

The Study for Guidelines for emergency shelter for disaster victims in disaster-prone areas, Thonburi District, Bangkok*



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Abstract

This research aims: 1) to assess the physical condition of the temple area as a temporary shelter for the community; and 2) to study the problem on residential area in the temple area as a temporary shelter for the community. This research paper is qualitative research. The specific group of informants used in the study consisted of 5 abbots from temples in Thonburi District area which has a lot of slum communities. There were Civil temples located near slum communities with risks on emergency disasters and can be reached with the distance less than 1 kilometer. Five temples will be used as case studies of this research including: 1) Bang Sai Kai Temple; 2) Yai Sai Si Suphan Temple; 3) Kantatararam Temple; 4) Santi Tammaram Temple; and 5) Pradittharam Temple. Tools used for collecting data were survey form and structured interview form. The group of informants consisted of abbots. Obtained data were analyzed by using content analysis and the results were reported in the form of descriptive study.

The results revealed that: 1) After assessing physical condition of the temple area as a temporary shelter for the community, it was found that these 5 temples used as the case studies of this research had properties that could act as the temporary shelters for the communities compared to minimum international criteria on establishment of temporary shelter; 2) For residential dimension, physical condition of most current residential buildings was the obstacle for becoming temporary shelters.

Keywords: Temporary shelter; Risk area; Emergency disaster

*Received July 26, 2021; Revised December 20, 2021; Accepted February 14, 2022

Introduction

Emergency disaster is a situation that can cause loss of assets and life. Emergency disaster can be natural disasters like flood, storm, or disasters caused by accidents like fire as well as sabotages. Some of these emergency disasters can be predicted but some of them are not. (International Organization for Migration (IOM), Thailand, 2011) However, to manage disasters, preparation of temporary shelter for victims is considered as the important measures because it will help to reduce loss of life and enable agencies helping victims to provide help fully and appropriately. (Reconstruction of Sendai, 2015) Each area of the world has different emergency disaster, for example, Japan often encounters with earthquake and storm while U.S.A. often encounters with natural disasters caused by storm. Consequently, these countries have developed preparation process of temporary shelters for their communities as the securities of local people on safety of temporary shelters in emergency disaster (Knowledge Management Center for Disaster Management (OECD), 2011), for example, India established the guidelines for building temporary shelters for victims in the form of a document called “National Guidelines on Temporary Shelters for Disaster – Affected Families” as the operational framework of construction of temporary shelter for victims (National Disaster Management Authority Ministry of Home Affairs Government of India, 2019).

For Thailand, if previous incidents are compared to those of other areas in the world, emergency disasters that are natural disasters are occurred in low level due to advantages on geographic condition. However, natural disasters that are frequently occurred in Thailand are often floods. For Bangkok with location that is not often affected by natural disasters, emergency disaster that is often occurred in Bangkok is fire. Emergency From statistics on public health, fire is the first rank of Bangkok. From 2017 statistic, there were 1,625 fire incidents. Fire scenes are often in residential areas of slum communities whereas slum communities in Bangkok often have crowded houses that are risky for fires. With physical characteristics of communities, i.e., wood houses or half-wood half-cement houses that are located next to one another with narrow entrance, plus with low income of local people, many fires occurred in Bangkok cause loss of life and assets of people extensively. As a result, it can be deemed that emergency disaster is a kind of danger that can occur unexpectedly, suddenly, and unpredictably or an abnormal situation that occurs with no time for preparation, for example, fire of a community located behind Kuha Sawan Temple causing damages against over 20 houses which victims were migrated to stay at Bote Intarasarnphetch Temple and fire incident of Taksin 23 Community causing damages against over 70 houses which victims were

migrated to stay at Santi Thammaram Temple as a temporary shelter, etc. Temple is one of places that are set as temporal shelter under the policy of Department of Disaster Prevention and Mitigation. (Department of Disaster Prevention and Mitigation, Ministry of Interior, 2014) For factors to consider as the temporary shelter, with physical characteristics, Buddhist temples are often located near communities. Before modifying as temporary shelters, temples are places for religious activities. Since Thailand has no regulations or laws to support modification of places and buildings as temporary shelters for victims of emergency disaster, there are some problems on space utilization that are not consistent with behaviors with no patterns on proper area allocation. These problems add insult to injury of mental condition of victims as occurred in various emergency disasters in the past. In Thailand, temporary shelters are defined as existing buildings and locations (Asian Disaster Preparedness Center, 2017) These buildings are designed for residential purpose therefore modification of building for supporting behaviors and living activities is difficult.

Temporary shelter is considered as mitigation on residential purpose for victims suffering from crises or emergency disasters with the goal to enable victims to stay at temporary shelters stably and safety. In addition, it is also the time which victims have an opportunity to prepare readiness for backing to live normally. (Office of the National Economic and Social Development Board, 2011) Consequently, the community will be ready for helping victims from homelessness and relieving troubles of victims providing security in life and health to victims rapidly with dignity as human beings and minimum standard for responding to disasters (Thanapurmpornn, Angspatt, and Boonpiamsak, 2019) As a result, preparation of hygienic temporary shelters for the communities is important and it must be performed urgently because it is highly necessary for quality of life as defined by the goal on safety and security of victims in shelters. In the event of emergency disaster, the first agency that can provide help to victims is community therefore establishment of temporary shelters is highly important for victims in communities or nearby communities (Thanapurmpornn, Angspatt, and Boonpiamsak, 2019) In the event of any emergency disaster that victims are unable to move to live with their relatives timely, temporary shelters will play the important role in solving problem on safe shelters for communities.

Although there are regulations on preparation of temporary shelters in Disaster Prevention and Mitigation Plan of Bangkok that will solve the problem on temporal shelters of victims (Phuwanan et al. ,2014), they are only general practices. However, with context of temporary shelters with specification and immeasurability, they are designed to act as

temporary shelters for communities. Consequently, there are some problems occurred with victims using the areas, for example, residential buildings. Physical condition of most current residential buildings is obstacle against utilization, insecurity, and privacy affecting to mental condition of victims. (Chuay Kamchoo, A., 2012) Therefore, the benefits obtained from this study will be utilized to develop temple areas as temporary shelters. Temples intend to develop their temples as temporary shelters will be able to apply the guidelines founded by the research to develop potential of their temple areas for supporting victims from emergency disasters. In addition, victims and communities will feel safe when they have to stay at temporary shelters in temple areas.

Objectives of the research

1. To assess physical condition of the temple area as temporary shelter for the community.
2. To study the problem on residential area in the temple area as a temporary shelter for the community.

Research Methodology

1st Step: Research design

This research is qualitative research aiming to study and assess physical condition and problems of residences in the temple areas acted as temporary shelters for the communities and present the guidelines for preparing temporary shelters in communities with the risks on emergency disasters in Bangkok.

2nd Step: Key Informants/Scope of Area

The researcher selected the key informants by using purposive sampling consisted of 5 abbots from the following temples located at Thonburi District, Bangkok Metropolis: 1) Bang Sai Kai Temple; 2) Yai Sai Si Suphan Temple; 3) Kantatararam Temple; 4) Santi Tammaram Temple; and 5) Pradittharam Temple.

3rd Step: Research Tools

To obtain actual data and answers covering all objectives of this research, research tools were as follows: 1) Related research documents; 2) Physical Condition Survey Form 3) Structured interview Form

4th Step: Data collection

Data were collected through documentary research and field research by surveying physical condition of buildings and structured interview with the following details: 1. Documentary research 2. Field research consisted of the following techniques: Physical condition survey: It was a survey form that was developed from the guidelines for establishing temporary shelters with international standard for applying to the research to collect data and assess current physical condition of the temple area including building types, building characteristics, building sizes, and basic facilities for victims of emergency disasters including elders, handicapped, men, and general people. Structured interview was conducted by interviewing with abbots from temples in Thonburi District including: 1) Bang Sai Kai Temple; 2) Yai Sai Si Suphan Temple; 3) Kantatararam Temple; 4) Santi Tammaram Temple; and 5) Pradittharam Temple. Structure of interview consisted of questions related to utilization and activities occurred in normal time and opinions on determination of temple areas as temporary shelters for the communities.

5th Step: Data analysis

Primary data and secondary data obtained from interview were analyzed then collected data were explained based on collected data through descriptive study with the following procedures: 1. Collected secondary data from documents including Disaster Prevention and Mitigation, handbooks, guidelines, concepts, ministerial regulations, and related researches. Primary data obtained from physical condition survey of the temple areas were collected. These data were obtained from 5 temples in Thonburi District including: 1) Bang Sai Kai Temple; 2) Yai Sai Si Suphan Temple; 3) Kantatararam Temple; 4) Santi Tammaram Temple; and 5) Pradittharam Temple. 2. Analyzed data obtained from interviewing with the abbots regarding problems on residences in the temple areas as the temporary shelters for the communities. 3. Analyzed all data to obtain clarity for responding to objectives of this research before discussing and presenting for preparing development of the temple areas as future temporary shelters for the communities.

Research Result

The 1st objective is to assess physical condition of the temple area as temporary shelter for the community – From surveying to assess physical condition of the temple areas as temporary shelters, Table 1 revealed that, when comparing to facilities under conditions of victims, there were necessary areas for establishing temporary shelters based on minimum international criteria in 5 temples including residential buildings, sermon halls or multi-

purpose buildings, bathrooms with toilets, kitchen and litter areas. Laundry areas, first-aid area, and areas for religious activities could be allocated in the temple areas as proper.

Table 1 Necessary Areas for Establishing Temporary Shelters Compared to Case Studies

Case Studies	Necessary Areas for Establishing Temporary Shelters							
	Residential Areas	Bathrooms	Toilets	Laundry Areas	Litter Areas	Kitchen	First-Aid Area	Areas for Religious Activities
Santi Thammaram Temple*	✓	✓	✓	✓	✓	✓	✓	✓
Kantararam Temple*	✓	✓	✓	✓	✓	✓	✓	✓
Yai Si Suphan Temple	✓	✓	✓	✓	✓	✓	✓	✓
Bang SaiKai Temple	✓	✓	✓	✓	✓	✓	✓	✓
Pradittharam Temple	✓	✓	✓	✓	✓	✓	✓	✓

*Temples with experience on establishing temporary shelters

The 2nd objective is to study the problem on residential area in the temple area as a temporary shelter for the community – For quality of facilities in residential dimension, Table 2 represented physical condition of residential areas of 5 temples. They determined the sermon halls as the areas for supporting residential purposes. Inside the buildings, there were open areas and small rooms for storing devices. From interviewing with the abbots, it was found that there were 2 temples that were former temporary shelters for nearby communities for 1 month, i.e., Santi Tammaram Temple and Kantatararam Temple, and they found some problems on residential areas in shelters, for example, sleeping with other families with no division leading to insecurity on life and assets and non-privacy affecting to mental condition, uncomfortable feeling, and stress that added insult to injury of victims. Temples with experience as temporal shelters for victims developed and improved areas as proper for victims in the future. Subsequently, the abbots improved and extended the areas, for example, building a dome in front of the sermon hall and extend the building to add more

areas for residential purpose with division between men and women for safety. In addition, screens and curtain rods should be installed for privacy. From lesson learned based on both temples as mentioned above, it could be predicted that temples that had not been the temporary shelters before would have some problems on residents regarding insecurity and privacy affecting to mental condition of victims certainly.

Table 2 Physical Condition of Case Studies

Santi Tammaram Temple (Sermon Hall)	Kantatararam Temple (Sermon Hall)	Yai Sai Si Suphan Temple (Sermon Hall)	Bang Sai Kai (Sermon Hall)	Pradittharam Temple (Sermon Hall)
				

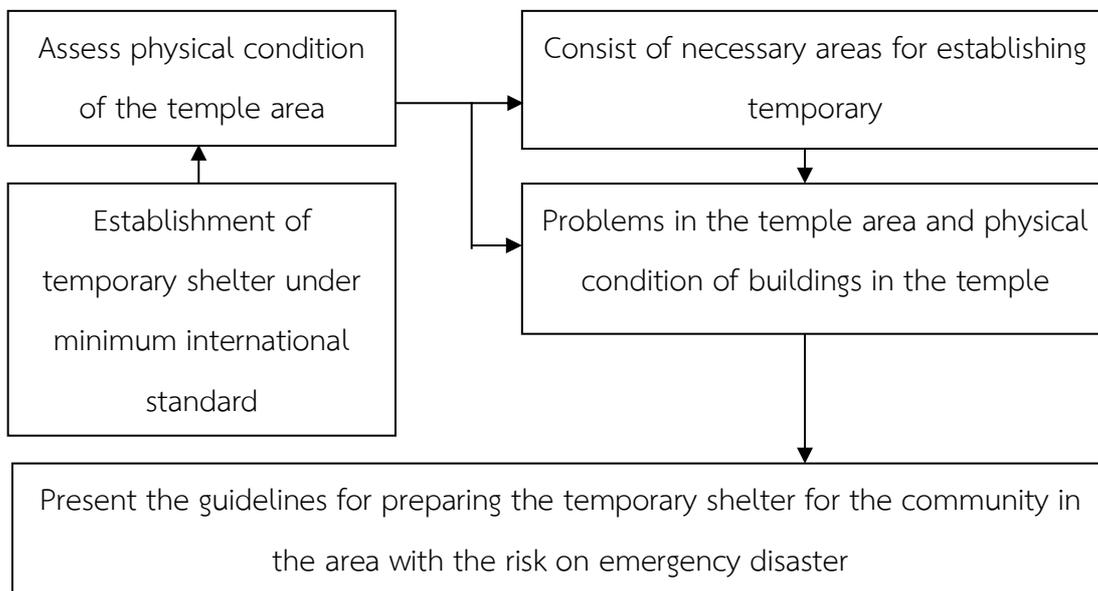


Figure 1 Connection of Objectives

Source: Researcher

The new body of knowledge

Selection of places as emergency shelters for accessibility, usability, and convenience of people in the community with equality requires criteria to select places, improve, and repair

parts of building for the ultimate benefit of utilization. Required basic factors were sufficient and hygienic sanitary system and consideration on psychology of victims and emergency shelters.

Discussion of research results

The research result of the 1st objective found that when comparing physical condition of temples to minimum international standard (Asian Disaster Preparedness Center, 2017) on establishment of temporary shelters, temples had properties that could be shelters. However, when comparing to temporary shelters in some Asian countries, it was found that India could build temporary shelters for victims (Ministry of Home Affairs, 2019) to be consistent with Japan with requirements and guidelines on shelter management (Cabinet Office, in Charge of Disaster Prevention). Both countries did not only have limited areas for establishing temporary shelters but they also establish the guidelines on temporary shelters management for victims in order to prepare readiness for dealing with problems timely. These are different from Thailand because Thailand only defines places as temporary shelters.

The research result of the 2nd objective found that this research was consistent with the research of (Thanapumporn, Angspatt, and Boonpiamsak,, 2019) who studied on health management in temporary shelter for Thai Red Cross Society. From studying, it was found that environment in temporary shelter should be safe with reduction of vulnerability on religion, culture, and gender. In addition, there should be sufficient private areas or family areas with good social condition in temporary shelters. There should be some areas for organizing some activities to reduce stress. This research was also consistent with the research of (Sawadipanich, and Chirarat, 2013) who studied on condition of accommodation in shelter for victims: perspective of children and parents towards condition of accommodation in shelter, which found 5 issues including: 1) uncomfortable feeling on physical and mental condition caused by living with a large group of people in the shelter and confusing atmosphere; 2) insecurity of life and assets due to living with strangers robbery, quarrel, sexual harassment, and gambling; 3) living condition with the risk on diseases, for example, large number of wastes, water supply with contamination; 4) disturbance against sleeping, behaviors of other victims, and disturbance, etc.; and 5) various problems for challenging and dealing with good management on people, residential areas, pets, donated things, disposal of wastes and garbage as demanded by victims. These were consistent with the study and it was found that the problems in shelters like sleeping with other families, no explicit division causing insecurity

of life and assets and non-privacy affected to mental condition, uncomfortable feeling, and stress that added insult to injury of victims.

Conclusion

When temples play the role as temporary shelters for communities, there should be preparation of utility spaces and facilities for planning establishment of the temporary shelter in the temple area with the pattern to meet with minimum international standard. To solve problems occurred in shelters that fail to support living of victims and to be consistent with the objectives of the policy on establishment of temporary shelters, it was required to consider on safety and living to be convenient for victims while staying in temporary shelters. According to National Disaster Prevention and Mitigation Plan and design of sermon hall or multi-purpose building that will be built in the temple area, utility spaces for supporting victims should be considered and proportion of areas for looking after victims with special needs like elders, handicapped, or persons with mobility impairment, pregnant women, or women requiring help and hygienic care, and areas for religious activities should be emphasized as the guidelines for planning establishment of temporary shelters in the future.

Suggestions

From the results, the research had the following suggestions:

1. Suggestions obtained from Research

The results based on Objective 1 revealed that, to prepare readiness in developing the temple area as the temporary shelter for the community, physical condition of the temple should be assessed in order to acknowledge on limitations or problems in each area. Facilities for victims like residences should be allocated properly with screens for privacy. Bathrooms should be improved with hygiene and availability without any declination or defect. In addition, facilities should be installed for elders and persons with mobility impairment for safety and convenience in living while living in the temporary shelter for the community. As a result, agencies related to determination and management of shelter and the major responsible persons, i.e., local government agencies, have the duties to define areas, management, and allocation of shelters, utility spaces, to victims based on minimum international standard on temporary shelter for surveying, improving, repairing, maintenance, and security.

The results based on Objective 2 revealed that, in the residential dimension of temporary shelter with consistency with behaviors of victims like family living or individual living, areas management should be performed properly for private areas of each group of people in order to reduce uncomfortable feeling without causing any stress as well as reduce the risks on sexual harassment and insecurity of life and assets enabling victims to stay at shelters with dignity. As a result, related agencies, directors of temporary shelters, Ministry of Social Development and Human Security, supervisors and coordinators should have patterns or guidelines on environmental and social management equally and extensively.

2. Suggestions for Further Researches

The further researches should involve in the following issues:

2.1 Preparation of plan or practices on establishment of temporary shelter in the temple area should be studied for preparing readiness of allocation of the temporary shelter for the community.

2.2 Management of establishment of temporary shelter for the community should be studied including management on places and environment in temporary shelter and victim management with rules and regulations for living together as well as facilities for vulnerable victims.

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