Innovative approach to full-service participatory occupational group development for the elderly in Bangkok, Thailand

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ABSTRACT

This research aims to investigate an innovative approach to comprehensive participatory occupational group development for the elderly in Wat Pracharabuedham Community 1-4. The goal is to reduce inequality in urban communities. The study used participatory action research (PAR) and community-based research (CBR) methods to collect data. The study included 77 participants: 19 public health volunteers, 20 elderly individuals, 5 community leaders, 10 teachers and students, 3 officials from the Dusit District Community Development and Social Welfare Department in Bangkok, and 20 lecturers and students from Suan Sunandha Rajabhat University. The research findings identified the key components of urban communities as households, temples, and schools, referred to as the "H-T-S Ecosystem." In this urban setting, working adults leave early and return late from work. During the day, grandparents managed household chores, cared for children, and monitored the community. However, the elderly did not want to burden their children and wished to contribute additional income to their families and communities. Despite this, they lacked the knowledge to develop community products. To address this issue, the research introduced a full-service herbal product called "Phaya Yor Green Oil." This product enabled the elderly to support themselves without government assistance, leading to improved urban quality of life and increased community income through self-sufficiency.

1. Introduction

Wat Pracharabuedham Community 1-4 experienced significant urbanization after the construction of Rama V Road and Wat Pracharabuedham Bridge. This new infrastructure offered easy access to the communities and linked them to various external routes, notably Rama V Road and Samsen Road. The integration of households, temples, and schools, known as the "H-T-S Ecosystem," became the central lifestyle in the communities (Kuddus et al., 2020).

This ecosystem served as the basis for community strength and development. Due to the dynamic changes caused by urbanization, the communities were divided into 4 smaller communities under the same title (Shi et al., 2022).

In terms of socio-economic characteristics, the areas had been rapidly expanding into large-sized communities (Salem and Tsurusaki, 2024). The community population sharply grew alongside the increase in job varieties. New careers had been available both inside and outside the communities. Some local people became small business owners or local merchants within the community areas, while many other locals worked outside the communities, for example, public servants and private company employees. At the very beginning, the local people had not established an occupational group (Phukamchanoad, 2023).

Nonetheless, in 2011, the Wat Pracharabuedham Foot Massage Occupational Group was founded with the support from the Department of Social Academic Services, Institute for Research and Development, Suan Sunandha Rajabhat University (Phukamchanoad and Khudthipong, 2011). It was the first-ever occupational group established in the communities. The local people learned foot massage science from the College of Allied Health Sciences, Suan Sunandha Rajabhat University. They also learned how to keep household accounts from the

Department of Social Development Management, Faculty of Humanities and Social Science, Suan Sunandha Rajabhat University. Unfortunately, the communities were unable to manage a full-service occupational group due to weak family and community bonds resulting from competitive individualism in urban societies. Groups or networks were fragmented and often formed temporarily. Differences in income levels, education, personal preferences, and hometowns contributed to this fragmentation.

These factors weakened the urban informal economic sector, where people lived isolated lives and rarely interacted with each other. Consequently, the sufficiency economy was only marginally applied, while a materialistic lifestyle became common (Domaradzka, 2018).

Based on Cohen and Uphoff's (1980) concept of public participation, the level of public participation in Wat Pracharabuedham Community 1-4 was quite low, particularly in the areas of decision-making, operation, benefit management, and evaluation. It was tremendously difficult for the local people to plan and develop community activities together since they were carefully protecting themselves from urban hazards and risks (Senior et al., 2023). During the COVID-19 pandemic, in particular, more problems such as unemployment, economic downturn, and poor health conditions have elevated social isolation and economic inequalities in the communities (Paremoer et al., 2021). There was also a lack of rights and opportunities, which should be considered as another kind of social inequality (Chitsa et al., 2022). Most importantly, the unemployed population included the elderly residents in the communities. According to the Elderly Person Act B.E. 2546, Article 3, an elderly person is defined as someone aged 60 or older with Thai nationality (Herberholz, 2022). The concept of active aging promotes self-driven opportunities for individuals of all ages, encouraging healthy personal growth and participation in social and economic developments to achieve security and improve quality of life. In 2019, there were 7 million young-old adults in Thailand, comprising 60.4% of the country's elderly population (Pothisiri and Teerawichitchainan, 2019). This group was still active and seeking career opportunities. Therefore, community leaders and public sector networks are needed to encourage the participation of the elderly and promote occupational development for them. The expected outcomes included increased community incomes and enhanced self-sufficiency for elderly residents.

The goal of this study is to explore innovative methods to develop a full-service participatory occupational group for the elderly population in Wat Pracharabuedham Community 1-4, Dusit District, Bangkok. The research also examines inequality issues in these communities to propose alternative solutions, helping local residents become self-sufficient beyond relying on government assistance.

2. Literature review

"Occupational group" refers to the gathering of 2 or more local people who have similar occupations and conduct occupational activities such as producing and selling with one another. The members of an occupational group have a clear common goal and a solid organizational structure. Additionally, they shall demonstrate collaborative behavior and interactions. Networking is a key for connecting individuals or organizations who voluntarily share and exchange information and freely conduct activities on the basis of human rights and respect. Another definition of an occupational group is "the gathering of local people who share similar careers and produce and sell products together under the same set of rules and regulations enforced by the group committee; the key to their success is the collective learning, collective research, and collective operation" (Kitatron et al., 2017). A community network, in addition, was initiated for mass communication and exchanging information within the communities. As the networks were informally structured, they were much more complex than other kinds of organizations (Boissevain and Mitchell, 1973). An example of occupational groups in Thailand is the Reed Mat Occupational Group, a community enterprise of Phu Toei Sub-District, Phetchabun Province. The occupational group applied several approaches to promote their activities, which included community management, awareness raising, collective learning, and public participation (Khatibi et al., 2021). According to the Bangkok Metropolitan Administration Order NO. 3808/2541 regarding the establishment of Bangkok's occupational groups, announced on 3 December 1998, the Wat Pracharabuedham Occupational Group was founded in order to support unemployed or disadvantaged people in Wat Pracharabuedham Community 1-4 to achieve employment towards vocational education and training. The establishment of the occupational group was based on the concept of stakeholder engagement. This approach aims to create a unique community product and promote community sustainability through collaboration among elderly residents, public health volunteers, and community leaders.

"Urban lifestyle" is characterized by the high diversity in urban areas, where individuals lead separate lives due to social class differences (i.e., the rich vs. the poor), selfishness, hastiness, and a money-focused mindset (Phukamchanoad, 2023). Urban fine arts reflect the constantly changing environment of urban societies, which are often full of loneliness, confusion, uncertainty, and ambiguity (Kryshtaleva, 2017).

According to the Bangkok Metropolitan Administration Regulations on Community and Community Committee B.E. 2555 in 2012, there are six types of communities: 1) slums, 2) urban communities, 3) suburban communities, 4)

community housing, 5) high-rise communities, and 6) housing estates (Herberholz, 2022).

Urban communities are generally disorganized and highly diverse in socio-cultural aspects, individual mindsets, advancements in public facilities and services, and formal and informal developments. Within large urban communities, there are slums, community housing, flat and apartment communities, military communities, temple communities, local market communities, housing estates, public sector communities, business communities, homeless communities, and nightlife communities. Due to their vast socio-cultural diversity, urban communities are more complex than rural communities. While urban communities are extremely materialistic, rural communities tend to be more spiritualistic. The essential elements of urban life are work and money; without these, individuals would face hardship from dawn to dusk (Wesz et al., 2023).

Another characteristic of the urban lifestyle is the division of labor. Professions are diversified by personal expertise and technological advancements, leading to secondary relationships and an individualistic culture. In Wat Pracharabuedham Community 1-4, an urban community in Dusit District, Bangkok, a major issue was the unemployment of elderly residents. Despite efforts by community committee members, public health volunteers, village fund group members, and officers of the Wat Pracharabuedham Learning Center, the problem persisted.

"Public participation" is a key factor in active community development, where community members become stakeholders in development activities through a bottom-up model. Public participation involves identifying problems, brainstorming, decision-making, operations, benefit management, investment, evaluation, resource mobilization, and problem-solving. Public opinion is a powerful tool for social, economic, and political negotiations, aiming to create a peaceful community.

There are two major approaches to public participation: 1) active public participation and 2) passive public participation. Public participation can be achieved through shared demands, role distribution, and collective responsibility to manage both positive and negative outcomes (Ang, 2021; Berman, 2017; Cohen and Uphoff, 1980; Phukamchanoad, 2021a; Phukamchanoad, 2023). In Thailand, public participation is emphasized in the constitution, highlighting its importance as a fundamental element of democratic governance.

"Community networks" result from group behavior that has persisted over time. They form through interactions among individuals, groups, and organizations that share common goals and target groups (Tomini et al., 2016). Within these networks, information is voluntarily shared, and collective activities are freely conducted. Although the term "networks" is often used in the business sector, it also describes social movements arising from interactions among individuals, groups,

organizations, and institutions (Starkey, 1997). Network members usually share the same objective but remain independent.

In this study, a community network is well-structured and aims to improve the local society, economy, and residents' quality of life. Relationships within the network can be based on tangible or intangible elements. There are three main types of relationships in community networks: exchange, communication, and coexistence. These networks are not structurally organized, making them more complex than groups or organizations (Boissevain and Mitchell, 1973).

According to the community-based research (CBR) method, community networks are a type of partnership. Strategic partnership (SP) is a non-profit collaboration between individuals, groups, or organizations that does not require changes in behavior, attitudes, or regulations. Boundary partnership (BP), on the other hand, involves direct intervention from community-based researchers and expects changes in behavior, attitudes, or regulations. The CBR approach allows community members to work together, make collective investments, and share responsibilities and risks. However, many community problems are caused by external factors and require solutions beyond the community's capacity. Due to insufficient local power, partnerships with government agencies, local academic institutions, temples, schools, and local organizations are necessary (Alderwick et al., 2021).

Community networks often consist of local members with a common goal, such as the community network for street food research established by Rajabhat University in Bangkok. In this study, a community network is defined as a social movement within a community, originating from interactions among stakeholders like civic and civil sectors, public and private sectors, and the academic sector. This collaboration leads to innovations, approaches, processes, and procedures needed for community development.

In Wat Pracharabuedham Community 1-4, a collaborative partnership existed involving community leaders, public health volunteers, elderly residents, Wat Pracharabuedham Learning Center officers, and community development and social welfare officers from the Bangkok Metropolitan Administration (BMA) (Phukamchanoad, 2021b).

"Inequality" is a global issue that has been significantly addressed by the United Nations. According to a UN (2018) report, reducing inequality is one of the 17 global goals because income inequality has increased by 10% and become a serious problem worldwide. Billionaires own 40% of global revenues, while the poorest 10% of the population earn only 2-7%. In developing countries, inequality has risen by 11% alongside population growth.

In 2015, Thailand identified seven types of inequality: income inequality, educational inequality (unequal access to educational services between urban and rural students, as well as unequal

academic achievements between regions), public health inequality, inequality in access to social welfare and services, land inequality, infrastructure inequality, and inequality in the criminal justice system. Scholars suggest that inequality is caused by unequal access to privileges, opportunities, power, and dignity, leading to the three most common types: economic inequality, social inequality, and inequality in resource allocation (Achawanantakul, 2011).

A previous study on inequality in Wat Pracharabuedham Community 1-4 found that public participation can help address inequality issues (Phukamchanoad and Khudthipong, 2011). However, reducing the gaps between classes remains difficult due to unequal access to jobs, education, natural resources, and justice. In Thailand, long-standing patronage systems and bureaucracy have led to widespread discrimination, often framed as "the rich vs. the poor" or "the urban people vs. the rural people." These terms should be avoided since all humans are equal.

In this research, inequality in Wat Pracharabuedham Community 1-4 is an urgent issue that could be addressed by generating new sources of income through public participation.

"Elderly person" or "Older person" is defined by the World Health Organization (WHO, 2021) and the United Nations (UNHCR, 2021) as "male and female individuals aged 60 years old or over". In Thailand, the Elderly Person Act B.E. 2546, Article 3, defines an elderly person as an individual aged 60 years old or over who has Thai nationality (Herberholz, 2022). The report entitled "Situation of the Thai Elderly 2019" provided a similar definition by which an "elderly person" refers to any individual aged 60 years old or over. According to the report, the "elderly population" is defined as the population group of citizens aged 60 years old or over. Additionally, active aging is a process in which individuals, regardless of age or gender, can create their own opportunities to be socially and economically engaged, grow up healthily, and enhance their own quality of life (Chappell, 2015). Social welfare for the elderly is also crucial for the active aging process; the public, private, and civil sectors should cooperate with each other in order to provide security and well-being to the elderly population. Elderly people usually have invaluable knowledge and experiences which can contribute to social development. Therefore, they should be respected by their families, society, and the state. Above all, they should be fairly and extensively involved in the community development process. In Thailand, everybody is obliged to support the elderly people to preserve their dignity, value, and quality of life. Fairness and access to justice for elderly people must be ensured as they are also members of our society. In 2019, there were 69.3 million people living in Thailand. 11.6 million people were elderly residents (17.5% of the total population). There were 7 million young-old adults, aged between 60-69 years old, taking up 60.4% of the total elderly population. The allocation of social welfare and

services consisted of 4 pillars, which were 1) social services, 2) social insurance, 3) social assistance, and 4) social support partnership promotion. Social welfare and services must be provided to the following seven areas: 1) education, 2) health care, 3) accommodations, 4) careers, 5) criminal justice system, 6) recreation, and 7) basic public services (Shahidi et al., 2019). Another prior study on the well-being of Bangkok's Elderly Club members showed that the members gained happiness from activity participation and community services. The activities helped them realize their own value, resulting in a healthy mind and body. The members became more hopeful about their life planning and could support their families better. They also had more chances to pass on their wisdom towards cultural or religious activities and their hobbies. This self-development opportunity allowed the elderly people to recognize their potential and contribute to society. The target group of this research is the elderly members of Wat Pracharabuedham Community 1-4. All research samples were 60 years old or older. They were looking for jobs and extra monthly incomes. Most importantly, they were willing to develop themselves and participate in social activities, including community networking and social welfare-based recreational activities.

"Sufficiency" is a term well-known among Thai people due to the famous Sufficiency Economy Philosophy developed by King Rama IX. This philosophy was often mentioned in the king's official speeches. On 29 November 1999, His Majesty the King made the following statement about sufficiency:

"Sufficiency Economy is a philosophy given by His Majesty King Bhumibol Adulyadej to the people of Thailand. It emphasizes the middle path as a guiding principle for appropriate behavior by Thai people at all levels, from family to community to country. It calls for national development and administration to modernize in line with globalization.

'Sufficiency' means moderation, reasonableness, and the need for self-immunity to protect against impacts from internal and external changes. Achieving this requires applying knowledge with careful consideration and prudence. Great care is needed at every step in using theories and methodologies for planning and implementation. At the same time, it is essential to strengthen the nation's moral fiber so that everyone, especially public officials, academics, and businessmen, adheres to honesty and integrity. Additionally, diligence, wisdom, and prudence are crucial to create balance and effectively cope with the critical challenges arising from rapid and extensive socioeconomic, environmental, and cultural changes in the world."

This suggests that the Sufficiency Economy Philosophy can serve as a framework for both personal and community development. The Thai government should use this philosophy to develop the country based on its own socio-cultural strengths. King Rama IX once spoke to the Chaipattana Foundation, saying, "Sufficiency

Economy is the foundation of life, the stability of the nation - like the pilings that support houses and buildings. Buildings stand firmly because of the pilings, but since pilings cannot be seen, people tend to forget about them."

This research applied the Sufficiency Economy Philosophy to develop occupational groups, such as managing resource allocation, accounting, and saving. The philosophy was expected to manage urban risks and reduce overspending, a common problem in urban lifestyles.

3. Research methodology

This research proposal was approved by the Suan Sunandha Rajabhat University Ethics Committee, which agreed to implement the proposal without further review (COE: 65-382-2-1).

This study used a mixed-methods research approach, focusing on participatory action research (PAR) and CBR to explore innovative methods for developing a full-service participatory occupational group for the elderly in Wat Pracharabuedham Community 1-4. The data collection tools included participatory observation, questionnaire surveys, structured interviews, and focus group discussions. Design thinking was applied throughout the data collection process. Vocational training sessions were held to test and experiment with the production and selling of a "full-service community product" designed to develop and promote the communities' occupational group. The research settings were:

- Wat Pracharabuedham Community 1
- Wat Pracharabuedham Community 2
- Wat Pracharabuedham Community 3
- Wat Pracharabuedham Community 4

Before conducting field visits, the research team organized a community meeting with local people and other stakeholders, including community leaders, community development and social welfare officers of the Dusit District Office, Wat Pracharabuedham School teachers, members of Wat Pracharabuedham Occupational Group, elderly residents, local public health volunteers, and the research team from the Department of Social Development Management at Suan Sunandha Rajabhat University.

The research and development process in this study consisted of three major stages, described below.

3.1. Wat Pracharabuedham community 1-4 questionnaire survey

A community survey was conducted to investigate the community's problems and contexts, including transportation access, community history, housing, trade and economy, culture, governance, and community development. Data was collected using field notes and participatory observation. The survey results, shown in Table 1, were analyzed

using a 5-stage integrated model based on human-centered design thinking and the Buddha's Four Noble Truths, as illustrated below.

3.2. Community activity design process

This process employed PAR, a data collection technique that involves dialogue, brainstorming, and action-reflection processes. The PAR approach utilizes powerful questions alongside content analysis, statistics, reference models, and concept mapping, with the primary goal of effecting change. CBR was integrated into the research process and action research from the inception of the issue, encompassing data collection and analysis, problem-solving steps based on data, and summarizing research findings. The emphasis was on including all community segments and empowering communities through active participation.

The data were analyzed using both descriptive and empirical approaches. The CBR aimed to design community activities as the foundation of the community's occupational group (Alderwick et al., 2021). Scholars were invited to collaborate to create a body of knowledge alongside local residents and members of the Wat Pracharabuedham Community Network. The author purposefully selected six groups of participants most involved in community development activities during the day. The research operation group included: (1) 9 public health volunteers, (2) 20 elderly individuals, (3) 5 community leaders, (4) 10 teachers and students, (5) 3 community development and social welfare officers in Dusit District, and (6) lecturers and students from Sunandha Rajabhat University, totaling 77 participants under two conditions: (1) the ability to participate in research activities throughout the 6-month research period; and (2) collaboration to conduct activities based on the community's concerns and needs. Three community activities were designed as part of this process.

3.2.1. Activity 1 community baseline data survey

(1) A questionnaire survey was conducted to acquire the baseline data of Wat Pracharabuedham Community 1-4. The data included 1) urban community contexts and 2) social, economic, cultural, and political contexts. In addition, photography was also used as a research tool to collect the baseline phenomenological data during the research period.

(2) Structured interviews and a focus group were conducted with four community leaders (one community leader from each of the four Wat Pracharabuedham communities). These activities were aimed at verifying the community data gained from the previous processes.

(3) A questionnaire survey was conducted to collect data about public participation in community development and community occupational group enhancement. The survey participants were the local elderly residents and public health volunteers. The

data comprised of 7 aspects: 1) collective acknowledgment and understanding, 2) collective problem identification, 3) collective planning and analysis, 4) collective operation, 5) collective benefit management, 6) collective responsibility, and 7) collective monitoring, follow-up, and evaluation.

Rating scale questions were used for collecting data in (1) and (3). The mean scores were interpreted as follows: 5.20-6.00 = highest, 4.36-5.19 = high, 3.52-4.35 = moderate, 2.68-3.51 = lowest, 1.84-2.67 = lowest, and 1.00-1.83 = no participation (Silcharu, 2017). The collected data was analyzed using descriptive statistics, including arithmetic mean and standard deviation. The most important item was "Please rate the level of community participation in the occupational group development conducted by Suan Sunandha Rajabhat University and Wat Pracharabuedham community leaders."

Table 1: Human center design thinking, Wat Pracharabuedham community

Stage	Activities
Empathy	- Study the problem - Visit the area to talk to people, youth, unemployed, housewives, elderly group, local public health volunteers, monks, teachers, and the Community Leader of Pracharabuedham Temple - Local researchers collect data on morning, noon, and evening routines during working days (Monday-Friday) and holidays (Saturday-Sunday)
Define	- Analyze the cause of the problem - The problems identified: - Low level of people's participation in community development activities - High number of elderly people in the community of Wat Pracharabuedham with potential to work during the day and earn more - Only one occupational group, insufficient to support the need for extra income from the elderly and public health volunteers - Public health volunteers working with low salary, needing additional sources of income with health knowledge - Lack of production knowledge for the unique product of the community
Ideate	- Brainstorm (hypothesize) - Meeting of community leaders at Wat Pracharabuedham - Focus group discussion with leaders, the elderly, and public health volunteers - Organize brainstorming groups with networks: 1. Community Leader 2. 19 public health volunteers 3. 11 elderly persons 4. Wat Pracharabuedham School 5. Social and Cultural Management program (Social Development Management), Faculty of Humanities and Social Sciences, Suan Sunandha Rajabhat University 6. Community development and social welfare officers of Dusit District Office 7. Community Network in Dusit District 8. Bhatphat Youth Group 9. Academics
Prototype	- Design activities to reduce inequality - Designing a course for producing herbal products - Develop a full-range product process model with 8 processes - Implementation
Test	- Organize training on herbal products (1 product as a model) - Distribute and sell products - Create Dusit Rabuedham Occupational Group - Clearly define group members and group accounts

3.2.2. Activity 2 phenomenological research

The local researchers explored the local phenomena and community lifestyle of Wat Pracharabuedham Canal Market in the morning. Photographs of the Wednesday and Sunday markets were taken by the local people who also acted as researchers under the CBR approach.

3.2.3. Activity 3 full-service occupational group capacity development

1. A meeting with 30 research participants from Wat Pracharabuedham Community 1-4 was arranged. At this stage, a new career was specifically developed for elderly residents, public health volunteers, and teenagers in the communities. The first step of this process was to assess the research participants' basic knowledge about the developed full-service herbal product called "Phaya Yor Green Oil." The contents were separated into eight topics: 1) the herbal product's production formula, 2) expense accounting and raw material and ingredient procurement, 3) raw material and ingredient preparation, 4) production, 5) packaging (bottling), 6) logo design (a prototype was created in a ready-for-use electronic file), 7) selling and distributing (at the Wednesday and Sunday markets of Wat Pracharabuedham Temple), and 8) basic household accounting.

2. Product knowledge training sessions were organized. The new full-service herbal product was designed based on massage balm products.

3. The 1-month trial sale of the full-service herbal product was offered at Wat Pracharabuedham flea markets.

4. A new occupational group was founded to mobilize activities related to the product in order to promote sustainable self-sufficiency in the communities. The occupational group was registered at the Dusit District Office, Bangkok.

3.3. Collaborative learning process between researchers, scholars, local people, and stakeholders

The development of collaborative learning for occupational group advancement was initiated

through the cooperation of researchers, scholars, local residents, and other stakeholders. This process encompassed seven stages as follows:

1. A focus group was conducted on 10 November 2020 at Wat Pracharabuedham Temple. It was the first time that the researchers, scholars, local people, and all the community network members came together in order to exchange basic knowledge and information about the communities and the research project. The focus group discussed the expected outcomes, research process and procedures, research outputs, and those who could benefit from the project.

2. A field visit led by community leaders was conducted to collect data about urban community contexts. The research team, including the students from the Department of Social Development Management at Suan Sunandha Rajabhat University, also joined the field visit.

3. A small meeting was arranged between community leaders, scholars, and local researchers. The objectives of the meeting were 1) to verify the collected community data, 2) to determine the occupational development approaches for the local people, and 3) to select elderly residents and public health volunteers who had the potential to participate in the project. As a result of the meeting, students and teachers of Wat Pracharabuedham School were also invited to join the project.

4. The Design Thinking Activity was the collaboration between the research team, government officers, researchers, scholars, local people, and community network members. It was organized to collect data about inequality problems and other key issues in the communities in order to design other future activities in the project.

5. The stakeholders, including community leaders, researchers, scholars, students from the Department of Social Development Management, Suan Sunandha Rajabhat University, and Wat Pracharabuedham School teachers and students, produced the full-service herbal product together.

6. Scholars and researchers educated local people to market and sell their products in the digital era. Once the local people had adequately obtained digital skills, the scholars and researchers retreated themselves and acted as the advisors of the local people who participated in the research project.

7. The Wat Pracharabuedham Learning Center was established based on the success of the Social Lab, the learning space for students of the Department of Social Development Management, Suan Sunandha Rajabhat University. Towards the Social Lab, local wisdom was passed on from the local people to freshmen, sophomores, and students in their junior year. This was a part of the Community Studies subject. In order to achieve the paradigm of fundamental social development, the students were encouraged to get first-hand experiences in genuine urban community contexts where social, cultural, and technological circumstances were rapidly changing. The Social Lab had been founded as the "Community Class" for a decade. The goal of the Wat Pracharabuedham Learning Center is to provide academic services for the urban community members in order to promote community development effectively (Phukamchanoad, 2020).

Over the past two years, Thailand has been experiencing a COVID-19 pandemic. For this reason, the field visits and data collection activities were conducted under the pandemic social restriction measures as follows.

1. Check ATK and ask for vaccination every time the group joins.
2. Everyone wore double masks, with at least a layer of a surgical mask.
3. Surgical masks must be worn at all times during the activities.
4. Everyone follows a 2-meter social distancing protocol.
5. Eating and drinking were only permitted in an open space at least 2-3 meters away from other individuals.
6. Conversation could not take place any time a mask was not worn.
7. Everyone regularly washed their hands.
8. The use of personal pens was required.
9. The number of participants was limited.
10. Coughing and sneezing were allowed only when surgical masks were worn.

4. Results and discussions

The research findings were categorized into five themes: 1) Wat Pracharabuedham Community 1-4's social contexts and urban lifestyle, 2) inequality phenomena and community relationships, 3) full-service herbal product acknowledgment and management, 4) public participation in Wat Pracharabuedham Community 1-4, and 5) the establishment of "Dusit Rabuedham Occupational Group."

4.1. Wat Pracharabuedham community 1-4's social contexts and urban lifestyle

Approximately 124 years ago, the area now known as Wat Pracharabuedham was a lowland region covered with grass and intersected by the Bang Krabue Canal. This area included Bang Krabue Village, renowned for its high-quality cattle and buffalo farming. The villagers primarily engaged in rice and fruit farming, with notable products being durians and coconuts. In 1897, the locals built a temple named Wat Bang Krabue, which was later renamed Wat Pracharabuedham. Over time, the area evolved from grass fields to fruit farms and then to residential households.

In 1987, the local residents officially formed the Wat Pracharabuedham Community. By 1995, the

community was divided into three distinct areas: Wat Pracharabuedham Community 1, Wat Pracharabuedham Community 2, and Wat Pracharabuedham Community 3. In 1997, a new community was established to accommodate commercial buildings and flats, known as Wat Pracharabuedham Community 4.

By 2021, Wat Pracharabuedham Community 1-4 had transformed into urban communities. The area featured a variety of housing styles, including commercial buildings, two-story wooden houses, high-rise buildings, flats, and apartments, with buildings closely constructed, often sharing walls. There was a notable lack of open spaces and public areas. The main street at the community entrance was narrow, and many alleys were only one meter wide, suitable only for pedestrians and motorcycles. Green spaces were absent, with only a few long-standing trees such as pipals, banyans, mango trees, tamarind trees, and rose apple trees.

Local residents tended to lead separate lives with limited participation in public activities. The community had a diverse range of occupations, including local merchants, contractors, business owners, government officers, BMA officers, and office workers. Wat Pracharabuedham Temple served as the spiritual anchor and religious center, hosting religious rituals and community ceremonies, such as New Year's Eve merit-making, the Songkran festival, and other key events (Phukamchanoad, 2023). The primary lifestyle in the communities revolved around the "H-T-S Ecosystem," integrating households, temples, and schools. Other community agencies included village and urban community fund groups, savings groups, community health centers, the Wat Pracharabuedham Occupational Group, and the Elderly Club.

Over the one hundred twenty-four years, the local people had continually lived together, and their children inherited not only their wisdom but also their lifestyle. The community bond was created through the family and kinship networks. Even though many of them had to work outside the communities, they still knew and kept in touch with their neighbors. The community's timetable is illustrated in Table 2.

Table 2: Community's timetable

Time	Activities
5 a.m.	Elderly people woke up early to pay homage to monks at Wat Pracharabuedham Temple
6 a.m.	Working adults traveled to their workplaces by cars, motorcycles, or buses (the bus stops were installed outside the communities)
8 a.m.	Children walked to school with their grandparents (or their parents if they worked within the community areas)
9 a.m. - 4.30 p.m.	Common activities at the canal market, local stores, local restaurants, and local enterprises. This also included the communities' public health activities
2 p.m. - 8 p.m.	Wednesday and Sunday Markets at Wat Pracharabuedham Temple
5 p.m. - 7 p.m.	Working adults came back from their workplaces outside the communities
8 p.m. - 5 a.m.	Family time and self-relaxation

Table 2 presents the daytime activities within the community, highlighting that only older adults, children, and unemployed residents remain at home. Most residents follow a consistent daily routine from dawn to dusk, working on weekdays (Monday to Friday) and enjoying leisure activities on weekends (Saturday and Sunday). As depicted in Table 2, the lives of community members are guided by rationality, focusing on sharing, earning merit, and spending responsibly. Their work, both within and outside the community, aligns with the urban setting and the principles of the sufficiency economy philosophy.

However, Table 2 identifies the time period from 9 a.m. to 4 p.m. as critical for initiating the production of "Phaya Yor Green Oil" products, marking the first step in the eight-step subprocess. The production of "Phaya Yor Green Oil" involves three essential steps:

- Raw material preparation: This phase involves gathering coconut oil, large kaffir lime peel, phlai, sweet flag, curcuma wanenlueanga, ludisia discolor, wild turmeric, aromatic ginger, hopped barleria, pandanus palm, and fennel.
- Frying the raw ingredients: The raw ingredients are fried on low heat for two hours with continuous stirring. This process is crucial to ensure the oil achieves a vibrant green color. It is important not to mix any raw ingredients at this

stage, as the complete oil should be utilized. The mixture is then poured into a package and set aside to cool.

- Packaging: Once cooled, the oil is packaged for sale. Named "Phaya Yor Green Oil" by the community, the production process is straightforward and caters to the needs of the elderly in the community. The product has medicinal properties, such as alleviating dizziness, reducing itching from insect bites and stings, and providing a refreshing aroma when inhaled.

This structured approach ensures the effective utilization of local resources and skills, promoting economic self-sufficiency and community well-being.

4.2. Inequality phenomena and community relationships

The analysis of inequality and community relationships, as illustrated in Table 3, reveals significant findings. According to the research results, the three most prevalent inequality issues affecting elderly residents are income inequality, inequality in herbal knowledge, and inequality in access to public services. The data suggests that elderly residents and unemployed individuals in these communities desire additional income sources. Consequently, a new product was developed, and new occupations were created based on the

collected baseline data. This initiative aims to support the elderly in urban communities by promoting self-sufficiency, encouraging savings, and facilitating a modest lifestyle.

Activities were chosen to suit the strength and age of the elderly, emphasizing the productive use of leisure time to benefit themselves, their families, and the community, thus achieving overall sufficiency for the elderly. Additionally, interactions among various groups within the community can be perceived as forming a cohesive network, as depicted in Fig. 1.

Fig. 1 presents a summary of community relationships based on interviews and focus group discussions. The creation of occupational groups empowers older individuals who are often isolated at home without work, harnessing their unique potential to collaborate in producing products and creating occupations, thereby restoring their dignity and human values. This initiative aims to instill pride in their families and alleviate the financial burden by helping family members generate supplementary income in addition to their primary income. Neglecting the elderly and viewing them as a burden has been a pervasive issue; this initiative addresses such economic and social inequalities at the community level.

4.3. Full-service herbal product acknowledgment and management

Fig. 2 illustrates the research and development (R&D) process, which integrated academic knowledge to create a full-service herbal product called "Phaya Yor Green Oil." The term "full-service 8-step" refers to the participation of local people in all stages of production, including brainstorming, producing, packaging, accounting, and team management. The product is designed for pain relief and muscle relaxation and can be used as an inhaler to provide quick relief from breathing problems and headaches for elderly individuals and working adults. This initiative encouraged local people to become self-sufficient before seeking government assistance. A pre-test on basic herbal knowledge was administered to 30 research participants, including 19 public health volunteers and 11 elderly residents and community leaders. The results showed that 3 participants (10%) scored 20 or higher, passing with excellence. Ten participants (33.3%) scored between 15-19, achieving good grades, while 17 participants (56.67%) scored less than 15 points, indicating the need for improvement. These results led to vocational training on the 8-stage herbal product management process for public health volunteers and elderly residents with the potential to produce "Phaya Yor Green Oil."

Following the training, participants took a post-test on basic herbal knowledge. The results revealed that 6 participants (20%) scored 20 or higher, passing with excellence. Fifteen participants (50%) scored between 15-19, passing with good grades, while 9 participants (30%) scored less than 15 points, indicating the need for further improvement.

4.4. Public participation in Wat Pracharabuedham community 1-4

The research results revealed that there was a moderate level of public participation in Wat Pracharabuedham Community's occupational group development ($\bar{X}$ = 3.87). Considering each public participation activity, public participation in all activities was rated at a moderate level: 1) collective acknowledgment and understanding ($\bar{X}$ = 4.23), 2) collective monitoring, follow-up and evaluation ($\bar{X}$ = 4.00), 3) collective problem identification ($\bar{X}$ = 3.87), 4) collective operation ($\bar{X}$ = 3.85), 5) collective responsibility ($\bar{X}$ = 3.76), 6) collective benefit management ($\bar{X}$ = 3.75), and 7) collective planning and analysis ($\bar{X}$ = 3.67). The sub-activity that gained the highest mean scores was occupational group development meetings ($\bar{X}$ = 4.52), while the sub-activities with the lowest mean scores were social development responsibility sharing and benefit distribution among the three age groups of the community population ($\bar{X}$ = 3.40). In addition, 27 research participants (90%) had the highest level of public participation in community development. The results showed that the collaboration between Suan Sunandha Rajabhat University and Wat Pracharabuedham Community was successful.

The government officers from the Department of Community Development and Social Welfare, Bangkok Metropolitan Administration (BMA), also engaged in the brainstorming focus group, in-depth interviews, design thinking focus group, and Dusit Rabuedham Occupational Group establishment training as described below:

1. The brainstorming focus group with the community network was conducted to reduce socio-economic inequalities in the communities.
2. The head of the Department of Community Development and Social Welfare, Dusit District Office, Bangkok Metropolitan Administration (BMA), was interviewed in order to understand the role of government agencies in Wat Pracharabuedham Community 1-4's occupational group development.
3. A design thinking focus group was conducted to collect the baseline data and social inequality indicators. The focus group participants included the head and the officers of the Department of Community Development and Social Welfare, Dusit District Office, Bangkok Metropolitan Administration (BMA), community leaders of Wat Pracharabuedham Community 1-4, community network members, public health volunteers, representatives of Wat Pracharabuedham School, Wat Pracharabuedham Learning Center officers, and Suan Sunandha Rajabhat University researchers and students.
4. The Dusit Rabuedham Occupational Group was established with the help of the government agency.

Table 3: Baseline data of the mechanism to reduce the inequality of Wat Pracharabuedham community

| Mechanism to reduce inequality	What is measured	Tools/measurements	Baseline Data	Inequality reduction effect
The complete production process of herbal products	Knowledge and skills in the production of integrated herbal products	Knowledge and skill of herbal production process, An unstructured interview to check your knowledge and understanding of the herbs to be produced	Knowledge of herbs is low level. Herb Processing skill is low. Able to produce by himself and understand the production process for 3 people (2 public health volunteers, 1 elderly person)	Make a Body of knowledge on herbs and can produce an increase from 3 people to 14 people (most of public health volunteers) (reduce inequality in knowledge)
Community participation in the establishment Community Occupational Groups	The process of participation of community leaders and the elderly person in setting up Occupational Groups	List of group members, Accounting and financial systems of Occupational Groups	Participation in the community of Wat Pracharabuedham is low. The elderly persons have joint activities in development and social-cultural activities mainly. There is a Nuad Thai (massage) group registration (currently), no herbal products professional group registration There is no accounting system for herbal products professions	There was an extension of the Nuad Thai (massage) group as an Occupation group of herbal products. by establishing a group called "Dusit Rabue Dham" generates 30% more income from the first month [COVID-19] [Aunt Aod, Sor. 1,000, add 300]
Cooperation with Dusit District Office Bangkok, Suan Sunandha Rajabhat University and public health volunteers	Role of cooperation among Dusit District Office, Bangkok in community development together with leaders and public health volunteers	Cooperation Agreement (formal), Observation (Practical model), Bhatphat Center, Wat Pracharabuedham (The area provides academic service activities for the society of Suan Sunandha Rajabhat University)	No formal cooperation agreement. Leaders and Public Health Volunteers are each doing their own job. (not participation) (There are specific working units such as community health centers) Nuad Thai Group at Wat Pracharabuedham	Community Development and Social Welfare Department Dusit District Office, Bangkok, easy access to people Visit the area to participate in more community activities to reduce the development gap
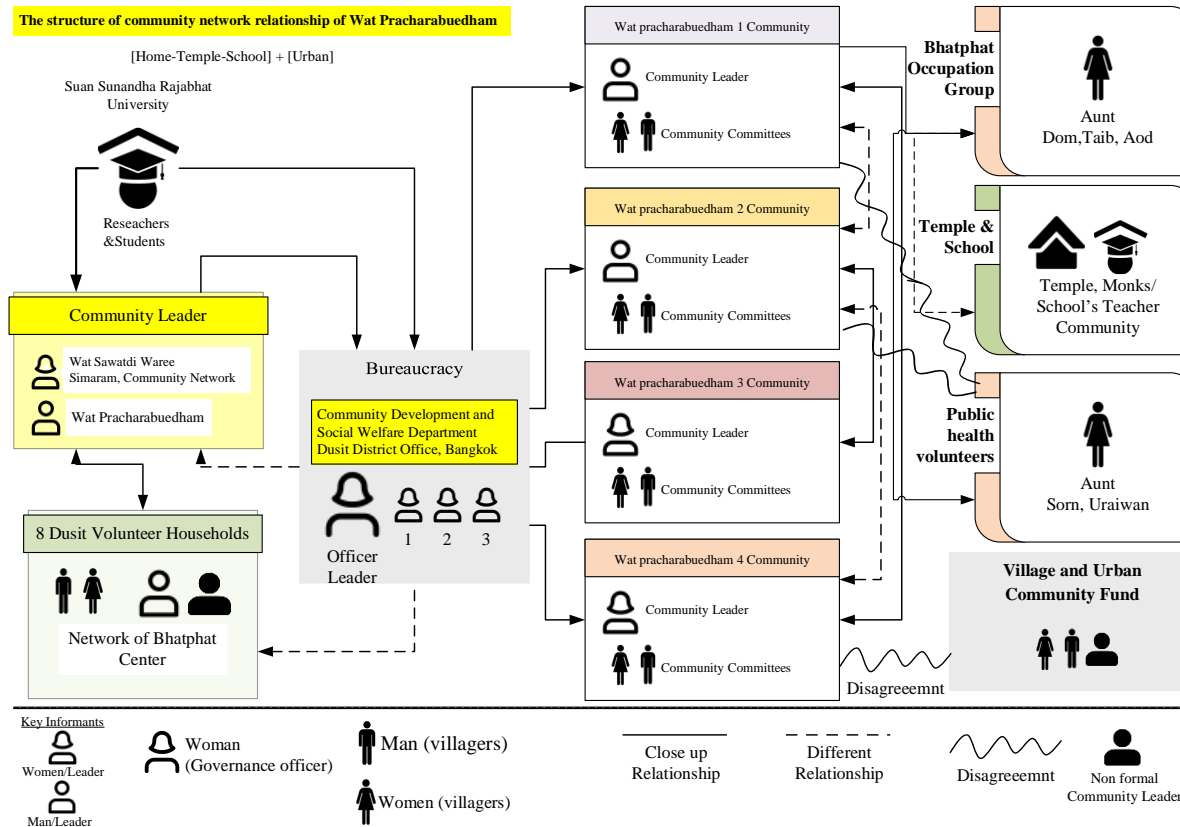
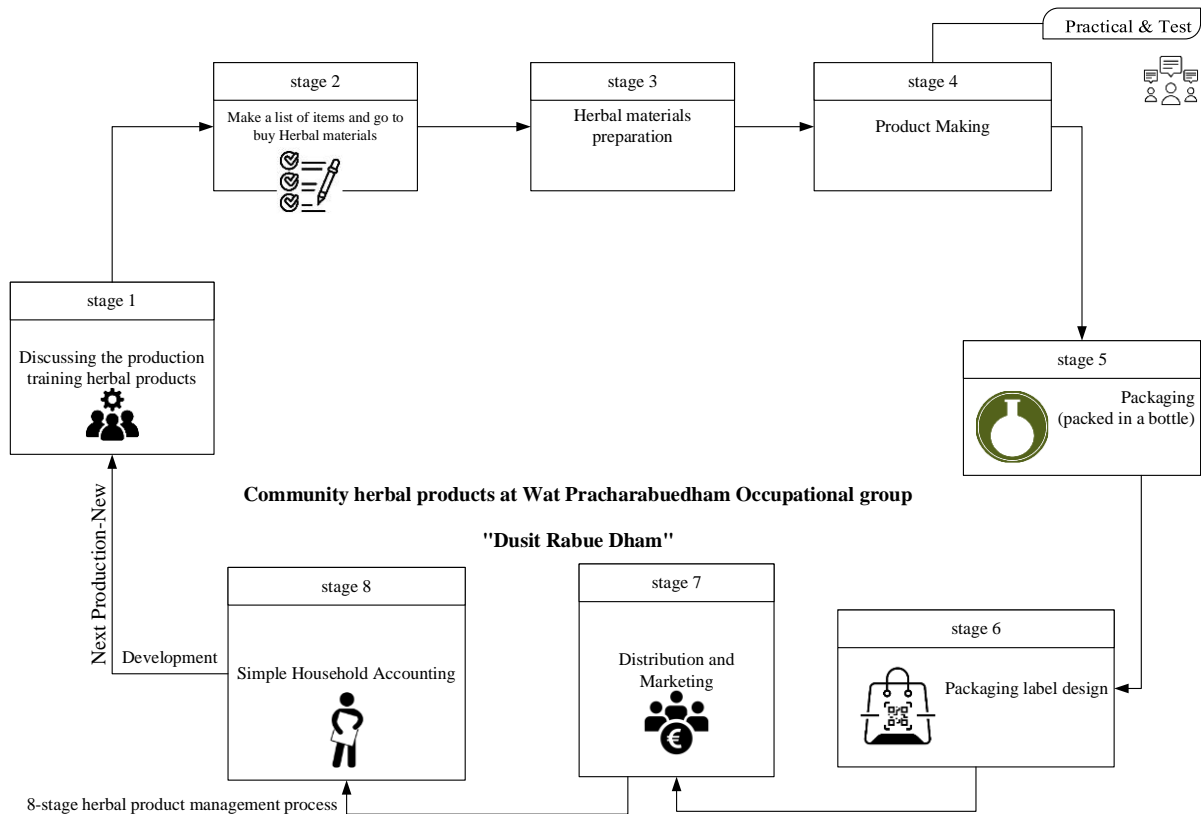**Fig. 1:** Wat Pracharabuedham community relationships

Fig. 2: 8-stage herbal product management process

4.5. Establishment of "Dusit Rabuedham occupational group"

The Department of Community Development and Social Welfare of the Bangkok Metropolitan Administration (BMA) facilitated the establishment of the "Dusit Rabuedham Occupational Group" by educating stakeholders on forming an urban community occupational group. They actively participated in local activities to bridge the gap between the state and the citizens. This collaborative process began when the academic sector facilitated connections between the public sector and the local populace, leading to improved relationships between government officials and community members in the following aspects:

- Access: More government agencies were established for the citizens. Still, the Department of Community Development and Social Welfare, Bangkok Metropolitan Administration (BMA), played the main role in community development and assistance provision.
- Participation: Various participatory activities were conducted to help the community members generate extra income, create and support new careers for elderly residents, and exchange knowledge for research between the local communities and Suan Sunandha Rajabhat University.
- Development: The Dusit Rabuedham Occupational Group was developed; towards this development, the gaps between the major social institutions

such as family, school, religion, and government were reduced in the communities.

A more extensive review of the impact analysis and long-term sustainability of the professional groups and products developed follows:

- Direct positive impact: elderly people have occupational groups that generate daily, monthly, and annual income; communities have products that are unique to the area; government agencies have included community career development policies in local development plans; and it serves as a community lap for students about the community.
- Indirect positive impact: children and grandchildren recognize value and dignity, as well as the elderly, who are praised for their knowledge; government agencies promote and distribute community items to publicize all government activities.
- Direct negative impact: The group has no next generation. Youth and the elderly in occupational groups continue to lack skills in technology, impacting online market sales.
- Future sustainability: Community leaders must organize occupational group management through self-management, self-reliance, belonging to the community, relying less on the state, and a new generation and local curriculum to expand youth vocational training, which is essential for continuous community presence.
- Possible challenges and obstacles to sustainability: Products are not suitable for all ages. This

necessitates the development of items in new formats that are fit for the times. Resulting in the application of higher knowledge. We need to rely on academics; researchers are constantly going to help, which causes delays and makes it difficult to select an adequate interval between them. The government may adjust policies based on the circumstances, affecting long-term community development.

- The problem-solving plan is a 5-year cooperation with government agencies to collaborate (engage) with five sectors: government, academia, the commercial sector, and civil society. The public sector to achieve sustainability in policy and municipal development strategies.

More suggestions from other major stakeholders include village and urban community funds, which can request financial help to invest in consistent Thai massage training. Community participation techniques must generate community innovators who gather information on occupational group management. Product "Phaya Yor Green Oil" and Thai massage in the community.

5. Conclusion

The objective of this research is to examine the innovative approach to develop a full-service occupational group for urban elderly people towards public participation in order to reduce the inequality problems in Wat Pracharabuedham Community 1-4, Dusit District, Bangkok. For more than a hundred years, the urban communities had been vastly transformed, leading to myriad social, economic, and political problems in the areas. The urban lifestyle caused the elderly residents to be left out and feel burdened due to the day-by-day increase in family expenses. For the elderly people who were still physically and mentally active, this problem could be considered income inequality at the household and community levels. The research and development (R&D) process in this study allowed the elderly residents of the communities, along with the community leaders and public health volunteers, to participate in the development of an herbal product called "Phaya Yor Green Oil." The product gave rise to new careers in the communities, including a new full-service occupational group. Vocational training was provided to the elderly residents in Fig. 3; the training contents consisted of 8 topics, including 1) the herbal product's production formula, 2) expense accounting and raw material and ingredient procurement, 3) raw material and ingredient preparation, 4) production, 5) packaging (bottling), 6) logo design (a prototype was created in the ready-for-use electronic file), 7) selling and distributing (at the Wednesday and Sunday markets of Wat Pracharabuedham Temple), and 8) basic household accounting. The author was summarized in the following Fig. 3.
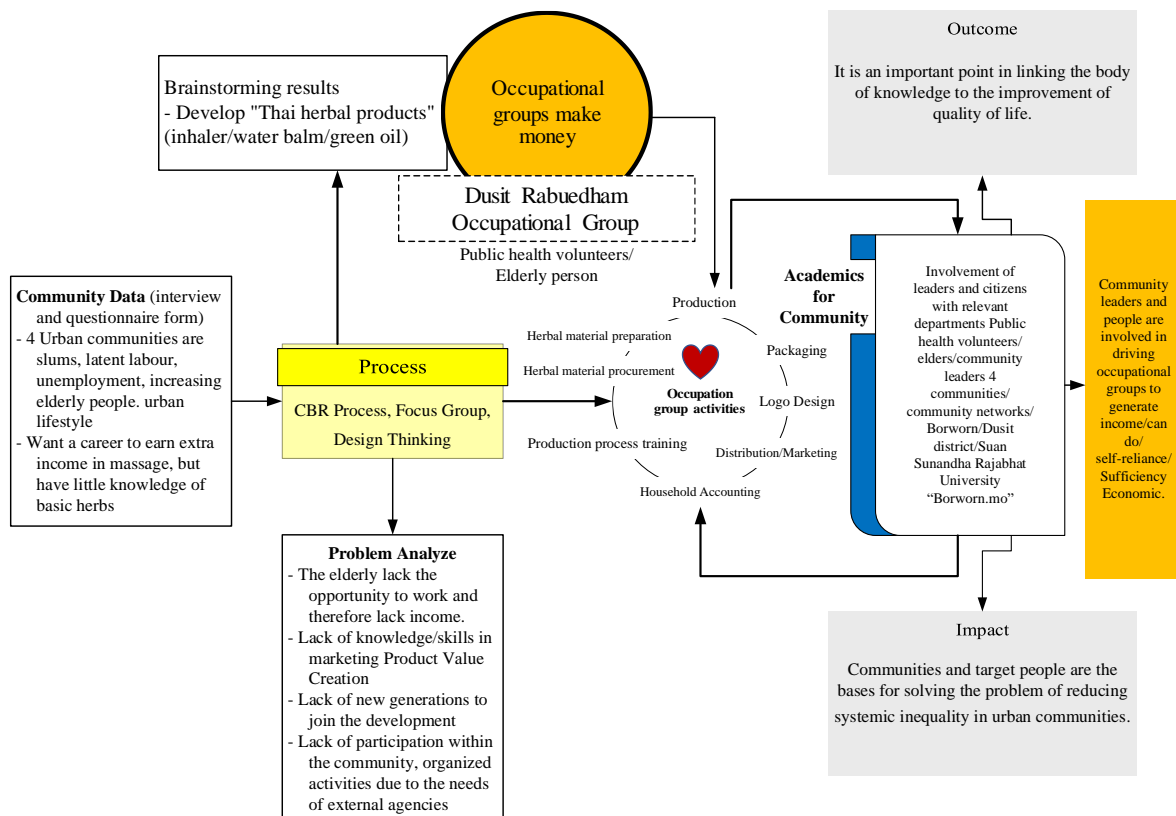

Fig. 3: A summary of the research that is an ecosystem for improving the quality of life of urban communities

In Fig. 3, the training helped the elderly residents to support themselves sufficiently towards public participation. The community network was the key to sufficiency as it supported the establishment of

"Dusit Rabuedham Occupational Group," a new occupational group initiated by the collaboration between community leaders, government officers from the Dusit District Office's Department of Community Development and Social Welfare, community network members, public health volunteers, representatives of Wat Pracharabuedham School, Wat Pracharabuedham Learning Center officers, and Suan Sunandha Rajabhat University researchers and students. The author applies the concept of ecological models of human development (Bronfenbrenner, 1994) to the urban community development ecosystem. However, it was also discovered that similar information existed, as the encouragement of local academics to reduce community inequality is a continuing effort. To collaborate systematically, we must investigate the ecological system that connects the roles of shared partners in the area. Promoting ongoing and sustainable development. A community engagement management system is in place to help with collaborative thinking, planning, and action to eliminate community imbalance, which has the same goal of creating a network for social development as an ecosystem, mechanism, and problem-solving system and the need to create stable careers to improve the quality of life in slum regions. The Satri Lek community in Bangkok's Don Mueang district has developed as a model community for promoting career development among the elderly and those with abilities.

Acknowledgment

Compliance with ethical standards

Ethical considerations

This research was conducted following the ethical guidelines and standards set forth by the Suan Sunandha Rajabhat University Ethics Committee. The study was reviewed and approved (COE: 65-382-2-1), ensuring all participants provided informed consent and that their confidentiality and anonymity were maintained throughout the research process.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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