

ตัวแบบที่เหมาะสมกับนโยบายการจัดการที่อยู่อาศัยของผู้สูงอายุของประเทศไทยในมุมมอง  
ของการจัดการภาครัฐ เอกชน และชุมชน  
The suitable model for the elderly housing management policy for Thailand  
in the management perspective of the public, private  
and community sectors

ชนมณี ทะนันแสง<sup>1\*</sup> และ รัตพงษ์ สอนสุภาพ<sup>2</sup>  
(Chonmani Tananpang <sup>1\*</sup>, Rattaphong Sonsuphap <sup>2</sup>)

บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษานโยบายการจัดการด้านที่อยู่อาศัยของผู้สูงอายุในมุมมองการจัดการของภาครัฐ เอกชน และชุมชน โดยการรวบรวมข้อมูลที่เกี่ยวข้องกับนโยบายด้านการจัดการด้านที่อยู่อาศัยของผู้สูงอายุ ลักษณะการพึ่งพาของผู้สูงอายุ และลักษณะการดำเนินงานในแต่ละโครงการ ผ่านการวิเคราะห์ด้วยเทคนิค SWOT Analysis และ TOWS Matrix Model ที่เป็นการวิเคราะห์ทั้งปัจจัยภายในและปัจจัยภายนอก เพื่อสังเคราะห์นโยบายที่มีความเหมาะสมการจัดการด้านที่อยู่อาศัยของผู้สูงอายุในประเทศไทย

ผลการศึกษาพบว่า นโยบายการจัดการที่อยู่อาศัยของผู้สูงอายุในปัจจุบันและการวิเคราะห์ด้วยเทคนิค SWOT Analysis และ TOWS Matrix Model ไม่ใช่วิธีรับมือที่ยั่งยืนนัก เป็นเพียงนโยบายที่แก้ไขปัญหาที่ปลายเหตุ งานวิจัยนี้ชี้ชัดว่าควรเพิ่มการกำหนดมาตรฐานที่อยู่อาศัยสำหรับผู้สูงอายุ ที่ประกอบไปด้วย ชุมชนผู้สูงอายุ ศูนย์ดูแลผู้สูงอายุ สถานบริการผู้สูงอายุ สถานดูแลผู้สูงอายุเสมอภาค สถานดูแลผู้สูงอายุระยะท้าย และชุมชนของผู้สูงอายุ นอกจากนี้สถานการณ์โควิด-19 และสภาวะเศรษฐกิจส่งผลให้พฤติกรรมของผู้บริโภคเปลี่ยนแปลงไป การต่อยอดโครงการจากภาคเอกชนในลักษณะของการพัฒนาที่อยู่อาศัยเดิมเป็นการช่วยแก้ปัญหาที่ต้นเหตุได้ดี ซึ่งหากได้รับการสนับสนุนจากภาครัฐทั้งงบประมาณ นโยบาย ข้อกฎหมายต่าง ๆ ร่วมกับเอกชนและชุมชน ทางด้านการให้บริการและเทคโนโลยี ร่วมกับการส่งเสริมการเก็บออมเพื่อเตรียมความพร้อมก่อนเข้าสู่วัยสูงอายุ ก็จะช่วยให้การจัดการด้านที่อยู่อาศัยของผู้สูงอายุภายในประเทศไทยมีการพัฒนาที่ดีอย่างยั่งยืนต่อไปในอนาคต

**คำสำคัญ:** การจัดการที่อยู่อาศัย ผู้สูงอายุ นโยบายการจัดการที่เหมาะสม

<sup>\*1,2</sup> วิทยาลัยนวัตกรรมสังคม มหาวิทยาลัยรังสิต ปทุมธานี 12000

College of Social Innovation, Rangsit University, Pathum Thani 12000

Corresponding author: chonmani.t@gmail.com

## ABSTRACT

This research aims to study the elderly housing management policy through the management perspective of the public, private and community sectors. each project operational process. Data was analyzed through SWOT Analysis and TOWS Matrix models.

The study results revealed that the current elderly housing management policy and analysis by SWOT Analysis and TOWS Matrix Model is not a sustainable solution, instead it is just a policy to solve the symptom rather than the root cause of the problem. This research clearly indicated that there is a need of an increase in setting a housing standard for the elder population including the elderly care center, the elderly nursing home, the elder with dementia residential care, palliative care, and the elderly community. The project extension of private sector in housing modification was a good solution to solve the problem at the root cause. If this project can get a support by the government including budget, policy, law and other regulations, together with the collaboration from the private sector and the community in providing services and technology as well as an encouragement on savings to prepare Thai citizens before entering the elderly age. This will enhance the elderly housing management in Thailand to be able to have a well-developed sustainability further in the future.

**Keywords:** Housing Management policy, Elderly, The suitable model

### Article history:

Received 31 July 2021

Revised 20 November 2021

Accepted 26 November 2021

SIMILARITY INDEX = 0.00 %

## 1. Introduction

Ageing Society is the change in nature of social structures that is the number of populations over the age of 60 is larger than the population of other ages. Recently, with the rise of the elderly population, there are more than 11.6 million elderly population in 2020, accounting for 17.57 percent of the total population (Department of Older Persons 2020) which is likely to increase. In 2015, the number of elderly populations was estimated as high as 20.42 million people, accounted for 31.28 percent. While year 2019 was the first year that the child population reported to have equal number as the elderly population of 11.3 million people. Since then, the number of child population is continuously lower than of the elderly population. (InfoQuest News 2020) The government has scheduled becoming the ageing society as a national agenda because there is a confident data of the number of elderly people in the future will have an even higher rate. Thus, Thailand will become a full-fledged ageing society in the near future when the number of elderly populations aged over 60 will be more than 20 percent of the total population. This will affect the overall structure of the

national society, especially in the residential property that will lead to the rise in real estate projects for assisting the increasing elderly population through both public and private sectors. Yet the growth in assistance is lower when compared to the relevant growth in demand. Habitat is fundamental to human life, but due to the limitation of economy or administrative obligations, the housing accessibility is difficult for people in the society living in Thailand. Moreover, the government policy has not covered the rise of elder population in becoming a full-fledge ageing society. (Thaipost 2019) This creates a gap of both in numbers and quality housing related to the elderly population. The government has been implementing the policies related to the elderly housing management both direct and indirect, such as 1) The 2nd National Plan on The Elderly 2002-2021(the 1st revised of 2009), 2) Strategy 2: promotion and support of Elderly Person Strategy as well as The Act on Older Persons B.E. 2546 (2003 A.D.) as amended by Derivatives Act (No.2), B.E. 2553 (2010) and (No.3), B.E. 2560 (2013). All of these policies were written in the purpose of health care and promoting better living quality of the elderly. Currently, various different forms of elderly housing projects are being seen among public, private, and community sectors, such as: 1) public projects including Ban Bang Khae Social Welfare Development Center for Older Persons 2) private projects such as Kamala Senior Living Project 3) public and private projects such as Senior Complex Project 4) public and community initiatives such as Bang Khae Home for Older Persons 5) private and community projects such as Udomsuk housing for Elderly 6) public, private, and community projects such as the comfortable housing project for grandparents by National Housing Authority. It can be seen that the government and various public agencies have started to support more housing for the elderly. Although, the elderly housing management policy is operating by the government sector, however private and community policies are also played a crucial role of effective development, accessibility, and meets the needs of the elderly as much as possible.

Therefore, the researcher realized the importance of the study on housing management policy in the area of differences in management perspective of public, private and community sectors. The internal factors were analyzed through SWOT Analysis and synthesized the suitable model for the changing social structure at present. The external factors were analyzed through the TOWS Matrix Model. These two theories are universal models and are easy to understand and implement to deal with the situation of entering the aging society completely that will arise in the future and to recommend for policy planning of the appropriate housing for the elderly.

## Objectives

1. To study the management perspective of the public, private and community sectors toward the elderly housing management policy.
2. To analyze a suitable policy for the elderly housing management policy for Thailand.

## 2. Literature Review

The study titled 'the suitable model for the elderly housing management policy for Thailand in the management perspective of the public, private and community sectors' has reviewed the literature on policies related to elderly housing management to answer research questions according to the research objectives in the management perspective of the public, private and community sectors are consisting of:

### 2.1 Elderly

2.1.1 Definition: The Royal Institute Dictionary defined the term "elderly" refers to the ages that follows the middle age with aged over 60. According to Elderly Person Act, B.E. 2546 (2003) (Phookaew, 2015) section 3 defined the elderly as a person aged over 60 years old, holding Thai nationality. World Health Organization classified ageing societies into 3 levels: Aged society, Completed Aged Society, and Super Aged Society.

2.1.2 Department of Older Persons discussed on Thai elderly situation and trends in 2018 found that there were 11.7 million elderly people aged over 60 years or accounted for 17.6 percent of the total population and is expected to continue growing. It is expected that in the next 20 years or in 2038, the elderly population in Thailand will increase to 20 million or accounting for 30 percent of the total population. The proportion of child will be reduced to 9 million, working age (15-59 years) down to 37 million, which will affect the future structure of Thai population as well as the economy and society. Therefore, the welfare management system has been affected more due to the changing on social structure. from the above two meanings It can be concluded that the elderly are an important group that the government and The private sector should be aware of and give importance to it because it is a group that tends to increase every year. Issuing policies to support the number of elderly people will improve the quality of life of the population in the future.

### 2.2 The relatability of the elderly housing policy and cabinet resolution

2.2.1 Department of Older Persons policy in 2016 on the project of the safe and suitable elderly housing as well as environmental development, the project that support the operation of Center for Quality-of-Life Development and Career Promotion for the Elderly. (Department of Older Persons 2016)

2.2.2 Elderly Person Act, B.E. 2556 (2013) (Department of Older Persons 2013), (Phookaew, 2015) with the protection of elderly rights in terms of medical and public health, education, religion, as well as information that is useful for living. In accordance with the law and to obtain laws that cover all aspects for the elderly and other matters as specified by the cabinet resolution.

2.2.3 Adjustment of ministerial regulation prescribing the facilities in the building for disabled, and old persons B.E. 2548 (2005) (Ministry of Interior 2003), Ministry of Interior, on the adjustment of the home environment, community, and original infrastructure

to be more assistive and conducive for the living of elderly. By emphasizing on the participation of the public, private, and community sectors through setting the criteria that can induce the private sector to become a driving mechanism and adjusting ministerial regulation prescribing the facilities in the building for disabled, and old persons.

2.2.4 National Housing Authority's Baan Eur Arthorn Project (1973- present) aims on building housing for the elderly, the underprivileged, and low-income group includes low-income civil servants and government officers (Office of welfare promotion protection and empowerment of vulnerable groups. 2019) to be able to acquire their own housing leasing at affordable prices. In addition, it is a project to strengthen the security of living and improve the quality of life for the underprivileged persons to have their own housing that meet the living standard within the community. The housing is built for affordable prices that the target group can bear the burden of installments. The project is scheduled to start building for the only target group whose household monthly income is not exceed 15,000 baht (annual income of year 2003) but current monthly income per household is adjusted not exceed 40,000 baht.

## **2.3 The Review of Theory and Concept**

2.3.1 Concept of the elderly housing management consists of physical environment, social, location, and services. (An appropriate environment for elderly and disabled people research unit 2010)

1. Physical environment: providing an appropriate housing for the elderly must consider the deterioration, malfunction, and the condition of the problem that the elderly is experiencing. For instance, improving the equipment and facilities that are appropriate and prevent snagging, such as handrails, ramps, sanitary ware, bedding, tiles or floors that are difficult to slip and fall. Moreover, home decor has a relationship towards the living and mental rehabilitation of the elderly, sufficiency of home lighting and selecting the furniture that can assist life of the elderly, etc.

2. Providing an appropriate housing for the elderly to interact with other people is also improving the elderly health both physically and mentally. It is also one of the methods of psychological therapy because it is a channel that the elderly can expose their deep feeling within which sometimes do not want to tell grandchildren in the family. They may feel more comfortable and open with peers who may provide additional perspectives and help relieve tension within their mind. In addition, the interaction can help forming a group for various recreational activities together.

3. Elderly housing management, especially in response to social participation, “location” of the residence is also an important factor that must be taken into account as it allows the elderly to open up opportunities in applying their skills and abilities that benefits the community. It is fully encouraging the elderly to fully utilize their existing potential and

the community will also benefit from the talent of the elderly. A decision on the location of the elderly housing as follows: 1) dispersed throughout the community, 2) the location designed close to various services within the walking distance, 3) located in conjunction with other projects attached to opportunities for contribution 4) easily the accessible for public transportations and close to the current community which conveniently revisiting by relatives. 5) a visual fit with local housing to prevent the elderly feeling of being separated from each other and able to live alone. The housing must fulfill the physical and mental needs of the elderly by providing appropriate medical assistance, social services, and public transportation. The housing of elderly who are disabled persons should be located close to their community because they are hardly adaptable.

2.3.2 The elderly housing model with dependency can be classified according to the characteristics of dependency. (Department of Older Persons 2017)

1. The independent elderly who do not need of housing. This elderly group will be close to people of other ages, but may want a suitable design for their living to prevent accidents.

2. Elderly semi-reliance. housing for elderly in this stage must begin with the preparation of special treatment service and caregiver in their daily life.

3. The dependent elderly is those who are in need of close monitoring by a doctor or nurse to take care of life and withdrawal symptoms.

4. The majority of elderly in the final stage of life prefer to die at home. In some countries, a place called Hospice Care is palliative care or end-of-life nursing homes for patients who are expected to live at less than 6 months.

2.3.3 The concept of creating age-friendly cities was paid attention by World Health Organization as it is important to create the cities that are convenient and equally accessible by elder people. The concept of creating age-friendly cities for older people requires friendly environments including quality of life, easy usage, accessible and safety. (Bureau of Elderly Health 2021)

2.3.4 SWOT Analysis is a tool used in the analysis of a situation or a current situation of the project to find its Strengths, Weaknesses, Opportunities, and Threats in an operation or the ability to compete for achieving the desired position or the goals in the future. (Niumluang, 2015) The meaning of SWOT is defined as "S" stands for strength which is the characteristic of an organization that is a factor contributing to the success of an organization, "W" stands for weakness which is the characteristic of bad organization hinder the success of an organization, "O" stands for opportunity which is external factors conducive to the success of an organization, "T" stands for threats which is outside factors that threaten or cause problems to the success of an organization.

The principle of SWOT Analysis is a situation analysis through exploring the two aspects: internal situation (Strengths and Weaknesses) and external situation. (Opportunities

and Threats) to help understand the factors that influence the organizational operation. SWOT Analysis is a tool which can use in an analysis of the project at all levels, hence, it can also be applied with this research titled “the suitable model for the elderly housing management policy for Thailand in the management perspective of the public, private and community sectors”.

2.3.5 Tows Matrix Model is a concept built on SWOT Analysis which brought out the strengths, weaknesses, opportunities and threats derived from the analysis of organizational environment both external and internal, or paired SWOT Analysis elements together (Hongchintakul, 2019) Four elements are divided through prior analysis of SWOT Analysis as follows.

SO is a strategy that results from a match between the positive internal environment (Strength) and the positive external environment (Opportunity), which is the combination of organizational strengths and advantages with opportunities to defined as SO strategy for the organization.

WO is the strategy of matching between the external negative environment that is Weakness and the external positive environment that is Opportunity to take advantage of any good opportunity to defend the weak spots of the organization or lowering its weaknesses.

ST is the strategy resulting from a match between the positive internal environment that is Strength and the negative external environment that is Threat to strengthen an organizational advantage and defenses against threats which concluded as using its strengths to avoid threats.

WT is the strategy resulting from a match between the external negative environment that is Weakness and negative external environment is Threat as a strategy to reduce the weaknesses and avoid threats. The main purpose is to prevent or avoid the situation of the organization to not be worse than its current position.

TOWS Matrix Model can define suitable strategies for the organization in each and different situations efficiently. In each model, additional strategies can be obtained from external and internal factors of the organization through SWOT Analysis. All of the above are fundamental analyzes to study and compile concepts from other perspectives, and ultimately, the results of the study are summarized for a decision-making on appropriate action plan or policy. This has therefore led to the analysis using TOWS Matrix Model in the study of external factors of the elderly housing management policy to study the suitable model for the elderly housing management policy for Thailand in the management perspective of the public, private and community sectors.



## Conceptual Framework

This research studied the elderly housing management policy in the management perspective of the public, private and community sectors to synthesize the suitable policy of the elderly housing management in Thailand. Data was collected through requesting information from the relevant state departments and searching via online system to synthesize the suitable policy of the elderly housing management in Thailand.

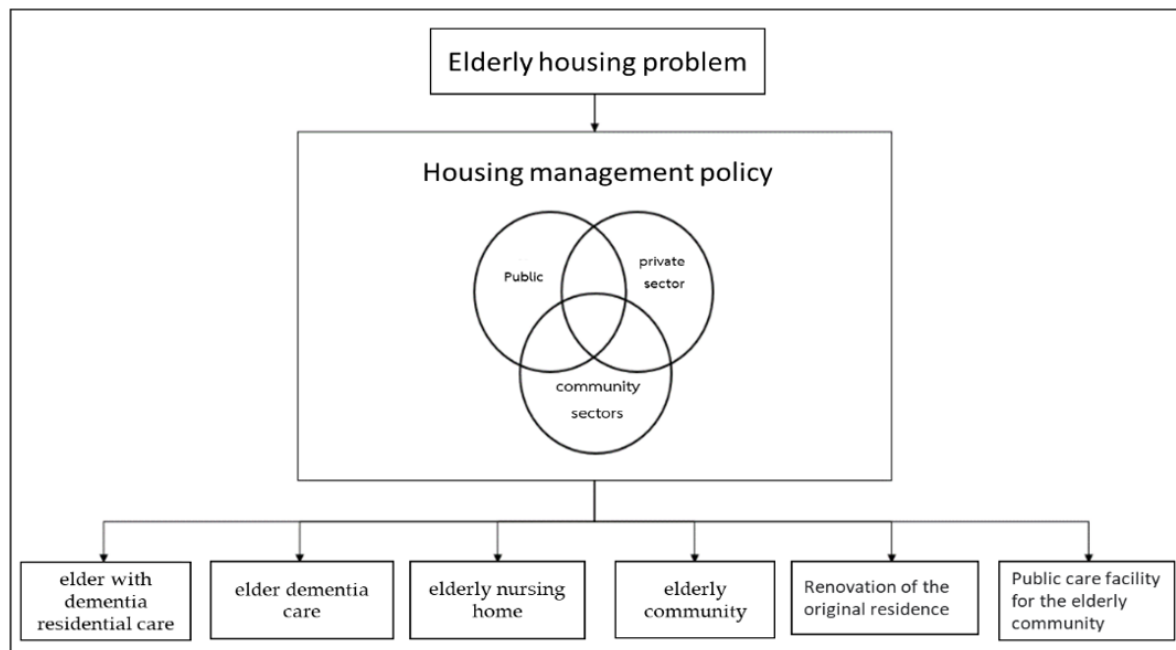


Figure 1 Conceptual Framework

## 3. Research Methodology

This research is a descriptive research, and the data was gathered from the secondary data to study the elderly housing management policy for Thailand in the management perspective of the public, private and community sectors. Data was technically analyzed through SWOT Analysis and Tows Matrix Model to analyze internal and external factors and to synthesize the suitable model the elderly housing management policy for Thailand. Recommendations and suggestions are provided to find an appropriate policy solution with details as follows.

### 3.1 Scope of contents

This research is to study the elderly housing management policy in the management perspective of the public, private and community sectors, as well as the dependence of the elderly and operating characteristics of the projects to synthesize the suitable model the elderly housing management policy in the country.

### 3.2 Scope of area and sampling

This research aims to study the elderly housing management policy for Thailand in the management perspective of the public, private and community sectors.



### **3.3 Data collection**

Researchers collected data used in the study from both secondary data and primary data. Secondary data was gathered from books, research, dissertation, articles in journals, electronic information, official information such as policy, laws, protocols, regulations, ministerial regulations, legislation, various projects from relevant agencies that contained data on aging population from the past, present and future. Furthermore, the government policies related to the elderly housing as well as the housing projects for the elderly, concepts, theories, the elderly housing management, and related research. Primary data was gathered from current elderly housing conditions (Observe Survey) which contains data on the elderly housing management policy in the management perspective of the public, private and community sectors, as well as characteristics on the dependence of the elderly and project operation.

### **3.4 Research Analysis**

3.4.1 Data collection and relevant documentation. The collection process includes:

1. Gathering of concepts and theories, policies, laws, protocols, regulations, ministerial regulations, Act, various projects from relevant documents and agencies on the elderly housing to provide suitable guidance on the elderly housing management in the country.

2. The relevant data was gathered on the elderly housing management policy for Thailand in the management perspective of the public, private and community sectors as well as the dependency characteristic of the elderly, and the project operation process by requesting data from various agencies.

3.4.2 The data was processing from the collection of concepts and theories, policies, laws, protocols, regulations, ministerial regulations, Act, various projects, and performance in relevant with the elderly housing management policy in the management perspective of the public, private and community sectors. Moreover, further data on the dependency characteristic of the elderly, and the project operation process was analyzed based on the SWOT Analysis technique to study the internal factors that occur and affect towards the elderly housing management policy.

3.4.3 Synthesize the study results on the elderly housing management policy in the management perspective of the public, private and community sectors that are suitable with the elderly housing management in Thailand. The study employed Tows Matrix Model technique to study the external factors that occur and affect towards the elderly housing management policy to find appropriate solutions.

## 4. Research Results

From data collection and literature reviews on relevant policies, the elderly housing management policy can be classified based on the dependence of the elderly into 1) independence living or active aging; 2) assisted living. The researchers have conducted the study on the elderly housing management policy in the management perspective of the public, private and community sectors together with a cooperation of various sectors, found that there were different characters in different policies. The study employed SWOT Analysis to analyze each policy to understand the overall as well as gap of the policies. Strengths and weaknesses were analyzed in each policy from the management perspective of the public, private and community sectors together with a cooperation of various sectors. Whereby opportunities and threats were analyzed using TOWS Matrix Model techniques to analyze with details as follows:

**4.1 Public sector** deals with the elderly housing problem through the direct related policies, agencies, or laws including budget management that must be allocated each part and distributed to the regions. The project was established by the government with sufficiency and covering in most areas across the country. This is enabling more feasible in an accessibility of the elderly with lower budgets. There are currently a total of 14 projects involved under the administration of the Department of Older Persons 12 projects includes the Elderly Social Welfare Development Center of Baan Bang Khae, Ban PhuKet, Ban Bang Lamung (Chonburi Province), Ban Buriram, Ban Thaksin (Yala Province), Ban Thammapakorn (Chiang Mai Province), Wassana Wet Social Welfare Development Center for Older Persons (Phra Nakhon Si Ayutthaya Province), the Elderly Social Welfare Development Center in Lampang, Songkhla, NakhonPhanom, PathumThani, and KhonKaen provinces, which can accommodate more than 1,770 seniors. Furthermore, the Ministry of Education conducts a project to establish the elderly care and hospice center while the Ministry of Social Development and Welfare is currently handling the shelter for children and families project of 77 areas nationwide. The research findings revealed that 14 projects manage the elderly housing management policy differently in accordance with the elderly dependence. It was found that more than 11 projects have a policy on housing allocation in the form of the elderly care centers and nursing homes. There is only one project focusing on the palliative care center for the elderly regarding the establishment of the elderly care and hospice center.

An overview of the strengths of public operations are: Coverage of the elderly in all areas (77 provinces nationwide), an accessibility of the elderly at all levels, Low-cost for living. However, the findings also revealed that there is a weakness in the project location and the sufficiency of number and quality of life of the elderly. The results of the TOWS Matrix Analysis of the elderly housing policy in the management of the public sector, are shown in Table 1.

**Table 1.** TOWS Matrix Analysis of the elderly housing management policy of the public sector.

SO Strategy	WO Strategy
<p>Both legal support and the housing projects had a direct positive impact on the elderly. Thus, housing development projects from the public sector should be increased to meet the demand. The policy of the Department of Older Persons was adopted to proactively cover the elderly in all areas (77 provinces all over the country). Therefore, the elderly at all levels would have access to housing projects of the public sector, such as the comfortable housing project for grandparents by National Housing Authority and the elderly housing project for the retirement age of Mahidol Hospital. Moreover, there are jobs for people around the areas of the elderly housing policy, and residential units for the elderly increase.</p>	<p>The housing project development was distributed in both location and adequacy. It also supports the areas around the project to be a source of jobs and residential areas to provide job opportunities that improve the quality of people's lives in the community. This will solve the social structure problem from elderly housing problem. The elderly will have access to housing at all levels and reduce their dependency on family members. Also, there will be jobs available for people around the areas of the elderly housing policy.</p>
EXTERNAL FACTORS	
ST Strategy	WT Strategy
<p>Problems that cause limitations on the elderly housing from many factors are as follows. 1. Policy problem: Increased budget allocation for the elderly housing policy and the public operational system that takes time to process affect budget management for developing other parts of the country, such as land ownership/housing problems in the areas allocated by the public sector. 2. The problem in problem management: The number of units is large but it is inadequate to the demands. Society/environment is unsuitable for the elderly with different characteristics and backgrounds affecting the elderly health. This includes the modernization of technology applied in project management. The number of projects that are widespread and distributed across the country impacts the inadequacy of monitoring and supervision processes. Hence, it is important to prioritize the project regulatory oversight, legal, and supporting the budget to increase the development of better social and environmental conditions for the elderly wellbeing to cover the elderly in all areas (77 provinces all over the country). The project must be accessible to the elderly at all levels with a focus on the cost of living as well as increase the number of residential units for the elderly.</p>	<p>The solutions to policy problems and management problems include land ownership/housing problems in the areas allocated by the public sector, the public operational system takes time to process, an increase in budget allocation for the housing management policy affected to budget management for developing other parts of the country, society/environment unsuitable for the elderly with different characteristics and backgrounds affecting the elderly health, and modernization of technology applied in the project management that improves the quality of life of the elderly and adequacy for the current number of the elderly.</p> <p>Following the expectation that there will be an increase in the elderly population, but the banks offer such loans or credits that are still limited. Moreover, the criteria available for approval include only properties located in Bangkok and metropolitan areas. Therefore, it should seek more cooperation from private banking and an approach to increase the number of locations to expand the status of the holders.</p>

**4.2 Private sector** is more specific in the manner of the elderly housing that differs from the public sector. This sector focuses on either a group of people or having a certain goal of consumers. They may have different levels for targeting the group of the elderly. There are differences in term of cost, several units, location, as well as the service quality. However, there is some limitation in the management perspective on the coverage of all areas and the inaccessible to the elderly at all levels. There are currently a total of 48 elderly housing projects that are regulated by different agencies which are either of companies and leading real estate organizations such as L.P.N. Development Plc., of Nusasiri Plc., SC Asset Plc., or Wellness City Group Company Limited. Moreover, the projects are also found in arising among other organizations such as Salaya Hospital, Mission Hospital, Thonburi Hospital, and Saint Camillus Foundation of Thailand. In addition, there are many projects from various subsidiaries in the form of individual management and joint venture. Overall, there have been projects that met the housing needs of the elderly over 8,000 units in the past, resulted in substantially grew in the residential real estate market. This has drawn an attention of entrepreneurs who are interested to invest in the elderly property development, all of which benefit consumers. Currently, the 48 projects are managing the elderly housing policies differently in accordance with the dependency. The findings revealed that more than 33 projects to have a policy to support the elderly community. In addition, it was found that other policies that differ in each project, such as the elderly care center, the elderly nursing home, the dementia care, and the palliative care etc.

An overview of the strengths of the operation by the private sector showed that having a good life quality, many choices in residential projects to choose from, appropriated housing location (in Districts or tourist provinces) that respond to the needs of a particular group of elderly, and a variety of services. Nevertheless, the weaknesses were found in price and in providing potential access of the elderly inequality. The TOWS Matrix Analysis results of the elderly housing management policy by the private sector are presented in Table 2.

**Table 2.** TOWS Matrix Analysis of the elderly housing management policy by the private sector.

SO Strategy	WO Strategy
<p>The private sector should provide comprehensive services in both nursing and housing with numerous choices of the housing project and an appropriate location (city areas or tourism provinces). This is to stimulate the growth of the elderly property market. Better social and quality of life, as well as the reduction of the dependency of the elders on their family members, can improve well-being and the better health of the elderly.</p> <p>The private sector must focus on service development in housing such as more suitable furniture, a regular caregiver, or medical practice. For example, there must be a general physician and a doctor who is on an aging society project. Further services include environmental development, public parks, recreational activities, online social media learning school, craft school, fitness, swimming pool, modern medical management tools, and technology to meet the needs of the elders as well as stimulate the growth and competitiveness in the real estate market.</p>	<p>Due to the limited number of projects/units unable to respond to the assessment of the elderly at all levels and relatively high project budget, the elderly housing projects did not cover countryside areas and other provinces.</p> <p>The private sector should provide housing projects across multiple levels to meet the needs of different consumer needs which may include lower, median, and high levels by offering different services or developing the housing projects for specific groups in relevance with disease or ages for ease of project controlling. This reduces the dependency of the elders on their family members. Quality well-being affects the better health of the elders. New technology development resulted from increased competitiveness among entrepreneurs led to a good result for consumers and stimulated the growth of the elderly property market.</p>
EXTERNAL FACTORS	
ST Strategy	WO Strategy
<p>Based on Thailand's legal restrictions on building the elderly housing projects in each category, the Covid-19 situation affects the property growth rate within the country, and the economic condition resulted in a decrease in consumer demand and reduced existing residential improvements that have led to real estate development problems. The private sector should reduce the construction of the new housing project, instead develop the current or existing housing of the elders to its maximization. Nevertheless, they can create a policy to provide services related to elderly care in terms of service delivery at home in which this idea is considered to be an adaptation to the economic condition, situation, and direction of today's consumer demand with emphasis on comprehensive services in both nursing and housing in an appropriate location (city areas or tourism provinces), resulting in better social and quality of life.</p>	<p>With a high budget required together with the current economic conditions, there are limitations in number of projects/units, unable to respond to the assessment of the elderly at all levels. This did not cover in either of countryside areas and other provinces. The private sector should have an investment allocation or managing expenses within the project due to relatively high project and personnel budgets. Therefore, financial policy with appropriate service allocation is necessary according to legal restrictions on building the elderly housing projects in each category with an adaptation to the Covid-19 situation affecting the property growth rate within the country.</p>

**4.3 Public and private sectors** are the collaboration in developing immovable land and properties to be more beneficial and to meet the housing needs of the elderly. It may operate by either the private sector or the public sector. There are 14 elderly housing projects that are supervised by various agencies, with 8 projects are handled under the supervision of the Treasury Department consisting of immovable land and property development in Chiang Mai province, Chiang Rai province, Prachuap Khiri Khan Province, Nan Province, Maha Sarakham Province, Nakhon Nayok Province, Suphanburi Province, and Surat Thani Province. In addition, the Treasury Department with collaboration among other organizations in developing the elderly housing. For example, 1) Treasury Department and Department of Older Persons In Chonburi province; 2) Treasury Department and Ramathibodi Hospital in Samut Prakan Province are all projects that are supported the land and property management policy in various forms. For instance, the elderly community, the elderly care center, and nursing home are considered as sufficiency with good services of private standards; and 3) Department of Older Persons, Treasury Department and Thai Red Cross Society established the old age housing project to support middle-level government officers in Chonburi Province. The findings showed that there is only support on the policy of the elderly land management in community. Likewise, this was also found in the project that supervised by National Housing Authority and Ministry of Social Development and Human Security on NHA Katanyu housing project in Nonthaburi Province and Klongluang 1 area, as well as the Sawang Khaniwet project of Thai Red Cross Society.

An overview of the strengths of the operation by the public and private sector found that a comprehensive of various medical services, the development on the immovable land and property led to lower budget spending, and the location is easy to access. However, the weaknesses are found in having a small number of operators led it insufficient to meet demand. The TOWS Matrix Analysis results of the elderly housing management policy by the public and private sectors are presented in Table 3

**Table 3.** TOWS Matrix Analysis of the elderly housing management policy the public and private sectors.

SO Strategy	WO Strategy
The public sector should use the approved immovable land and properties for further development on additional elderly housing or a public residence suitable for the elderly activities with the cooperation with the private sector (hospitals) to use those areas as a research development center or a place that serves particularly specialized patients. This reduces the dependency of the elders for their family members and covers various types of convenient services and utilities provided, such as elderly community, elderly care center, and nursing homes, and quality well-being affects the better health of the elders.	Currently, there is a limited number of projects/units. Laws and regulations that support the building approval on immovable land and properties for the elderly housing project. The approved immovable land and properties should be used for further development on the elderly housing to meet the current inadequate needs. This covers various types of convenient services and utilities provided, such as elderly communities, elderly care centers, and nursing homes. Private sector cooperation (hospitals) affects the development of various medical technologies for numerous choices of the housing project and the reduction of the dependency of the elders on their family members.
EXTERNAL FACTORS	
ST Strategy	WT Strategy
Since the project budget is not very high, the elderly housing project is not effective for the aging society. So, the public sector should utilize immovable land and properties which are the area where the properties are owned by the country which in the future can be utilized for other benefits. Additionally, they should adjust the law of the future usage in immovable land and properties areas by specifying the category of immovable properties that are unable to be exempt or changed for the future land use which will eliminate problems of the housing security, such as Ban Eur Arthorn elderly care, etc. This is to cover a wide range of medical services with accessibility for the elders to a certain level.	The approved immovable land and properties should be used for further development on additional elderly housing or develop the existing housing of the elders to have a suitability of, the environment, health, and public utilities which solves the problem at the root cause.



**4 Public and community sectors,** a policy from the government to develop the elderly housing at the micro level to meet the housing needs for people in the community who may not be able to the current availability of housing accessibility. This collaboration provides an advantage of accessibility to all levels of citizens, but it may not have a good service quality as well as incomprehensive. There are 19 elderly housing projects supervised by different agencies which are comprising more than 13 nursing homes scattered in different areas. For example, Ban Bang Khae 2, Ban Nakhon Pathom, Ban Ratchaburi, Ban Thammapakorn (Nakhon Ratchasima), Ban Lopburi, Ban Maha Sarakham, Wai Thong Niwet, Ban U Thong Phanang Tak (Chumphon province), Ban Khao Bo Kaew (Nakhon Sawan province), Ban Thammapakorn (Pho Klang), Chalerm Rajakumari (Luang Por Poen Upatham) and Chalerm Rajakumari (Luang Por Lamyai Upatham). Moreover, the elderly care centers are found in Dindang and Sri Sukhot (Phitsanulok province). In addition to this, there are Senior Rehabilitation Center (Luangbu Thamma Phithaksa), Community Care Center (Ban Klang elderly project), Nursing Home for Women (Pathum Thani province), and the Mitrapap Songkhro Foundation for Elderly Women, Tiwanon. The projects are operated by the policy from public and community sectors want to focus on the elderly housing care in the perspective of the elderly care center in particular which hasn't been operated in another part of services due to the limitations in budget and management.

An overview of the operational strengths under public and community sectors is found in an increase of accessibility for the elderly in the community (micro level), low project budget spending, low cost of living, deeply understand of the needs of the elderly. However, the weaknesses are found in the diversity of services provided, especially the housing when the elderly stage shift to a dependency. The TOWS Matrix Analysis results of the elderly housing management policy by the public and community sectors are presented in Table 4

**Table 4.** TOWS Matrix Analysis of the elderly housing management policy the public and community sectors.

SO Strategy	WO Strategy
An increase in accessibility in the elderly community (micro-level) and an increase in the distributional authorization directly for both in administration and budget to the community for developing the housing project efficiently for each community which faces different problems can solve the problem of elderly housing management at the root cause. Project budget is low with a low cost of living, and this solves social structure problems which are caused by the elderly housing management, to allow the individual accessibility for the elders as well as reduce the dependency of the elders on their family members.	Due to the problems in the services that are not comprehensive and few varieties, living quality of the elders, limited number in housing, unable to meet the needs of the elders, public and community sectors should cooperate to increase the budget support for the housing management, infrastructure, suitable housing for elders with a caregiver, and provide medical services as well as adding a greater number of units to accommodate future needs. The budget is allocated to the community to support an operation of the elderly housing management, with the distribution of the authorization to the communities or regions in managing the elderly housing project.
EXTERNAL FACTORS	
ST Strategy	WT Strategy
Access to the elders in the community in terms of expenses and budget support will be a factor to attract more senior citizens entering into the public housing care system by increasing accessibility in the elderly community (micro-level). Therefore, the project budget is low with a low cost of living. Land ownership/housing problems in the areas that are allocated by the public sector, the public operational system, accessibility to the medical services, and the limited number of projects/units, unable to meet the needs of elders must be addressed.	There must be the increases in the accessibility of the housing project in the community including location and services and the number of housing to meet the needs of elders to solve overall problems, including land ownership/housing that are allocated by the public sector, the public operational system, accessibility to the medical services, and comprehensive and few varieties for the elderly at all levels.

**4.5 Private and community sectors,** the elderly housing management policy under the operation of private sector which focuses on developing the community in different areas. There are advantages in terms of policy, in addition to a housing already but also nursing home and care center as currently becoming an aging society within the community. With this consideration, it is concluded that this policy is a sustainable and quality housing management for the elderly. Besides, there are 16 projects of the elderly housing that are supervised by various agencies, which differ according to the organizational operation in the form of foundation, companies, and various groups of health promotion development. With more than 15 projects run under the elderly housing management policy that emphasized on setting up the elderly care centers. There is also an additional project to serve in accordance with the different needs of consumers. For example, 1) the elderly care centers and nursing homes are including the Camillian Social Center project in Samphran District, nursing home center at Baan Koh Kaew in Suphanburi Province, a nursing home for Muslims (Foundation for Morality) in Bangkok, the the Elderly Care Development and Restoration Center of Luang Pu Thammapituksa at Sangruang temple in Sisaket Province; 2) elderly care centers and communities are including McKean Rehabilitation Centre in Chiang Mai, and the Payaika project; and 3) the elderly care centers and condominium renovation are including in health promotion program for the elderly and the disabled (Bureau of Health Promotion, Health

Center 5, Nakhon Ratchasima). Each of the projects that has completed, is considered as a direct operation under the elderly housing management policy

An overview of the operational strengths under private and community sectors is found in an increase of accessibility for the elderly in the community (micro level), covering the diversity of services provided, having good society and living quality, responding to the needs of the group of elderly who have income, as well as renovation of the condominium so that the elderly does not need much of adaptability in life and society. In the contrary, the weaknesses are found regarding the cost of services that accessible by only a specific group of the elderly. The TOWS Matrix Analysis results of the elderly housing management policy by the private and community sectors are presented in Table 5.

**Table 5.** TOWS Matrix Analysis of the elderly housing management policy the private and community sectors.

SO Strategy	WO Strategy
Private and community sectors must mainly offer variety of services to the elderly at the community level as an extension of the projects of private sector in the community in the form of an existing residential development such as the housing renovation project, an environmental management, as well as providing services delivery in food, medical staff and equipment.	The key problems in housing that private and community sectors must solve together include the limited number of projects/units, unable to meet the accessibility of elders at all levels, relatively high project and personnel budgets. The solutions are to increase the number of projects to meet the demands or to categorize the projects in different levels from high to bottom to meet the needs of the elderly in all forms together with the development of technology to suit different levels of needs of the elderly. Stimulating the growth of the elderly property market in the community would result in competitiveness among entrepreneurs leading to a good result for consumers, or existing housing should be developed which has resulted in the development of real estate within the community and modernization of tools and technologies used in the elderly medical care.
EXTERNAL FACTORS	
ST Strategy	WT Strategy
Legal restrictions on the elderly housing project development at a community level should be studied. The service quality should be upgraded to remain standard at all times so that the project can be carried on in the current economic conditions and situations. Currently, the Covid-19 situation affects the property growth rate within the country. The economic condition resulted in a decrease in consumer demand along with a high cost of project management. However, elderly housing is specific, so the demand is at a certain level.	The problems of elderly housing include the limited number of projects/units unable to respond to the accessibility of the elderly at all levels and relatively high project and personnel budgets. Also, the Covid-19 situation affects the property growth rate within the country, and the economic condition resulted in a decrease in consumer demand with a high cost of project management. Private and community sectors must work together to examine and study Legal restriction on building the elderly housing projects at a community level and maintain the standard of existing projects to preserve consumers together with controlling the allocation of expenses within the project appropriately under the current situation.

**4.6 Public, private, and community sectors,** the elderly housing management policy are operating under the cooperation among in different sectors which aims to specifically develop a policy on the elderly housing management. This coordination has led to forming of a strong elderly community consisting of 4 elderly housing management projects by the various agencies under the supervision of the National Housing Authority. The projects consist of 1) the comfortable housing for grandparents project within the areas of Phetchaburi Province, Singburi Province, Chiang Mai Province, Rayong Province, Amnat Charoen Province, Ubon Ratchathani Province, Songkhla Province, Chanthaburi Province, Phrae Province, Lopburi Province, Loei Province and Surin Province; 2) commercial residential development project to support the elderly population in Mueang District, Saraburi Province which is currently under the process of being implemented; and 3) commercial residential development project to support the elderly population in other areas across the country. Furthermore, there is also a project that is a collaboration between the National Housing Authority and the Mass Rapid Transit Authority of Thailand in developing the condominium projects for the elderly in the land near the Green Line Metro Repair Center within the bearing range in Samut Prakan Province. This is considered as maximizing benefit of land used for the project. However, weakness on this section showed that the elderly housing management policy under an administration of public, private, and community sectors are found to only focus on building the elderly community without providing any other services, etc.

An overview of the operational strengths under public, private, and community sectors is found in providing comprehensive services to many provinces across the country, the emergence of an elderly community in a convenient location, responding to the elderly housing needs at all levels, various types of housing projects are available. The TOWS Matrix Analysis results of the elderly housing management policy by the public, private and community sectors are presented in Table 6.

**Table 6.** TOWS Matrix Analysis of the elderly housing management policy the public, private, and community sectors.

SO Strategy	WO Strategy
<p>The public, private, and community sectors must formulate policies to cover a wide range of services across the country, and the public sector should prioritize the quality living standard promotion of the elderly in terms of laws, exempt the urban law in the immovable areas to be able to build the elderly housing to protect the entitled rights of the elderly with land development of the agencies for building the elderly housing as well as the allocation of policies in term of public health and finance to allocate budget and immovable property appropriately. This is to push forward the administration decentralization into the community for sustainable development in the needed areas. The private sector has various types of housing projects to meet the housing needs of the elderly at all levels by utilizing modern technology in medical practice, and the elderly community has led to solving social problems and creating employment, creating an effective aging society.</p>	<p>No elderly medical administration has been found. Type of residence (commercial buildings, condominium) was not suitable for the living of the elderly. The emergence of the aging community is still difficult to manage and spread among families, making it difficult to control.</p> <p>The public sector must exempt the urban law in the immovable areas to be able to build the elderly housing and land development of the agencies for building the elderly housing. The private sector stimulates the growth of the elderly property market and develops suitable housing for the elderly, such as a single-story house, or a single-story commercial building with open-air and furniture which provide convenience and suitable for the elderly to able to help themselves. Moreover, providing medical services must be driven within the project through collaboration between public or private hospitals to allocate permanent personnel in the project. The community must create a community of the elderly to respond to the housing needs of the elderly at all levels.</p>
EXTERNAL FACTORS	
ST Strategy	WT Strategy
<p>Elderly housing should be upgraded under the supervision of the Department of Older Persons to have better standards to cover a wide range of services across the country. The law about immovable land and properties should be modified to be able to build elderly housing or permanent shelters along with an increasing number of projects/units to respond to the housing needs of the elderly at all levels. Housing in various forms should be adjusted and modified to be more suitable for the elderly with the adoption of modern medical technology, resulting in the aging community characterized by the dependence of each community.</p>	<p>There should be a law to protect immovable land and properties in the areas where the properties are owned by the country which in the future can be utilized for other benefits. The existing project's establishment should be improved to be suitable for the elderly and to maintain standards and fix the sections that may change according to the need and time, such as furniture. The improvement includes a training course for care staffs, an environment, and modern and adequate medical services and equipment along with community decentralization for convenience, covering all areas over the country.</p>

## 5. Conclusion and Discussion

The research revealed match with the concept of the World Health Organization Principles of creating a livable community for the elderly (Age-Friendly Cities), that the policy related to the elderly housing management is found to be different, but the research observation showed that it faced similar problems. Public and private policies clearly have different patterns of operation both in terms of the number of projects, location, the services and expenses of the projects. The public policy focuses on the projects that serve the elderly at all levels with low cost while getting numerous units. However, the project's outputs come with either of lower quality of life or the services received and also fewer doctors. The research findings revealed that it is only the foundation policy for the primary care of the elderly population. It is unlike the elderly care centers and nursing homes supervised by the private sector that focuses on providing all types of services for this particular group such as, the elderly care center, the elderly nursing home, the elder with dementia residential care, palliative care, and the elderly community. However, expenses are quite high and reachable by only some groups of elderly with enough income to afford this high level of expenses, or persons who have planned for their retirement or are supported by the family members. Regarding the differences between pros and cons, the policies under the cooperation of the public and private sectors are an interesting choice in which can be concluded that a project that combines the advantages of both sectors together and can manage the elderly housing at higher level. These projects are including the elderly care centers, nursing homes, the elderly communities. In addition, there are projects that focus on the community and accomplished by the cooperation of people and agencies within the community under the operational policy between the public and the community with only elderly care center is found, including social welfare centers and elderly homes, the elderly social services center etc. While the private and community sectors can provide elderly nursing home, the elder with dementia residential care, as well as support the renovation of the condominium. The elderly housing management policy under the cooperation of public, private and community are found to mainly focus on the elderly community development policy.

It can be concluded that the elderly housing management policy is not a very sustainable response, instead it is just a policy that did not solve the problem at the root cause and led to weakness and threats. Regarding TOWS Matrix Model Analysis of the elderly housing problems, therefore, this study has synthesized a policy that prioritizes to the quality of the elderly life in term of both laws to protect the elderly rights. This is including the establishment of the elderly housing on the immovable land and properties project have pushed for legal reforms to be able to either build housing for the elderly and elderly care center permanently. The establishment should focus on the development of suitable housing particularly for the elderly, such as a single-story house, or a single-story commercial building, open a foyer with furniture that are appropriately facilitates for the elderly to help

themselves if needed. In addition, pushing forward the provision of medical services within the project which may be possible by the collaboration between the public hospitals or private hospitals to allocate permanent personnel handling this project. Moreover, the standardization of the elderly housing management must have these policies as the primary factors in its important implementation. The factors are elderly community, elderly care center elderly nursing home, the elder with dementia residential care, as well as palliative care. For other factors are the government budget that will push forward the administrative decentralization to the community for the development of each local area accurately and sustainably.

### **Suggestions**

In addition, according to the COVID-19 situation and the economic conditions that occurred, resulting in the change of consumer behavior. The investment for the new residence at old age may be a good solution. Therefore, to solve the problem at the root cause is giving priority to the former residence of the elderly, meaning that to continue extending the project from private sector in developing the former residence of the elderly within the communities. These can be done through, such as the house renovation project, the allocation of various environments, delivery services in forms of housemate, medical personnel, food, medical equipment, etc. With this approach, it will help to make problems that arise, both the elderly project inadequate needs and accessibility problems among the elderly may be finally eliminated. With the support of the government, including budget, policies, legal regulations, and the collaboration from private sector in services and technology, will help the management of the elderly housing within the country achieve sustainable development in the future. In addition, the research found that the total number of policies and elderly care services are inadequate to meet the needs or to solve the problems that arise. It may neither be just making policy nor building and developing of the elderly housing, but the need of an additional policy in preparation management before entering seniority or before retirement, such as promoting savings, financial planning, health and housing arrangements are also available in advance for each of the living conditions of the elderly life.

**Suggestions for next research** from collecting information on the model of housing management policy for the elderly has conducted a review of government, private and community policies in finding ways to care for the elderly which for the next research The researcher proposes to study the legal framework. Technology trends for the elderly and the construction of housing for the elderly should compare prices and analyze the suitability of housing for and analyze the trend of the elderly population.



## Reference

- An appropriate environment for elderly and disabled people research unit. 2010. **Handbook for managing an appropriate and safe environment for the elderly**. Retrieved February 19,2021, from <http://www.oic.go.th/>. (in Thai)
- Bureau of Elderly Health. (2021). **The principle of creating age-friendly cities**. Retrieved July 8, 2021, from <https://eh.anamai.moph.go.th/download/Manual/Age%20friendly%20manual.pdf>. (in Thai)
- Department of Older Persons. (2013). **The situation and trends in the aging society of Thailand, BE 2556 - 2573**. Retrieved February 19,2021, from <http://www.dop.go.th/th/know/side/1/1/47/>. (in Thai)
- Department of Older Persons. (2016). **The policy of Department of Older Persons BE 2559**. Retrieved June 19,2021, from <http://www.dop.go.th/download/laws/lawth201607071427571.pdf> (in Thai)
- Department of Older Persons. (2017). **Project of the study project on service, administration and housing management for the elderly**. Retrieved February 19, 2021, from <http://www.dop.go.th/download/knowledge/th1512636145-109.pdf>. (in Thai)
- Department of Older Persons. (2020). **Statistics on the elderly in Thailand, 77 provinces as of 31 December 2020**. Retrieved February 21,2021, from <http://www.dop.go.th/th/know/1>. (in Thai)
- Hongchintakul, A. (2019). **TOWS Matrix and organizational strategy**. Retrieved February 20,2021, from <https://www.tereb.in.th/erp/tows-matrix/>. (in Thai)
- InfoQuest News. (2020) . **In 20 years, the proportion of elderly in Thailand will reach 31.28% from 18% of this year**. Retrieved February 20,2021, from <https://www.infoquest.co.th/2020/1837>. (in Thai)
- Ministry of Interior. (2003). **Ministerial Regulation. Prescribing accessible facilities for persons with disabilities and the elderly B.E. 2548**. Retrieved February 25,2021, from [http://www.dop.go.th/download/laws/regulation\\_th\\_20152509163042\\_1.pdf](http://www.dop.go.th/download/laws/regulation_th_20152509163042_1.pdf). (in Thai)
- Niumluang, T. (2015). **SWOT Analysis, organization and personnel**. Retrieved February 25,2021, from <http://pakphananghealth.com/data2558/top/SWOT1.pdf>. (in Thai)
- Office of welfare promotion protection and empowerment of vulnerable groups. (2019). **A Guide to Setting Up a Safe and Appropriate Environment For the elderly**. Retrieved February 25,2021, from <http://www.oic.go.th/FILEWEB/CABINFOCENTER18/DRAWER003/GENERAL/DATA0000/000000064.PDF>. (in Thai)
- Phookaew, M. (2015). **Elderly Person Act, B.E. 2546 (2003)**. Retrieved February 19,2021, from <https://www.parliament.go.th/ewtadmin/ewt/elawparcy/ewtdllink.php?nid=1536>. (in Thai)
- Thaipost. (2019). **World Habitat Day 2019 " Home Security, home by the community, all togetherbuild" (Collective Housing)**. Retrieved February 25,2021, from <https://www.thaipost.net/main/detail/47827>. (in Thai)