law is by rights of person who has the right to use the farmland.

Agriculture Land Use Policy in Myanmar

In Myanmar, the measurement, the high level of ethnic diversity, and the low level of development mean that a variety of traditional rights to land has existed around the country, most, although not all, of which are new now recognized by statute law. Under the Constitution of the Republic of the Union of Myanmar 2008, the State has an underlying title to all land, with the exception of certain freehold or inherited land. In most cases, land ownership held by Myanmar citizens and companies is actually a long-term grant of land from the government, which is subject to conditions and limitations on the purpose for which it is allowed to be used. Depending on the types of land, a government approval to change the use may be able to be obtained, in particular, to repurpose agricultural land for commercial uses.

Apart from the common land type's farmland, it is a single type, under old legislation referred to as agricultural land, and now called farmland under the Farm Land Law 2012. Farm Land is also granted to private citizens under a land grant from the government, typically for a period of 30 years, and subject to an express condition that the land only is used for cultivation purposes.

According to the Farmland Law, 2012, terms and conditions are to comply with the person who has the Right to Use the Farmland. The person who has the right to use the farmland:

(a) shall carry out the farmland as prescribed in this Law;

(b) shall pay land revenue and other taxes levied by the Ministry relating to the farmland;

(c) shall register in the relevant Township department by paying the stamp duty and registration fees for the contract stipulated by the department in carrying out sale, mortgage, lease, exchange, and the gift of the right to use the farmland;

(d) shall register in the relevant township department in accord with the stipulations when the right to use the farmland is obtained by inheritance in accord with the existing law;

(e) shall have the right to mortgage the right to use the farmland only for the purpose of investment for cultivation and shall mortgage it in the Government bank or the Bank recognized by the Government;

(f) shall not trespass without permission from the relevant Farmland Administrative Body;

(g) shall not use the farmland by other means lacking permission;

(h) shall not change the originally cultivated crop with another kind of crop, without permission;

(i) shall not be fallow the farmland without sufficient reason;

(j) shall no sell, mortgage, lease, exchange or gift the farmland during the period before having the right to use the farmland or during the period the dispute arises relating to the right to use the farmland If the dispute relating to the right to use the farmland arises after this Law

has come into force, it shall have the right to settle legally only after registration in the department.

The person who has the right to use the farmland shall not sell, mortgage, lease, exchange or gift on the whole or part of the right to use the farmland with no permission of the Government to any foreigner or any organization in which the foreigner is incorporated.

The objectives of the Fertilizer Law 2015, specifies as follows:

(a) to enable supporting the development of the agricultural sector which is the basic economy of the State;

(b) to enable supervision and control of the fertilizer business systematically;

(c) to enable growers to use the fertilizer of quality in conformity with the specifications;

(d) to support the conservation of soil and environment by utilizing suitable fertilizer;

(e) to enable carrying out of educative and research works extensively for the systematic utilization of fertilizer by the agriculturalist;

(f) to cooperate with government departments and organizations, international organizations and local and foreign non-governmental organizations regarding fertilizer business. [1]

According to Section 5(d) of Fertilizer Law, Fertilizer Committee has the duty of issuing necessary directives to prevent environmental pollution and hazard to human beings and animals in respect of fertilizer business. [2]

No one shall, without the registration certificate, produce, import, or export fertilizer for commercial purposes.[3]

According to Section 33 of the Fertilizer Law 2002, it states that "no one shall produce, store, or distribute and sells fake fertilizer or fertilizer, not in conformity with original specifications. And no one shall produce, store or distributed or sell fertilizer mixed with toxic substances. And no one shall use the fertilizer in purposes other than agriculture.[4]

According to Section 36 of the fertilizer Law 2015, it states that whoever violates any prohibition contained in sections 31, 33, or 34 shall, on conviction, be punished with imprisonment for a term which may extend to 3 years or with fine which may extend to kyats 100, 000 or with both. In addition, the order shall be passed to confiscate the exhibits involved in the offense.

Whoever violates the prohibition contained in section 35 shall, on conviction, be punished with imprisonment for a term which extends to one year or with a fine which may extend to kyats 500,000 or with both. In addition, the order shall be passed to confiscate the exhibits involved in the offense.

Whoever violates the prohibition contained in section 35 shall, on conviction, be punished with imprisonment for a term which extends to one year or with a fine which may extend to kyats 500,000 or with both. In addition, the order shall be passed to confiscate the exhibits involved in the offense.[5]

Furthermore, farmers in Myanmar use pesticides to improve agricultural production and increase yield. Actually, abusing pesticides is like using poisons. Because they are toxic, and

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[1] Section 3 of the Fertilizer Law, 2015.
[2] The Law Amending the Fertilizer Law, March, 2015.
[3] Section 31 of the Fertilizer Law, 2015.
[4] Section 34 and 35 of the Fertilizer Law, 2015.
[5] Section 37 of the Fertilizer Law, 2015.

exposure to pesticides can cause a number of health effects. Pesticides can cause short-term adverse health effects, as well as chronic adverse effects that can occur months or years after exposure. Each and every farmer chooses to use chemicals to keep weeds and pests from destroying their crops and to add more nutrients to the soil. There are three different kinds of pesticides: herbicides, insecticides, and fungicides. These pesticides are used to kill different kinds of pests that can be found on a farm.

According to the Pesticide law 2016, the Registration Board has the functions and powers relating to pesticides. The Registration Board shall direct the department to carry out the analysis of pesticide or active ingredient submitted with the application under sub-section (a) of Section 14of this law for determining whether or not the percentage of active ingredient meets the potency according to the instruction, to carry out bio-efficacy all in the cultivation field whether or not the pesticide is effective in suppressing the pest.[1]

The Registration Board may issue any relevant registration certificate if the quality of the pesticide is fulfilled and effective under the analytical test and efficacy trial of the agriculture and irrigation department.[2]

Moreover, the Registration Board may prohibit the use of pesticide or toxic substance for which registration has been obtained on occurring any of the following events contained hereunder or withdraw the registration:

(a) on facts received from outside or inside of the country that pesticide may be hazardous to human beings, animals, crops, and the environment

(b) finding on reinvestigation of the pesticide that the percentage of the active ingredient has met neither the analyzed strength nor the quality, as shown at the time of application;

(c) on being requested to discontinue the use by the applicant who may be either the pesticide or active ingredient manufacturing foreign company or the local formulator.[3]

Pesticide's use has been found to cause problems to farmers' health and the environment, especially since farmers do not dispose of used pesticide bottles properly. Pesticide's use can lead to environmental problems such as the death of fish and other insects, air pollution from its unpleasant odor, and water pollution from pesticide residues. Pesticides residues in water can lead to human health issues (e.g, headaches, dizziness, and vomiting, and eye irritation.[4]

Pesticide User has conditions for compliance. The user of pesticide shall:

a. comply with the instruction for use of pesticide;

b. comply with pesticide safety guidelines published by the department from time to time;

c. neither keep pesticides in close proximity to foodstuffs nor within easy reach of children;

d. comply with the methods of disposal and destruction of the used empty container and packing materials of the pesticide in accord with the directive of the department;

e. comply with the educational directives published from time to time by the department concerning the use of pesticides in cultivated fields and the storage of harvested crops. [5]

[1]Section 5 of the Pesticide Law, 2016.
[2]Section 6 of the Pesticide Law, 2016.
[3]Section 8 of the Pesticide Law, 2016.
[4]Economy and environment Institute Lower Mekong Sub-region, the Impact of Pesticides Use on Health: A Case Study from Myanmar, 2017.
[5]Section 26 of the Pesticide Law, 2016.

The Pesticide Law provides the prohibitions relating to pesticides; no one shall, import or export the pesticide and active ingredient without a permit of the Registration Board.[1] No one shall, without a license, engage in an enterprise of formulating and selling of active ingredient imported from abroad as a pesticide or repacking and selling of pesticide imported into the country or of the retail and wholesale of the pesticide and of fumigation.[2] In Section 33 the Pesticide Law provides that no one shall use the pesticide or active ingredient, apart from suppressing the outbreak of pests, in crops or foodstuffs or beverages consumed by the public. No one shall use the pesticide or active ingredient to catch or kill any creatures. No one shall use other types of the pesticide and application methods other than types of the pesticide and application methods prescribed by the Registration Board in the storage of crops.[3]

Under Section 39, of the Pesticide Law, it lay down the punishment for whoever violates any provision of subsection (d) of Section 25, Sections 31, 32, 33, 34 shall, on conviction, be punished with imprisonment for a term which may extend to 5 years or with fine which may extend to 100,000 kyats or with both. In addition, the exhibits involved in the offense shall be also be confiscated.

Under Section 40 of the Pesticide Law, also provides for, whoever violates any provision of Section 35 shall, on conviction, be punished with imprisonment for a term which may extend to six months or with a fine for a term which may extend to 300,000 kyats. Whoever violates any provision of Sections 36 and 37 shall, on conviction, be punished with imprisonment for a term which may extend to one year or with a fine for a term which may extend to 100,000 kyats or with both. In addition, the exhibits involved in the offense shall also be confiscated. [4]

Thus, apart from the set outlaw and controlling of agricultural impact is essential. For instance, making modern organic farming is developed as a response to the environmental harm caused by chemical pesticides and synthetic fertilizers in conventional agriculture. Conservation tillage is a part of a system of crop production designed to minimize soil disturbance, maintain previous crop residue on or near the soil surface and minimize the number of field operations. And organic farming is one of the methods of crop and livestock production that involves much more than choosing not to use pesticides and fertilizers genetically modified.

Challenges on Agriculture Land

Agriculture is at the heart of our daily life, vital to the economy and society. And farming cannot exist without farmers. They produce high-quality, safe food for consumption and export are also help tackle climate change and preserve the diversity of agriculture. Although industrialized agriculture has been successful in producing large quantities of food, the future of food production is in danger due to problems in agriculture. Two of the most major problems in agriculture are the loss of agricultural land and the decrease in the varieties of crops and livestock produced.

Agricultural lands are those lands that are utilized to grow a marketable crop of botanical or biological nature. Arable land is a type of agricultural land which is under temporary crops such as cereals, temporary meadows for mowing, land under market or kitchen garden, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded. Pasture land is land used for five or more years for forage, including natural and cultivated crops. Agriculture uses

[1] Section 31 of the Pesticide Law, 2016.
[2] Section 32 of the Pesticide Law, 2016.
[3] Section 37 of the Pesticide Law, 2016.
[4] Section 41 of the Pesticide Law, 2016.

about a third of the world's land surface. So, it directly depends on the Environment because of its existence and sustainability are very important for living organisms.

There are many causes of the loss of agricultural land. In these causes, population growth is an important factor. Urbanization is the most dramatic human form of environmental alteration, resulting in widespread changes to the structure and functioning ecosystems including those of agricultural systems. Therefore, urbanization has direct impacts on the conversion and loss of agricultural land. Agricultural pollution is the phenomenon of damage, contamination, and degradation of the environment and ecosystem and health hazards due to by the products of farming practices. The earliest source of pollution has been pesticide and fertilizers. Generally, most of the people realize that agricultural fertilizers and pesticides do not have the main sources of environmental pollution and social impact. So, they should apply pesticides and fertilizers systematically, which is little prospect for pollution and environmental impact.

Advantages and Disadvantages for Assessment on Social Impacts

The agriculture sector is very often related to land issues and monopoly issues. In front of small-scale farming, foreign companies easily take over the control of the market. So, organic farmers should protect in their investment and public incentive must be proposed by public authorities to allow the proper development of the organic sector. Policies need to prevent small-scale farmers in general and organic farmers in particular from any abuses coming from industrial agriculture investments. In order to promote organic and sustainable agriculture, it is necessary to earn consumers' trust.

The organic agriculture sector should be strengthened and developed through the creation of an independent body made by experts and relevant stakeholders to control those organic products that fit with the consumers' expectations. Sustainable agriculture's products shall be promoted through the creation of a Sustainable Agriculture label.

The organic supply chain must be strengthened through cooperation between farmers, retailers, and banks. The lack of storage facilities as well as infrastructure does not allow proper development of the sector. Civil Society Organizations, organic farmers, banking institutions, and public authorities should cooperate to ease the access to funding and thus reinforce the sector all along the supply chain. Specific attention must be made to the training of farmers on different sustainable methods of production and their benefits for the farmers' lifestyle, the environment, and the community.

A particular emphasis must be made on the negative impact on their health of the unreasoned use of chemicals, and on adaptation to climate change effect. Agriculture has been the origin of every country's development and constitutes the core of any society.

Modern agriculture proved its relevance while looking at the production increase. However, it leads to major threats to the environment such as soil degradation, deforestation, and overuse of chemicals. Organic and Sustainable agriculture appear to be relevant alternatives since they allow high productivity while preserving the environment and people's health.

Lack of access to market information is an initial problem of social impact. There is no mechanism to provide farmers with knowledge of market prices and supply/demand trends for individual agricultural products; hence, there is little guidance on planting, storage, or marketing decisions. Returns to farmers tend to be based on the low prices at harvest time, with most profits going to traders and exporters.

Inadequate access the fertilizers is the second problem of social impact. Fertilizers are expensive and difficult for farmlands to obtain, given the lack of credit and poor state of the road network. While Myanmar has sample supplies of natural gas from which to produce urea fertilizers.

Limited access to improved seed is a third of the problem of social impact. The recently established Public/Private Myanmar Rice Specialized Companies are designed to facilitate access to improved seed, but so far, the results have been limited. Most farmers use seed retained from the previous harvest, which tends to be of poor quality and deteriorates genetically over time.

Thus, inadequate access to fertilizers, limited access to improved seeds, lack of access to market information and it is the deficiency of knowledge of farmers. So, it should be given for the awareness to farmers.

Myanmar Social Impact Assessment Processes on Agriculture Land

In Myanmar, land possession is defined in relation to land uses. Agriculture Land: Land being utilized or kept in possession for agricultural purposes. With the enactment of the 'Land Nationalization Act', all agricultural land has come under exclusive State-ownership. Farmers become tenants and have the right to cultivate only. Correspondences under Agriculture Land are not transferable and the tenant must pay land revenue.

It is also necessary to develop an umbrella land law, based on the guidelines and principles of the over-arching National Land Use Policy. This process could mobilize a genuine and inclusive, multi-stakeholder public consultation process. This law would need to address the unresolved gaps such as the recognition of customary tenure and mechanisms for conflict resolution and accountability of the authorities involved in land administration. It is also necessary to develop an umbrella land law, based on the guidelines and principles of the over-arching National Land Use Policy.

Findings

The principal outcome is the study of what impact is likely to have on the environment and how to stop the overuse of land, limit the use of chemicals in agriculture; protect the rights of ethnic peoples, and enable people to participate in decisions about conservation. On the other hand, it was found out that the terms and conditions to be complied by the person who has the right to use the farmland, the farmland law and policies onwards.

And Myanmar Government needs to protect the farmland that an agricultural conservation easement is deed restriction landowners voluntarily place on their property to protect productive agriculture land. They are used by landowners to authorize a qualified conservation organization or public agency to monitor and enforce the restrictions set forth in the agreement.

Recommendation

Agriculture land is a value that non-renewable natural resource. It serves several important factors for living organizations; also, it provides food products and raw materials that are used to manufacture goods throughout the world. It absorbs rainwater, helping replenish groundwater supplies and reduce flooding. It also provides a habitat for wildlife and open space that enhances the landscape. So, the government's economic development strategy gives high priority to the agriculture sector. Of the economic development objectives of the government, in the agriculture sector development is regarded as one of the major driving forces and the basis for the uplifting of social well-being. In accordance with the government's plans, the major role of the agriculture

sector is to fulfill food security, increase foreign exchange earnings through agricultural exports, and spur rural development generally.

In the field of fertilizing corps at the time of seeding, the government should provide the seeds with essential nutrients like potassium, phosphorous, and calcium. The root zone at the base of crops is the most important area to facilitate growth. In that way, corps can thrive and produce an impressive yield.

However, Myanmar silences behind in modern agriculture production. The use of machinery in agriculture will raise productivity, cut processing time and bring about economies of scale. Technological and scientific inputs are also important in boosting agricultural production. At present, agriculture production is more or less traditional in Myanmar. Modernization and expansion of agriculture require large capital requirements and modern technology. For these requirements, private sector participation, Foreign Direct Investment, and assistance from international agencies are needed. In addition, other factors such as infrastructure development both social and physical, efficient administrative procedures, and political stability within the country are required to attract foreign investment and maximize private domestic participation. Consequently, the success of agricultural development tasks as well as the acceleration of growth and development can occur. As much as progress has been made in the agriculture sector, the capital will gain and it can be used in implementing sector for national development.

Conclusion

Agriculture land plays a crucial role in Myanmar's economic life. It is the backbone of our economic system. Agriculture provides not only food and raw material but also employment opportunities to a very large proportion of the population.

It is a duty to Ban Dangerous Pesticides. ... Children are especially vulnerable to pesticides because their bodies are still developing, and their diets and activities such as playing on pesticide-treated lawns or eating a lot of fruits with pesticide residue result in high exposure.

The State Peace and Development Council enacted the Fertilizer Law on 1st October 2002 with notification no. 7/2002. The objectives are to enable supporting the development of the agricultural sector which is the basic economy of the State, to enable supervision and control of the fertilizer business systematically, to enable growers to use the fertilizer of quality in conformity with the specifications, to support the conservation of soil and environment by utilizing suitable fertilizer, to enable carrying out of educative and research works extensively for the systematic utilization of fertilizer by the agriculturalist, to cooperate with government departments and organizations, international organizations and local and foreign non-governmental organizations regarding fertilizer business.

The government has protected the farmland that an Agricultural Conservation Easement (ACE) is deed restriction landowners voluntarily place on their property to protect productive agricultural land. They are used by landowners to authorize a qualified conservation organization or public agency to monitor and enforce the restrictions set forth in the agreement.

The agricultural sector is one of the most important components of our society. Farmers and ranchers produce food and fibber for human beings every day. Soil is a critical part of successful agriculture and is the original source of the nutrients that we use to grow crops. In agricultural productivity in rising will release workers from food production for employment in other sectors. Building infrastructure for rural development such as dams, roads, and railways, especially in remote areas, brings benefits to geographically disadvantaged groups and thus meets the country’s social concerns. Hence, there are strong economic and social imperatives for

Myanmar to build up its agricultural base. A sound agricultural base will provide a good foundation for the development of ago, wood, marine, and other traditional resource-based industries

Today, it keeps the economy running and helps people to survive. More than half of the lands engaged and developed by human beings in the world are devoted to agriculture. Agriculture is mainly contributed to the Gross Domestic Production over the past years. At the same time, productivity has been increasing. We should protect that the farmers manage nearly half of the land in the states. It is in their interests to be good stewards of the land. In turn, well-managed agricultural land provides food and cover for wildlife.

Acknowledgements

I am very thankful to my sister and all of my teachers for their valuable support. Special thanks are due to Prof. Dr. Daw Than Nwe (Rtd), and Prof. Dr. Khin Chit Chit, Head of Law Department, Yangon University, Prof. Dr. Khin Phone Myint Kyu and Prof. Dr. Khin Khin Oo,for their kind advices and suggestions during the course of my paper.

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J. Myanmar Acad. Arts Sci. 2021 **Vol. XIX. No.8**

AN ANALYTICAL STUDY OF MYANMAR TRADEMARK LAW 2019

Khin Thinn Thinn Oo[1]

Abstract

Trademark right, as one of the intellectual property rights, is directly related to the area of trade and investment. Trademark Law is essential for the development of international trade as well as national economy of the nation. Trademark protection is also important for all the traders, manufacturers, investors, entrepreneurs and consumers. Before 2019, there was no examination, opposition and cancellation procedures of trademark registration and Myanmar can recognize the trademark rights by declaration the ownership of trademark. Local and foreign investors want to acquire legally ownership and protection their trademark in Myanmar. In 2019, Myanmar enacted Trademark Law and it will be entered into force in coming soon. In order to implement Trademark Law, Trademark Rules and administrative authority are needed to establish. But, some of the provisions of Trademark Law are needed to change in line with International rules for effectively enforce in practice. The aim of this research is to examine the provisions of Trademark Law 2019, to describe the some significant points of this law and to discuss some suggestions which are in line with the provisions of international conventions and agreements in order to the development of existing Trademark Law and upcoming Trademark Rules.

Keywords: Distinctiveness, Right of Priority, Confusion, First-to-File, Registration.

Introduction

In 2019, Trademark Law was passed for the development of Myanmar's IP system. Nearly all members of TRIPs Agreement have already established Intellectual Property Law as well as Trademark Law. The promulgation of Trademark Law makes a step forward for Myanmar's trademark protection system. The Trademark Law enables significant changes to the current process of trademark registration and protection in Myanmar in line with international agreement and standards. The Trademark Law introduces many new provisions which are for the interests of trademark owners as well as for the consumers. After the promulgation of Trademark Law, the enactment of Trademark Rules and the establishment of IP Court are needed in order to implement the law.

The paper also examines existing provisions of Trademark Law 2019 and compares with the provisions of international convention relating to protection of trademark. This paper provides some suggested terms and provisions that are needed to replace and change in Trademark Law. This paper also proposes some procedure or process for upcoming Trademark Rules.

Materials and Methods

A descriptive, comparative and an analytic method are applied in this research. The materials used for the purpose of the research are Trademark Law 2019 and International Conventions relating to trademark protection, books, and articles (including articles on the Internet).

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Importance of Trademark in International Trade

In the twentieth century, trademarks become a important factor in the modern world of international trade and market oriented economy that allow manufacturers and traders to offer consumers a variety of goods under differ in quality, price and other characteristics. In the current information technology era, the marketing of goods and services are moving quickly and trademark infringement issues are widespread. The economic development of the country is directly relationship between enhanced intellectual property protection and an increase of foreign direct investment. Therefore, trademark protection is becoming on particularly important matter and it may be promoted by promulgating effective IP law including Trademark Law.

A trademark is one of the categories of Intellectual Property Rights (IPRs). It is represented by the symbol ™ or ® and used on the products. It is a distinctive sign, symbol or indicator which is used by an individual, business organization or other legal entity to identify uniquely the source of its products or services to consumers, and to distinguish its products or services from those of other entities. It could typically be a name, word, phrase, logo, symbol, design, image, or a combination of these elements. Trademarks are used to facilitate and enhance the marketing of a commodity and is a sign that indicates to consumers the source and reputation of the affixer of the mark and provides an important advertising and sales tool.[1]

Myanmar and International Provisions relating to Trademark Protection

Myanmar is a member of World Trade Organization (WTO) and World Intellectual Property Organization (WIPO). Myanmar has an obligation to comply with Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs). The TRIPs Agreement establishes the detailed substantive minimum standards on the protection of trademark. According to TRIPs' Provisions, Myanmar has indirectly applied and obliged other related international agreements.

Article 2 of the TRIPs Agreement obliges Members to comply with Article 1 through 12 and Article 19 of the Paris Convention. Article 2 also incorporates all substantive provisions of the Paris Convention, and these binding on contracting parties who are not members of the Paris Convention if they are members of the World Trade Organization (WTO). Although Myanmar is not a party to the Paris Convention, So, Myanmar will in effect be obliged to observe the Paris Convention.

Several other global and regional agreements signed between the Paris Convention and TRIPs remain. All of these conventions are interrelated such that an entire international system of trademark protection exists today. Agreements that pre-date TRIPs, based on the Paris Convention for the Protection of Industrial Property 1883, coexist with the requirements of TRIPs. A few of these older trademark agreements include: Madrid Agreement on the International Registration of Trademarks 1891; Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration 1957; Vienna Agreement for international classification of the figurative elements of marks 1973; Madrid Protocol on the International Registration of Trademarks1989; and Trademark Law Treaty 1994. Each of these conventions offers a different link to TRIPs.[2] The Trademark Law Treaty 1994 and Singapore Treaty on the

[1] https://www.lawteacher.net/free-law-essays/business-law/trademark-infringement-vis-vis-the-tata.php.
[2] Summaries of Conventions, Treaties and Agreements Administered by WIPO, 2013, wipo_pub_442.pdf, p 10.

Law of Trademarks 2006 harmonize national and regional registration procedures, the Madrid Agreement and the Protocol relating to the Madrid Agreement facilitate multiple registrations in a number of jurisdictions.

The TRIPs Agreement contains a comprehensive definition of trademarks and a description of the rights conferred by registered trademarks, as well as provisions on limitations and on the term of protection. The TRIPs Agreement also adds some significant substantive provisions regarding service marks and the protection of well-known marks. These provisions codify and concretize to some extent jurisprudence and general practice that had already been developed under the Paris Convention and relevant national laws. Therefore, Myanmar enacted Trademark Law 2019 in line with TRIPs Agreement. Then, Myanmar is also a member of the ASEAN, Myanmar is bound by the ASEAN Framework Agreement on Intellectual Property Cooperation 1995 to advance the legal framework to support the ASEAN Economic Community.

Significant Points of Trademark Law 2019

Trademark Law was enacted on 30th January 2019 by (Pyidaungsu Hluttaw Law No. 3/2019). It will be come into force on the date which is prescribed in the notification issued by the President.[1] Trademark Law 2019 is comprised of 24 Chapters and 106 Sections. The enactment of the Trademark Law is an important step for Myanmar Intellectual Property Regime. It can facilitate to protect trademark right effectively in Myanmar. As a result, it can attract for local and foreign investment. Trademark Law establishes a framework for a comprehensive trademark registration and protection system for trademark owners.

Examination System for Registration

Before the enactment of Trademark Law 2019, there is no examination system for registration whether the applied trademark is registrable not. Trademark Law 2019 introduces formality and substantive examination of application, publication for oppositions and granting certificate. Opposition on absolute ground or related ground may be filed by anyone by paying an opposition fee within 60 days of publication. For example, if applications to register trademark that are deemed to lack of distinctiveness, or directly descriptive of goods or services, that mark will be refused for registration.

Rights of Registered Trademark Owner

Trademark Law clearly enacted the rights of registered trademark owner. Under section 37 to 41 of Trademark Law, a trademark owner can enjoy an exclusive rights such as the right of transferred and licensed[2], the right to prevent[3], the right to take the criminal action, civil action and both against the infringer[4].

Term of a Registered Trademark

Before the enactment of Trademark Law, there is no recognized term for trademark duration. According to section 34 of this Law, the term of a registered mark shall be 10 years from

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[1] Section 1(b) of the Trademark Law 2019.
[2] Section 38(b) of the Trademark Law 2019.
[3] Section 38(a) (1) of the Trademark Law 2019.
[4] Section 38(a) (2) of the Trademark Law 2019.

the submission date for application of trademark registration. After this period, the applicant may renew the term of registration for 10 years at a time.

Transfer of Trademark's Right

Section 42 to 44 states that "transfer of the trademark's right". According to those sections, the owner of a registered mark may apply to the Registrar to transfer ownership of the mark to any other person or legally formed organization. This process can decline the issues relating to trademark disputes.

Section 45 to 49 clearly rules that "licensing of registered mark". An owner of a registered mark may grant a license for use of the mark to any person or legally formed organization after setting the terms and conditions.[1] An owner of a registered mark or the licensee may submit certified copies of the grant of license and pay the prescribed fee to the Registrar to request the entry of the grant of license into the registration records.[2] Unlike the prior to the enactment of Trademark Law, there is a systematic method of trademark licensing and registering of that manner under the control of Registrar.

Establishment of IP Court and Appointment of Judges

According to section 67 of the Trademark Law, the Supreme Court will establish the IP Court and appoint the judges in order to adjudicate the criminal and civil suits of IP matters.

Scope of Protection

The Trademark Law covers the protection of trademarks, service mark, well-known marks, collective mark, certification mark, geographical indications and trade names. The interpretation of the terms of law is fundamental to the process and practice of law. It is the process of defining that the intended meaning of a written document. Some interpretation of term of the Trademark Law is ambiguous. In this Law, statutory interpretation of the terms is important in enforcing the law in efficient and effective way. So, the court can face difficulty in order to seek to ascertain the meaning of the legislature.

Intellectual Property Rights

Section 2(i) of the Trademark Law 2019 states that "Intellectual property rights means the right granted by law to protect creations made by one's own intellect. This expression includes copyright, patent rights, industrial design rights, trademark rights, and other types of intellectual property rights". In this definition, there are two parts and the second part of the definition should be added. According to Article 2 (viii) of the Convention Establishing the World Intellectual Property Organization, "Intellectual property" shall include the rights relating to: literary, artistic and scientific works, performances of performing artists, phonograms, and broadcasts, inventions in all fields of human endeavor, scientific discoveries, industrial designs, trademarks, service marks, and commercial names and designations, protection against unfair competition, and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

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[1] Section 45 of the Trademark Law 2019.

[2] Section 45 of the Trademark Law 2019.

So, the second part of this definition should replace the words "this expression includes all categories of intellectual property rights under WIPO".

Mark and Trademark

The TRIPs Agreement defines "Any sign, or any combination of signs, capable of distinguishing the goods or services of one undertaking from those of other undertakings, shall be capable of constituting a trademark. Such signs, in particular words including personal names, letters, numerals, figurative elements and combinations of colours as well as any combination of such signs, shall be eligible for registration as trademarks."[1]

Unlike TRIPs provisions and Trademark Law of other countries, Section 2 (j) Myanmar Trademark Law defines the term "mark": "Mark means any visible sign, which includes personal names, letters, numbers, figurative elements, or combinations of colors or one a combination of such signs, capable of distinguishing a particular goods or services from other goods or services. This term includes trademark, service mark, collective mark and certification mark".

By observing this definition, the first part of this definition indicates the term marks is distinguishable for a particular goods or services from other goods or services. The second part expressed the term "mark" includes "trademark, service mark, collective mark and certification mark". Therefore, the first part and the second part of the definition do not harmonize and it is difficult to apply in practice.

Beside the definition of "mark", there is a definition of "trademark" in this law. That is "Trademark means a mark that distinguishes the goods of one enterprise from those of other enterprises in the course of trade."[2] As a result, the interpretation of mark and trademark can confuse in practice. Even though the title of Law is "Trademark Law", almost all of the provisions, except Section 8 and 9, used the term "mark" instead of the place of using "trademark".

Article 2 (viii) of the Convention Establishing the World Intellectual Property Organization 1967, the term "trademark" is used in the definition of "intellectual property" Section 2, Article 15 to 21 of the TRIPs Agreement provides the "Trademark" including "protectable subject matter of trademark, rights conferred, term of protection, requirement of use and licensing and assignment". In this provisions, the term "trademark" was only used. In addition to, there are other international agreements relating to trademark such as Madrid Agreement on the International Registration of Trademarks 1891, Trademark Law Treaty 1994 and Singapore Treaty on the Law of Trademarks 2006. By analyzing international trends, some provision of this law should be used the term "trademark" which is more suitable than "mark".

Therefore, the term "mark" should be changed "trademark" in line with the relevant provisions. For example, some of the provisions related to "right of priority" are only related to trademark or services not related to collective mark, certification mark and trade name.

Service Mark

Section 2 (l) of Trademark Law 2019 states "service mark means a mark that distinguishes the services of one enterprise from those of other enterprises in the course of trade". Even though the term service mark is defined in this law, there is needed the authoritative instruction that the

[1] Article 15 (1) of TRIPs Agreement 1994.
[2] Section 2(k) of the Trademark Law 2019.

provision of trademark applies for the protection of service mark. The TRIPs Agreement requires service marks to be protected in the same way as marks distinguishing goods.[1] So, service mark protection has sometimes been introduced by a very short amendment to the existing trademark law, *mutatis mutandis*, of the provisions on the protection of trademarks.

Collective Mark and Certification Mark

In relating to the right of collective mark, the term "collective mark" was defined in Section 2(m) of the Trademark Law that "Collective mark means a mark owned by a collective organization, such as organization, association or socio-economic organization collective with Industrialists, manufacturers or traders or cooperative. This expression includes marks which distinguish the goods or services of the members of said organizations from those of others". Except that definition, there was no provisions that how to registered and how to protect the collective mark. And then, section 2 (n) of Trademark Law 2019 defines "Certification mark means a mark which certifies the use, under the supervision of the owner of said mark, in connection with the origin, quality, type and other distinguishing characteristics of the goods or services of a mark". Some provision relating to registration and enforcement for the infringement of those marks should be added in line with Paris Convention and TRIPs Agreement.

Geographical Indications

The protection of geographical indication was expressly provided in Article 22 to 24 of TRIPs Agreement. In Trademark Law 2019, section 2 (o) and section 53 to 62 of Trademark Law 2019 clearly express the protection of geographical indication. But there is no provision relating to the form of infringement and the action upon infringement. So, the nature of geographical indication is different from other marks and it should be added in detail in the upcoming Rules.

Well-Known Marks

Section 2 (p) of Trademark Law 2019 defines well-known mark that is "well-known mark means a mark that is well-known, in accordance with the stipulated standard, in the Republic of the Union of Myanmar". Well-known mark is a trademark or service mark that has relatively high renown and repute among the substantial segment of the relevant public. Well-known mark has special character which is different from ordinary trademark or service mark. Therefore, the detail procedure should be supplement in Trademark Law as well as upcoming Trademark Rules.

The basic instruments governing protection of well-known marks are Paris Convention for the Protection of Industrial Property, TRIPs Agreement and WIPO Joint Recommendations Concerning Provisions on the Protection of Well-Known Marks. Therefore, the provisions relation to well-known marks in Trademark Law 2019 should be fullfiled in line with those international provisions. There should be laid down a list of factors that can assess of whether a mark is well known in Myanmar. The criteria which evaluate an ordinary mark to be a well-known mark is important for competent authorities and judicial courts in practice the law.

The protection of well-known mark is very complicated issues. If a mark has recognized as a well-known mark, it may be protected from infringements without registration, and even without use. Some issue relating to unfair competition of the well-known mark may be the confusion,

[1] Articles 15.1, 16.2 and 16.3 of TRIPs Agreement 1994.

dilution and bad faith registration of the well-known mark. So, Trademark Law 2019 should add the detail procedure for the examination of the confusion and dilution of the well-known marks.

Although there is no guideline in international convention, the national practice of determining factor is existed. For example, US second circuit courts use the Polariod test which contains a number of factors as a guideline for determination of whether there is likelihood of confusion or not. The court can apply when examining:

(1) the strength of the plaintiffs marks;

(2) the degree of similarity between the marks;

(3) the proximity of the products or services;

(4) the likelihood of the senior user "bridging the gap" into the junior user's product service line;

(5) evidence of actual confusion between the parties' marks;

(6) whether the defendant adopted its mark in good faith;

(7) the quality of the defendant's goods or services; and

(8) the sophistication of the parties' customers.[1]

This is the another State practice that Federal Trademark Dilution Act ("FTDA") provides a list of eight non-exclusive factors that a court may consider in determining whether a particular mark is distinctive and famous, thus warranting protection against dilution. The factors are:

(1) the degree of inherent or acquired distinctiveness of the mark.

(2) the duration and extent of the use of the mark in connection with the goods or services with which the mark is used.

(3) the duration and extent of advertising and publicity of the mark

(4) the geographical extent of the trading area in which the mark is used

(5) the channels of trade for the goods or services with which the mark used

(6) the degree of recognition for the mark in the trading areas and channels of trade used by the mark's owner and the person against whom the injunction is sought;

(7) the nature and extent of use of the same or similar marks by third parties; and

(8) whether the mark is federally registered.[2]

Conditions for Registration as a Trademark

Section 94(b) of this law clearly describes, "regardless of the provisions in any other existing law, registration of a mark must be carried out according to this law". In order to obtain trademark and service mark protection in Myanmar, registration of a mark is the principal way under Trademark Law. This system is in line with the international provisions. According to Article 6(1) of the Paris Convention and Article 15.2 of the TRIPs Agreement, the conditions for

[1] INTA, The Trademark Reporter, Annual Review, Vol 97, March-April, 2007, No 2 ,p.126.

[2] 15 U.S.C section 1225 (c) (1).

the filing and registering of a trademark are in principle determined by the domestic legislation of each Member country.

Trademark Law 2019 describes trademark rights are territorial. This means the ownership of a registered trademark is valid within territory of Myanmar. The trademark owner, who has already registered his trademark in another country, the trademark must be needed to register if his trademark wants to protect in Myanmar.

In order to apply registration of mark, “a clear and complete description of the mark” is one of the factors.[1] With regards to an application for the registration of a mark, the examiner must been made according to stipulations, together with his remarks to the Registrar after examining whether the application meets any of the provisions set out in section 13 and whether it contains the points set out in section 17 of this law.[2]

Examination Process

The Intellectual Property Office will examine the absolute ground[3] and related ground[4]. This law recognizes acquired distinctiveness through use in line with the provisions of TRIPs Agreement. Before the enactment of Trademark Law, Myanmar applies acquisition of trademark rights through use. The trademark right through use will also recognized and registered under section 93 of Trademark Law 2019. If the mark is not distinctiveness and it is a generic mark, it can be refused as absolute ground by the IP office.

Section 13 (b) (1) of Trademark Law states that if the mark’s distinctiveness is known among consumers due to its use before the date of application for mark registration; recognize to register and protect the trademark which has “acquired distinctiveness through use” among the customer. Section 13 (b) (2) of Trademark Law provides “If the applicant, in good faith, is exclusively using the mark continuously within the trading area of Myanmar”. This provision means Trademark Law 2019 is still recognizing use system.

For registration, the mark must be a distinctive mark and it must be capable of distinguishing the goods or services with which it is used. Such marks must be invented or fanciful and not be descriptive of the goods or services they identify. The mark must have some inherent quality making it unique. Because their purpose is to help consumers identify products and services.

Multiple-Class Applications

Section 17 (a) (5) of the Trademark Law states that “name and type of goods and/or services for which a request for registration is made and the category of international mark classification to which it belongs”. According to this provisions, the availability of multiple-class applications is allowed.

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[1] Section 17 (a) (4) of Trademark Law 2019.
[2] Section 23 (a) of Trademark Law 2019.
[3] Section 13 of the Trademark Law 2019.
[4] Section 14 of the Trademark Law 2019.

Right of Priority and Right of Priority for Trade Exhibitions

Section 2 (v) of the Trademark Law defines "Right of Priority" which means "the right of priority described in Section 31 of this Law". Section 17 (b) (2) of the this Law, "In addition to the requirements in subsection (a), the following must be attached to the application if necessary: if the applicant requests the right of priority, an application for the right of priority together with sufficient evidence proving that he has the right of priority, and description."

Section 31 states that "If a person who has initially applied for registration of mark in a Member State of the Paris Convention or the World Trade Organization or the transferee of said person applies for the registration for identical goods or services and identical mark in the Republic of the Union of Myanmar within six months from the date of the initial application, the aforementioned date of application must be considered as the date of application and the right of priority must be granted from such date". In this section, "Right of Priority" means "Right of Priority for International Registration". Therefore, the term should be amended more clearly as "Right of Priority for International Registration" in section 2(v). Because, there will be conflict in section 93 (b) of the law.

Section 93 (b) of Trademark Law, Stated that "before this law enters into force, whether a mark has been registered or not registered in accordance with the Registration Act, a mark that is actually used in the markets of the Union (Myanmar) shall enjoy the right of used priority for the goods or services for which said mark is used for the duration of the stipulated period". This section relates to the recognition of trademark right through use and the owner of mark can have an opportunity to apply for registration. This section is ambiguous that whether the law allows use priority or right or priority of international registration. According to this section, the term "Union" should be also interpreted.

And then, section 2 (w) of Trademark Law states that "Right of priority for trade exhibitions" which means the right of priority related to trade exhibitions described in section 32 of this Law. Section 32 of this Law states that "If the applicant requests the registration of a mark, displayed at an international trade exhibition authorized or recognized by a Member State of the Paris Convention or the World Trade Organization, to the Department within six months from the first day of displaying the goods or services, then the first day of display shall be considered as the date of application and the right of priority for trade exhibitions for the aforementioned mark shall be granted from such date'.

According to Section 17 (b) (3) of the Trademark Law, "In addition to the requirements in subsection (a), the following must be attached to the application if necessary: if the applicant requests the right of priority for trade exhibitions, an application for the right of priority for trade exhibitions together with sufficient evidence proving that he has the right of priority for trade exhibitions, and description."

The provision of this section is in line with the international convention. If the local or foreign trademark owners who displayed their mark in authorized international trade exhibition before the registration, they have an opportunity to enjoy right of priority.

Transitional Period

Trademark Law introduces registration system to be in line with other countries. A trademark application can be filed at Intellectual Property Office and the task of examination and opposition will be handled by that office.

All marks currently registered under the Registration Act 1908 or the Deeds Registration Law 2018 must be re-filed and examined when the Trademark Law enters into force in order to get trademark mark ownership in Myanmar. Currently, trademarks can be registered at the Registration of Deeds Office under Ministry of Agriculture, Livestock and Irrigation. This office accepted the registration of all sorts of documents, in particular long-term lease contracts and sale and purchase contracts for immovable property. It is not a specific office for Trademark Registration. This office currently registers the trademark and issues "declarations of ownership".

The registration officer usually does not examine and verify

1. whether the applied mark has already been registered or not
2. whether the applied mark has distinctiveness or not.
3. there is no cancellation procedure whether the unauthorized use occurred other the owner.

There will likely be a transitional period for existing trademark owners to re-file their marks. Section 93(a) of the Trademark Law states that if trademark owners that have previously recorded their marks with the Office of Registration of Deeds (ORD) or have not recorded their marks but can provide evidence of actual use in Myanmar want to enjoy rights relating to their marks, they must apply for registration in accordance with the new law.

Existing and previously registered Declarations of Ownership and published Cautionary Notices can be submitted as part of the application. Section 17 (b) (4) of the Trademark Law states, "in addition to the requirements in subsection (a), the documentary evidence proving such registration must be attached to the application if the mark is registered at the documents registration office". This section allows the transaction of old registration to new registration.

If the mark was recorded with the ORD under the old system, the trademark owner should submit evidence of that recordation together with the trademark application under the new system for the registrar's examination.

If a trademark owner can prove actual use of its mark in the market, then the mark will be protected – irrespective of whether it is recorded at the ORD. The owner will enjoy priority rights for goods and services with such marks, within a specified period.

Enforcement of Trademark Rights

Under Trademark Law 2019, civil, criminal and administrative action can claim when the infringement was occurred. Section 77 to 86 of the law provide the authority of IP court relating to infringement of trademark right. The right holder may apply to the IP court for criminal action or civil action[1]. The provisions of this law are in line with TRIPs Agreement. Part III, sections 2 to 5 of TRIP Agreement provide a more detailed list of procedures and criminal, civil, and

[1] Section 77 (b) of Trademark Law 2019.

administrative corrective measures. In cases of infringement, rights holders may seek enforcement from judicial, administrative, and customs authorities, through measures such as injunctions and penal sanctions, or through the confiscation or destruction of counterfeit goods. If infringement is threatening, the owner may demand provisional measures such as suspension of the goods from circulation.

Civil Action

The right holder may, according to the provisions in sections 79 and 80, apply for a miscellaneous suit to IP court for provisional measures orders through civil action for damage.[1] Under the Trademark Law 2019, the civil remedies are to order the removal of goods in the market, to prevent the entry of products and to maintain the original condition of evidence relating to alleged infringement upon mark rights.

Administrative Action

The owner can claim the refusal for application, invalidation the registration and cancellation the registered mark by administration actions A trademark registration can be cancelled for non-use and it can be invalidated for non-registrability. Section 50 of the Trademark Law, the Registrar have an authority to announce about the invalidation of a registered mark when any stakeholder request with sufficient that constitutes the grounds for refusal under the provisions of this Law. Upon the request of any stakeholder regarding the use of the mark, the Registrar must cancel the registration of a mark if it is found to meet conditions which are clearly described in Section 51 and its sub-sections of Trademark Law 2019.

Criminal Action

The provisions relating to offences and penalties of criminal actions are stated section 87 to 92 of Trademark Law 2019. And then, section 94(b) of this law clearly describes, "regardless of the provisions in any other existing law, any offense regarding a mark must be punished according to this law only". As a result, the Penal Code and other existing laws which have been using before the enactment of Trademark Law 2019 will not use when the Trademark Law enter into force. Depend upon different infringement, punishment range from fine and imprisonment.

Findings

By analyzing the Trademark Law, this law is mostly relating to the protection of trademark, service mark and well-known mark .In order to successfully impalement Trademark Law 2019 in practice, some provisions should be amended and some of the terms should be replaced or substituted. By observing this Law, there is no clear procedure of recognition and protection of well-known mark, collective mark, certification mark and trade names. There should be added the amendment provisions for the registration protection of collective mark and certification mark because the nature of marks are different. The Trademark search system is important and that searching procedure should be needed to add in the Rules. Because of trademark rights can also be protected by unfair competition, the term "act of unfair competition" should be interpreted and the forms of act of unfair competition should be added in line with Article 10*bis* of Paris Convention.

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[1] Section 77 (b) of Trademark Law 2019.

Conclusion

Myanmar have new system that the registered trademark will be recorded and published to the public. So, the applicant can search the list of registered mark and they can create the new distinctive mark. By enacting Trademark Law in Myanmar, it can be enable to improve the ASEAN region's trademark registration and protection system.

Modern marketing methods require a trademark law in conformity with the needs of trade. For a developing country, investment in every sector of the economy, both domestic and foreign, is a key factor to promoting its economic development, which forms the basis for all other developments. Myanmar has invited participation in terms of technical know-how as well as investment from sources inside the country and abroad for the proper evolution of the market-oriented economic system and development of the economy for the country and for the people.

Trademarks can be protected for goods and services used in connection with the trade through normal application and registration of a trademark in Myanmar. Since the protection of trademarks is fairly in its infancy stage in Myanmar and is gradually going through further development. Myanmar must set up a programme to improve the legislative system for enforcing intellectual property rights in line with TRIPs Agreement. Further, it is important that legislative improvement will enable both judiciary and administrative enforcement bodies in Myanmar to award damages and expenses to right holders, and to provide for adequate border measures.

Acknowledgement

I am very thankful to my parents and all of my teachers especially for their valuable support. I want to express my appreciation and thanks to Prof. Dr. Khin Chit Chit, Head of Department of Law, University of Yangon, for her valuable advice, guidance and supervision throughout this study. Special thanks is due to Prof. Dr. Khin Khin Oo, Department of Law, University of Yangon, for her guidance to carry out this paper. My special thanks are due to Prof. Dr. Daw Than Nwe, Part-Time Professor, Department of Law, University of Yangon and Member of Myanmar Academy of Arts and Science (MAAS), for her kind advice and suggestions during the course of my paper. I wish to express my gratitude to Prof. Dr. Khin Mar Yee, Part-Time Professor, Department of Law, University of Yangon for her encouragement to write this paper.

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