**Buddhist Concepts and Waste Management of Post-COVID-19 Outbreak**

Phrapalad Raphin Buddhisaro, Direk Duangloy, Lampong Klomkul*, Mallika Phumathon

Mahachulalongkornrajavidyalaya University, Nakhon Sawan Rajabhat University

Corresponding Author E-mail: research.mcu@gmail.com

**Abstract**— Buddhist concepts and waste management of Post-COVID-19 outbreak are studies by using documentary study and related research. The study found that Post-COVID-19 outbreak caused the problem of waste and the management of consumption waste which will be another case of detention measures, ordering food online, and medical waste from other masks have increased. The public sector must pay more attention to the promotion systematic storage management measures. In Buddhism, there is a concept of raising consciousness through discipline such as social discipline, corporate responsibility and volunteerism in waste separation, toxic waste management, medical waste to be proportionate Discard as advised by the relevant authorities. In the concept of Buddhism, it will be an extension of measures and methods within the framework of encouraging a conscience to see the harm of garbage. It also sees the benefits of the public by managing the waste in their own home, self-discipline, the benefits of society as a whole social responsibility and environment for the benefit of coexistence as a result of tackling waste that is emerging after COVID-19 outbreak.

Index Terms— Waste Management, Post-COVID Outbreak 19, Buddhist Concept

**I. INTRODUCTION**

From the information that appears, it was found that the Thai population had to wear masks every day and change every other day at least 1-2 pieces per day. Since Thailand has measures to lock the country and has measures for people to wear masks From March 2 0 2 0 until now, it has been more than a year, including legal measures that anyone who does not wear a mask will be guilty and fined. Therefore, the mask used has become rubbish which is not only Thailand but also includes countries around the world. From surveys on waste and waste management such as: (a) the amount of waste that increases with consumption behavior; from the lock down of the country, WFH (Work from Home), which has an effect on stopping the epidemic of buying the virus. However, in other words has caused the behavior of members in society. The whole society stopped moving. Many people have to work from home. As a result, the food ordering business or food delivery has more people calling for the service both in the first phase and in the second phase until the present what follows from Food Delivery is the amount of plastic waste doubled from normal. During the lockdown to stay home, stop germs, for the nation’s Kasikorn Research Center Assess whether it is used the Food Delivery application service was 66-68 million times, an increase of 78-84% from the same period last year. growing by leaps and bounds. The most popular applications are LINE MAN and Grab Food, with usage statistics increasing by 300-400% compared to the pre-Covid period. As a result, the amount of single use-plastics waste such as drinking glasses, stacking dishes, water bottles, plastic dishes and drinking straws has increased exponentially by more than 15%.

Thailand Development Research Institute, Thailand, or TDRI, used to estimate that 1 order of food. There will be an average of seven pieces of plastic waste, including food boxes, sauce bags, plastic spoons, plastic forks, cutlery bags, soup bags and plastic food handle bags. The Thai Environment Institute reported that during the Covid-19 outbreak earlier this year. This caused the amount of plastic waste to soar by 15%, from an average of 5,500 tons per day to 6,300 tons per day, excluding the hazardous waste generated by used masks. It is estimated that the rate of disposable masks is about 1.5 – 2 million pieces per day. Most of which are mixed with general solid waste. Therefore, from the facts and conditions of the problems that arise, they are studied and reflected into articles to present the problematic conditions ready to propose guidelines for managing and solving problems through Buddhist concepts which will be presented in an overview sequentially.
II. THE IMPACT OF THE COVID SITUATION ON WASTE

From the statistics of the phenomenon of the epidemic of COVID-19, this means that the situation of the world is affected in a similar way which means that everything has changed impact of COVID-19 has made many changes on a global scale both economic, political, lifestyle and especially the environment all over the world have received impact of COVID-19. Some of which are impacts on the environment and climate due to travel restrictions and a significant economic slowdown. This makes air quality and water quality in many countries tend to improve, but vice versa. The rise of plastic waste especially PPE plastic (such as masks and rubber gloves). Infectious waste and other waste from hospitals are on the rise and have a negative impact on the environment.

1. Infectious waste on the rise, September 2020, the journal Bioresource Technology Reports reports[1] that since the outbreak of COVID-19. Medical waste is on the rise around the world which is a threat to people’s health and the environment, such as in Wuhan. The epicenter of the novel coronavirus epidemic has more than 2.40 metric tons of hospital waste were generated every day during the outbreak. This amounted to about 190 metric tons more than the usual time period, as was the case with Ahmedabad, India. The amount of waste from hospitals has increased from 500-600 kilograms per day to 1,000 kilograms per day for Thailand. The proportion of infectious waste across the country is also increasing. Data from the Department of Health revealed that During the past lockdown Thailand has an infectious waste generation rate of approximately 1 4 7,7 7 0 kilograms per day or higher than the normal period of 1,900 kg.

2. Ineffective use of safety equipment and disposal to prevent viral infection. People are currently using masks, long gloves and other safety equipment without knowledge of how to manage, and store, according to Lancet Glob Health[2] in October 2020, in both the United States and China, which will increase the volume of medical waste. In Thailand, the Thailand Development Research Institute (TDRI) points out that COVID-19 is causing people to use more masks from 800,000 to about 1,500,000 a day, posing a risk of spreading the disease and exposure to the virus by garbage collectors.

3. Increased community solid waste, the increase in community waste many countries (both organic and inorganic) have direct and indirect impacts on the environment, such as air, water, and soil air pollution. This has increased the demand for online shopping for home delivery. Most of the amount of household waste is caused by packaging. Thailand Development Research Institute, Thailand, or TDRI[3], used to estimate that 1 order of food. There will be an average of seven pieces of plastic waste, including food boxes, sauce bags, plastic spoons, plastic forks, cutlery bags, soup bags and plastic food handle bags. The Thai Environment Institute reported that during the first round of COVID-19 outbreak. This caused the amount of plastic waste to soar by 15 percent, from an average of 5,500 tons per day to 6,300 tons per day, excluding the hazardous waste generated from used masks. It is estimated that the rate of disposable masks is about 1.5 – 2 million pieces per day.[4] Most of which are mixed with general solid waste.

From the overview, it reflects that COVID-19 has made the nation's society not the same anymore, everything has changed may use the word different both in society, economy, way of life and lifestyle. Thailand vaccine case creating economic measures to stimulate the economy lending creating financial measures. Therefore, it is necessary and urgent after the situation resolves soon. Therefore, people and nations have to adapt to cope with the differences as reported and quoted. which will be presented next.

III. WASTE MANAGEMENT UNDER THE COVID 19 SITUATION

Waste Management has guidelines on waste both medical waste and waste from household use as shown in the research titled Eliminate infectious waste of Thammasat Chalermprakiat Hospital [5]. Research on Integrated Food Waste Reduction in Households [6] (Patranit Srijuntrapun,2 0 1 6 ) , and research on Development of Community-Based Learning Process in Waste Management at the Source [7], including a proposed approach to cautious waste management as shown in the Self-Care Ability Among Waste Picker[8] or creating knowledge in waste management as in the research, Development of Waste Management Information System for One-stop Waste Management Learning Center. [9] It means, talk about how to deal with medical waste including household waste which means that there is a study of the approach, but in this study, I want to reflect on the subject have a Buddhist concept. This will be a support to help waste management under the COVID-1 9 situation where the amount of waste occurs in large numbers. Consequently, consciousness and intent result in behavior and action will have an effect and play an important role in determining or
participating in systematic waste management with the goal of protecting the environment and reducing the amount of waste in the situation of the COVID-19 epidemic.

Fig. 3-4 Religious use of substitute containers and food ordering to reduce waste

IV. BUDDHIST WASTE MANAGEMENT

When it comes to Buddhism, there is a concept or principle as a method of practice on promoting or raising awareness among people and citizens in society. In Buddhism, there is the concept of managing things for the benefit of coexistence, which means the environment and waste management. As shown in the Vinaya Pitaka: (1) Do not spit on the pavement, (2) Do not throw food waste into the water source, (3) Do not pour food waste onto the tree, (4) Do not defecate urine into the water source, etc. All of them are guidelines or practices that appear as Buddhist disciplines. Which such guidelines or measures can be applied for waste management in the situation of COVID-19, with the heart of such concepts being conscience or social and collective responsibility. In the current situation, the Sangha with a population of more than 250,000 people has come to have campaign activities through the 5 Precepts Village activities that are driven by the Sangha Sangha Council has promoted and driven. Through more than 40,000 temples across the country, these located in more than 40,000 communities across the country through campaigns to promote through preaching and repeated campaigns to communicate with Buddhists to reduce the amount of food-related waste, such as the use of lunch boxes to reduce the amount of waste reducing the amount of household waste and in public. When the COVID-19 situation spreads, waste from masks and medical waste has increased, Buddhist temples and principles have also contributed to the promotion campaign through consciousness and will which can be classified as follows:

1. Social Discipline: Buddhism teaches about precepts, so precepts are the basic consciousness that Thai citizens have seen the importance of protecting the environment and waste management systematically within the framework of possibility Stimulates responsibility and recognizes the importance of systematic waste. When we have to see the effect of ordering food, we see that cups, plates, stacking straws are not needed. We may not accept in the case of those foods that we eat at home, which are already stacked, plates, fixed, etc., this concept reflects social discipline waste separation management or managing waste from the beginning by making it clear which waste is household waste, food waste and what is recycled plastic. Which one is the waste due to medical waste that need to be managed in a systematic way.

Fig. 5 Religious use of substitute containers and food ordering to reduce waste

Fig. 6-7 Using alternative containers in religious ways and activities to reduce the amount of waste of temples and monks in Thailand

2. Volunteer spirit responsible for the society as a whole is to see that the public is the key for us to help or provide assistance in order to make the waste not a burden or a problem for society as a whole. Therefore, it must start from inside your own home since reducing waste production even in the situation of COVID-19 must consume a lot the waste was brought to be used for bruising such as plastic bags or water bottles in case of medical waste, which means a mask. After using once and then discarded, it must be managed in a systematic way to prevent infection or prevent the spread of undesirable infections, etc.
3. Religious morality means that religion teaches you to have awareness and responsibility to society as a whole including stimulating consciousness and social responsibility under the framework of possibility encourage and see the importance. In Thailand, the Sangha and the state have a policy to drive the religious dimension through the 5 Precepts Village project focusing on driving society through the concept of Buddhist precepts. Promoting careers, incomes, and being in the framework of social discipline. The Pracharath Building Happiness Project which is a continuation of the first project by using more than 40,000 temples across the country. Covering more than 40,000 communities, it has been a mechanism to drive religious ways. The goal for coexistence emphasizes community unity and quality of life and religious approach as a mechanism for driving religious guidelines. From this strength, if adapted to be a way of campaigning to promote community co-operation. This will cause people's power to manage waste, both household waste. Rubbish in the COVID-19 situation, medical waste and household waste are kept continuously safe, waste separation, and not accepting excess items. From ordering food only plastic straws, plastic fixing plates that come with food in order the shop to reduce or refrain from accepting which will make it a part of waste reduction and waste management in the medical waste section which can affect the infection to be separated systematically store and pack separately to prevent the spread of germs, etc.

It's all about the mind or the development of foundations within the framework of ethics to be responsible for society as a whole and at the same time is a matter of ethics to foster development and shared responsibility. In addition, the Buddhist concept does not look trash, but looking at the garbage in celebrities, there is a saying that “...Any of those who are not restrained in sensual pleasures not composed of dharma, not respecting the dharma, with prejudice because I put my attitude, Dosati, Mohagati, Bhayati, such a person, we call him the trash in the company. The enlightened monk has said this and…”[10] In its meaning, consciousness and responsibility respect Dharma practice according to the practice of being a Buddhist therefore it will be called a Buddhist. If you practice the opposite, it will be filth or excess in the name of the Buddha Company. The concept of Buddhism has the principle of thinking for the public, which is the service of benefit that have principles of discipline and precepts as a director and at the same time Buddhists must be a follower with respect including the Sangha and the State currently. There is a project (1) 5 Precepts Village that encourages people to have religious precepts, such as not oppressing others social discipline and far from drugs including unity in the community through various established activities that reflect the role of monks and society in many provinces such as Phra Nakhon Si Ayutthaya Province[11] and Samut Songkhram Province[12]. (2) The Pracharath Building Happiness Project is driven by the government and related sectors to promote people's quality of life in terms of occupation income and quality of life, such as community markets, temple markets. It is to promote quality of life and income for people at the foundation level holy day holy days and activities in the temple. The goal is to campaign and encourage people to practice religious principles and prayers as well. This approach can be written in a figure that affects the campaign to promote the reduction of waste through recycling non-plastic waste and medical waste management especially the mask in every household to be correct and appropriate.
管理在所处的国家中是公开的和宗教化的，其中特别强调在国家、寺庙、僧侣和民众之间的合作。通过寺庙和国家合作，传播一种方法，通过寺庙的方法可以解决废物问题。这种合作方法需要在社区和国家层面进行推广。这种情况下的废物管理是国家和社区的共同努力，将废物管理的方法传递给社区，并使用一种项目方法，即利用寺庙和国家的合作来传递废物管理的方法。

**REFERENCES**


