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Socio-economic Impacts of COVID-19 pandemic  
in the deep south of Thailand  
(Pattani, Yala and Narathiwat Provinces)

# COVID-19



# “Socio-economic Impacts of COVID-19 pandemic in the deep south of Thailand”

(Pattani, Yala and Narathiwat Provinces)

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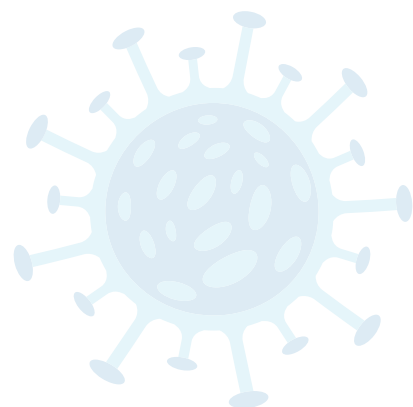
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# Acknowledgment

The Coronavirus Disease 2019 (COVID-19) pandemic has expanded worldwide. COVID-19 has been declared a Public Health Emergency of International Concern by the World Health Organization (WHO), which has advised all governments to increase monitoring and prevent the spread of COVID-19. Since 2020, COVID-19 cases and fatalities in Thailand has spread to all provinces. The government has implemented strict measures to combat the disease's spread, such as declaring a state of emergency, closing businesses and educational institutions, implementing country-wide lockdowns and travel bans, etc. All of these measures have had an impact on broader economic and social conditions at the social, community, family, and individual levels.

Thailand's southernmost provinces face a variety of unique and serious social issues, including civil unrest, poverty, and socioeconomic disparities. The problems that local people faced before the pandemic became more complicated and increased in magnitude during the COVID-19 pandemic. However, no research has been done on the impact of the COVID-19 epidemic on the general population of Thailand's Deep South provinces. Empirical data on these issues can help support programs that address the local people's needs. It is our hope that this report contributes to the body of much-needed empirical data to support resource allocation and public policy decisions to address the issues facing the region's population.

We would like to express our deep gratitude to the European Union and Save the Children International for financial and technical support, monitoring and evaluation of the results. We are also grateful to all participants and field work research assistants that have given us to more understanding of the impacts of the COVID-19 pandemic on population the southern border provinces of Thailand.

**The Investigators**

June 2022



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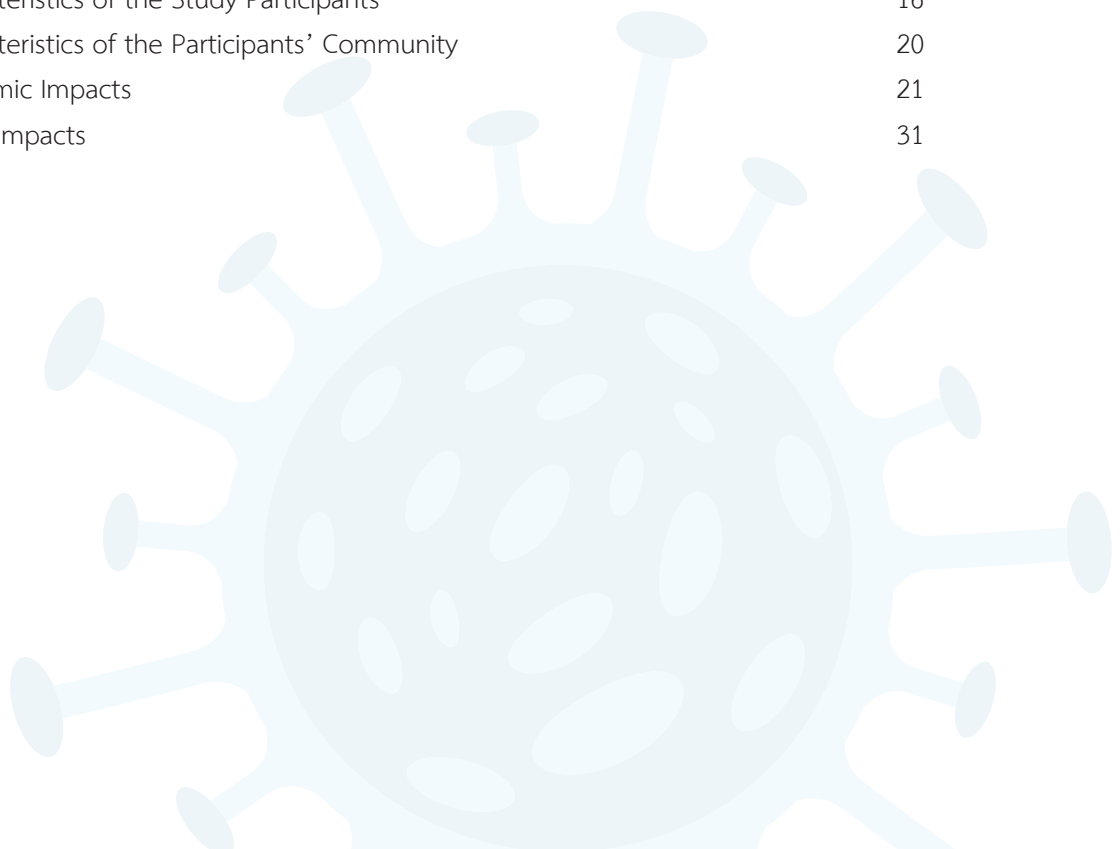
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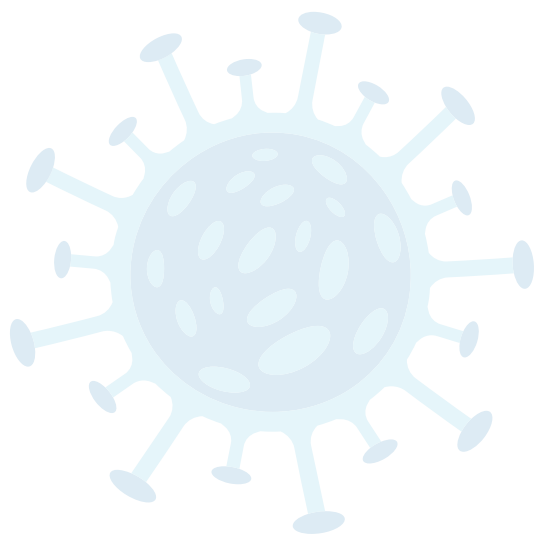
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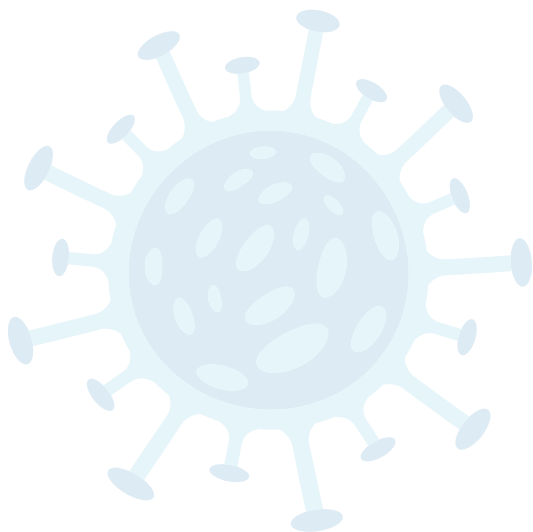
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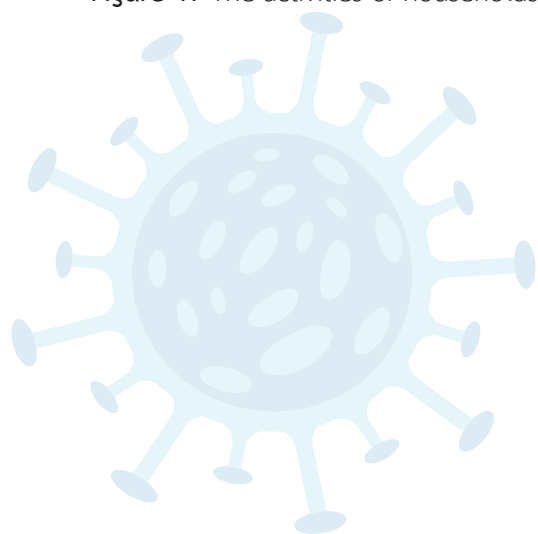
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# Introduction



## Background and significance

The coronavirus disease 2019 (COVID-19) epidemic began in late 2019 in the People's Republic of China's Wuhan Province. Since January 2020, COVID-19 has spread to countries around the world, including Thailand. The World Health Organization proclaimed the coronavirus disease epidemic of 2019 (COVID-19) to be a Public Health Emergency of International Concern on January 30, 2020. Thailand's first case was discovered on January 12, 2020, and moved to the country's southernmost provinces in March of the same year. The number of infections then fell and remained low until June 2021, when the second wave of the outbreak began. The second wave peaked in October 2021. As of February 25, 2022, there have been 145,442 cases and 1,194 deaths from COVID-19 in the region, i.e., the case fatality of 0.82 percent.

Following the initial outbreak of COVID-19, the Thai government enacted strict measures to restrict the virus's spread, including declaring a state of emergency and enforcing a curfew. Authorities began imposing travel restrictions, closure of businesses, educational institutions, communities, and cities (lockdown), and introduced social isolation. Economic activities halted. Employees had to suspend work without pay, experienced layoffs or reduced income, were unable to pay their debts or took on more debts. Those working in the informal sector had to cease work without benefits to compensate for lack of employment and illness. Thus, the COVID-19 pandemic affected a large number of business owners, vendors, employees, and informal sector workers, resulting in sudden unemployment and lack of income. Additional societal consequences, such as dropping out of school, child malnutrition, and child abuse, were discovered as a result of school closures. In Thailand's southernmost provinces, which had long been plagued by civil unrest, poverty, and social inequity, the effects of the pandemic were more severe than elsewhere, particularly on vulnerable populations including impoverished families, children, women, and the elderly.

The COVID-19 pandemic continues to have a significant impact on people's lives. However, few studies have been conducted on the economic and social consequences of the pandemic in the southernmost provinces. A study on the impacts of the COVID-19 pandemic can help relevant stakeholders understand the situation and make management and public policy decisions that are more aligned with the actual conditions and situation, which ultimately benefit the people in the Deep South.

## Research objectives

To investigate the economic and social impacts of the coronavirus disease epidemic of 2019 (COVID-19) on the general population in Thailand's southern border provinces.

## Conceptual framework

The conceptual framework of the investigation on the social and economic impacts of the COVID-19 outbreak on the generational population in Thailand's southern border provinces is shown in Figure 1.

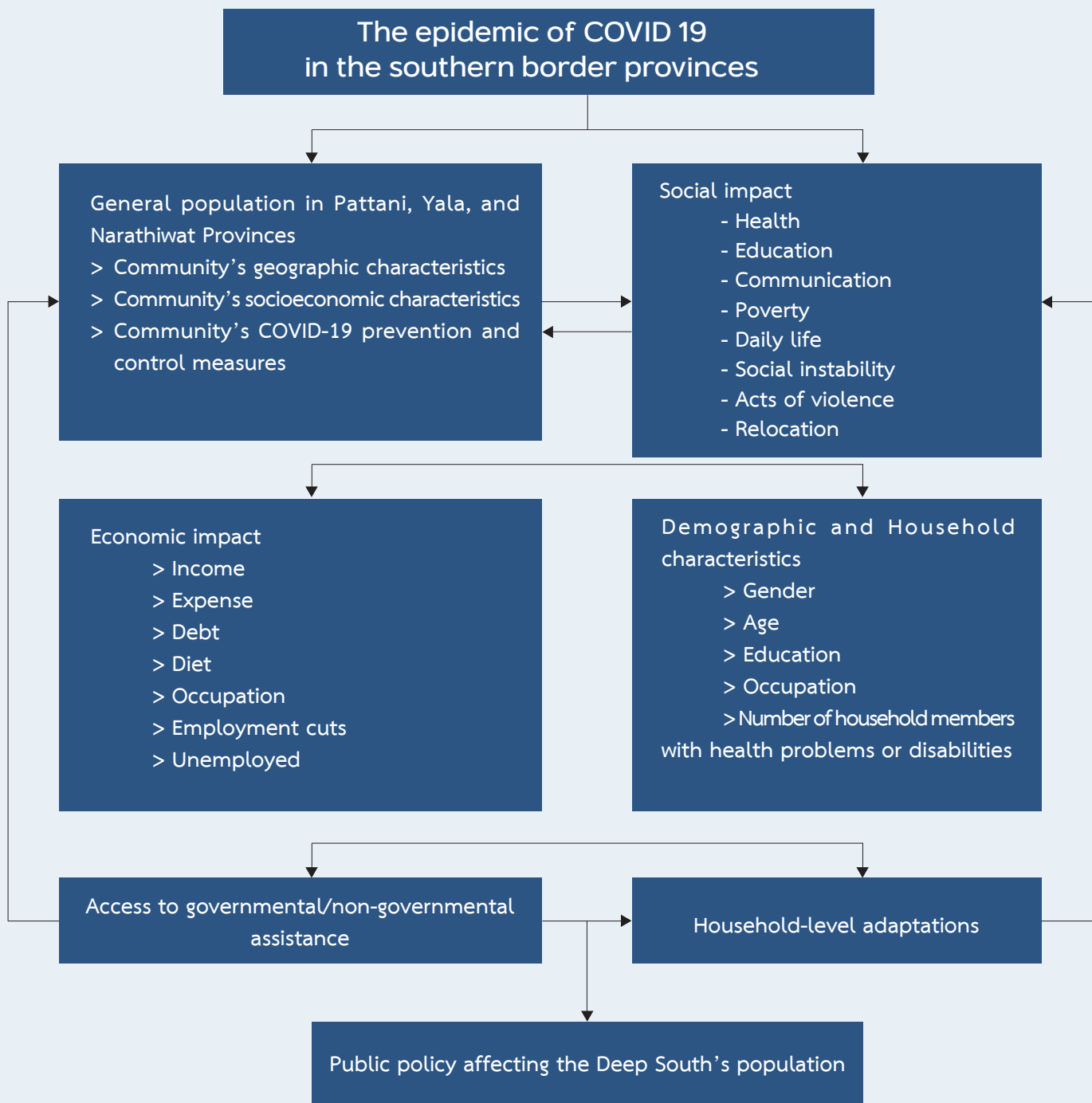


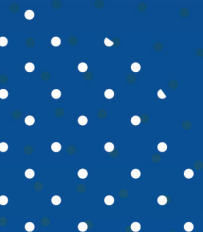
Figure 1 Conceptual framework

## Expected results

Local and regional government agencies use the study findings to formulate policies to mitigate the impact of the COVID-19 pandemic.



# Methodology



## Study design

Cross-sectional study

## Study setting

Thirty-nine (39) sub-districts in Pattani, Yala, and Narathiwat Provinces.

## Study population

Households according to the population registries in Pattani, Yala, and Narathiwat Provinces, with the total number of 590,617 households.

## Study participants

Study participants included heads of households listed in the official household registry in Pattani, Yala, and Narathiwat. The sample size was calculated by according to the following formula:

$$n = \frac{\frac{z_{\alpha/2}^2 \times p(1-p)}{e^2}}{1 + \left( \frac{z_{1-\alpha/2}^2 \times p(1-p)}{e^2 N} \right)}$$

Where:

N = number of households in study area

Z<sub>a/2</sub> = the critical value (at 95% confidence, Z<sub>a/2</sub> = 1.96)

e = margin of error is 5 percent (e=0.05)

p = proportional of households with economic or social impacts from COVID-19, assumed at be at an arbitrary 50 percent (p=0.50)

The required sample size was 736 households. For this study, investigators estimated 10 percent non-response from sampled households, and thus aimed to collect data from 819 households. Investigators sampled the households using stratified sampling method, start with simple random sampling of 13 sub-districts in each of the provinces (39 sub-districts in total): Pattani and Yala had a total of 245 sub-districts each, whereas Narathiwat had 246 sub-districts. After sampling the sub-districts, investigators then sampled 21 households per sampled sub-district, yielding a total of 819 households.

## Study instrument

The study instrument was a structured interview questionnaire (see the Appendix) which included:

- Part 1: Basic information of households
- Part 2: The Impact on People, Families, and Neighborhoods
- Part 3: Effects on Mental Health and Access to Information
- Part 4: COVID-19's impact on the household's economic dimension
- Part 5: COVID-19's Effects on the Household Diet Dimension
- Part 6: COVID-19's Effects on the Household Health Care Dimension
- Part 7: Obtaining federal aid, as well as corrective and recovery interventions
- Part 8: Household Adaptation during the COVID-19 crisis

Investigators assessed the instrument's validity by requesting expert reviews, then pilot-tested the instrument among 30 participants whose demographic characteristics were similar to those of the anticipated study participants. The investigators then further revised the study questions to be more suitable for the participants.

## Sampling and data collection procedures

1. Investigators obtained the list of sub-districts, villages, and households from the Ministry of Interior with collected by the Prince of Songkla University Pattani Campus Graduate Volunteer Program Alumni Association

2. The investigators used stratified the list of sub-districts by province, and randomly sampled 13 sub-districts from each province, resulting in 39 study sub-districts in total. The first listed village in each sub-district according to official information was designated as the study villages.

3. Investigators then used simple random sampling to select 21 households from the list of households in each sampled village, thus resulting in a total of 819 households.

4. Investigators trained field data collectors with regard to the study protocol as well as the following protocols for conducting survey research during the COVID-19 pandemic situation:

4.1 Field data collectors were to receive health risk assessment by local health personnel prior to contacting the participants. Only data collectors with low risk were allowed to conduct interviews.

4.2 Data collectors and participants were to wear masks at all time during the interview.

4.3 Data collectors were to perform hand hygiene and clean equipment with 70% alcohol before and after the interview.

4.4 Data collectors were to choose a well-ventilated location for the interview and maintain a distance of 1.5 meters during the interview.

4.5 Data collectors were to avoid physical contact. The interview was to take approximately 50 minutes.

4.6 Data collectors were to be residents of the same sub-district as the participants.

5. Field data collectors were to adhere to the following procedures when conducting data collection:

5.1 Data collectors were to explain the consent form and clarify issues related to the study objectives, procedures, as well as benefits and potential impacts of the study in details. Other issues included in-kind reimbursement for the study participants and allowing adequate time for the participant to ask questions.

5.2 Data collectors were to allow the participants to make decision on their free will.

5.2.1 If a participant expressed an interest in participating, the data collector was to conduct the interview in a courteous manner, using language that was appropriate for the participant's level of comprehension, and avoiding scientific and English-language terms.

5.2.2 If a participant did not agree to participate, the data collector was to explain about the following issues:

(1) The alternative choices available to the participant in case of refusal to participate

(2) The legal right of the participant to withdraw from the study at all time, without losing any benefit at present or in the future.

6. Data collectors recorded the interview responses onto the questionnaire using Kobo Collect.

7. With regard to confidentiality, the study instrument contained no field for personally identifiable information or personal details about the participant. Information recorded by the data collectors would be uploaded to the document server at the Faculty of Nursing at Prince of Songkla University Pattani Campus. Only the system administrator had access to the study data, thus restricting access.

## Data analysis

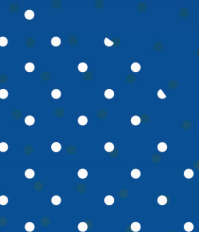
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Data from Kobo Collect would be downloaded in spreadsheet format for data cleaning and analyses. Data analysis procedures will include descriptive statistics (frequencies, percentages). Investigators will perform cross-tabulate to disaggregate the identify groups experiencing particularly high disparities in the impact of the pandemic.





# Results and discussion



Between April 12 and June 11, 2021, during the first wave of the pandemic in the Deep South provinces (Pattani, Yala, and Narathiwat) investigators surveyed 819 households in 39 sub-districts. The study findings are as follows:

## Characteristics of the study participants

Investigators collected data from heads of sampled households, hereinafter referred in this section as the study participants. Demographic and socioeconomic characteristics of the study participants in each province are summarized in Table 1.

**Table 1** General characteristics of the study respondents by province (n = 819).

Basic Information	Frequency (percent)		
	Pattani	Yala	Narathiwat
Gender			
Male	55 (20.2)	61 (22.3)	80 (29.3)
Female	218 (79.8)	212 (77.7)	193 (70.7)
Age (mean = 46.5, standard deviation = 14.8)			
Less than 30 years old	35 (12.8)	36 (13.2)	42 (15.4)
30-39 years old	60 (22.0)	61 (22.3)	48 (17.6)
40-49 years old	68 (24.9)	65 (23.8)	65 (23.8)
50-59 years old	46 (16.9)	65 (23.8)	54 (19.8)
60 years and older	64 (23.4)	46 (16.9)	64 (23.4)
Religion			
Buddhism	45 (16.5)	19 (7.0)	6 (2.2)
Islam	228 (83.5)	254 (93.0)	267 (97.8)

**Table 1** General characteristics of the study respondents by province (continued)

Basic Information	Number (percent)		
	Pattani	Yala	Narathiwat
Education			
No education	33 (12.1)	43 (15.8)	65 (23.8)
Elementary school, Grade 4 / Grade 6 / Grade 7 or equivalent	99 (36.3)	107 (39.2)	91 (33.3)
Middle school or equivalent	26 (9.5)	28 (10.3)	46 (16.8)
High school level or equivalent	51 (18.7)	42 (15.4)	42 (15.4)
Vocational level	26 (9.5)	7 (2.6)	12 (4.4)
Undergraduate	36 (13.2)	43 (15.8)	16 (5.9)
Postgraduate	2 (0.7)	3 (1.1)	1 (0.4)
Current Occupation			
Civil servant/ state enterprise	13 (4.8)	13 (4.8)	2 (0.7)
Private company employees	4 (1.5)	4 (1.5)	2 (0.7)
Retail Sales / Retail Services	21 (7.7)	21 (7.7)	24 (8.8)
Private business/ Entrepreneur	10 (3.7)	23 (8.4)	12 (4.4)
Laborer / General Contractor	67 (24.5)	45 (16.5)	82 (30.0)
Retired/ Butler/ Housewife	25 (9.2)	17 (6.2)	44 (16.1)
Farmers/ Fisheries	66 (24.2)	102 (37.4)	46 (16.8)
Freelancers (lawyers, architects)	2 (0.7)	1 (0.4)	0 (0.0)
unemployed	45 (16.5)	22 (8.1)	51 (18.7)
Others	20 (7.3)	25 (9.2)	10 (3.7)

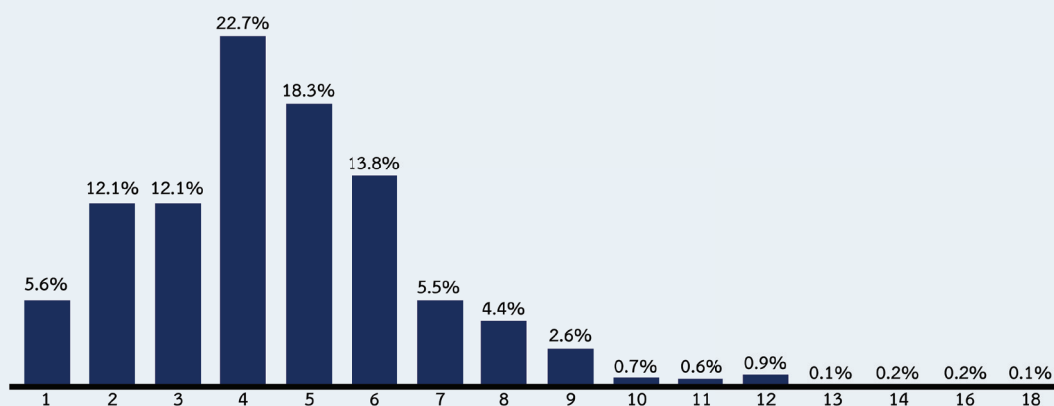
The majority of the participants were female (76.1%), between the age of 40 to 49 years, identified as Muslims (80%-90%). Approximately half of the participants completed elementary education or less. Most participants worked as manual laborers, farmers or fishers.

Investigators also asked participants about number and sex of persons living in the participant's household (including the participants). The age and sex distributions of the household members are shown in Table 2.

**Table 2** Number of members living in the household (n=819 households)

Detail	Male	Female	Both
	Number (Percent)	Number (Percent)	Number (Percent)
0-2 years old	90 (5.0)	85 (4.3)	175 (4.6)
3-5 years old	126 (7.0)	115 (5.8)	241(6.4)
6-18 years old	449 (25.0)	437 (22.0)	886 (23.4)
19-39 years old	559 (31.0)	619 (31.1)	1,178 (31.0)
40-59 years old	365 (20.3)	467 (23.4)	832 (21.9)
60 years and over	211 (11.7)	272 (13.6)	483 (12.7)
<b>รวม</b>	<b>1,800 (100)</b>	<b>1,995 (100)</b>	<b>3,795 (100)</b>

Among the 819 households of the study participants, there were a total of 3,795 family members. Although the majority of households had between 1-6 members, there were larger households with up to 18 members (Figure 2). Approximately 34% of the participants' households had 1-3 children aged under 5 years (Figure 3).



**Figure 2** Distribution of sizes of study participants' households

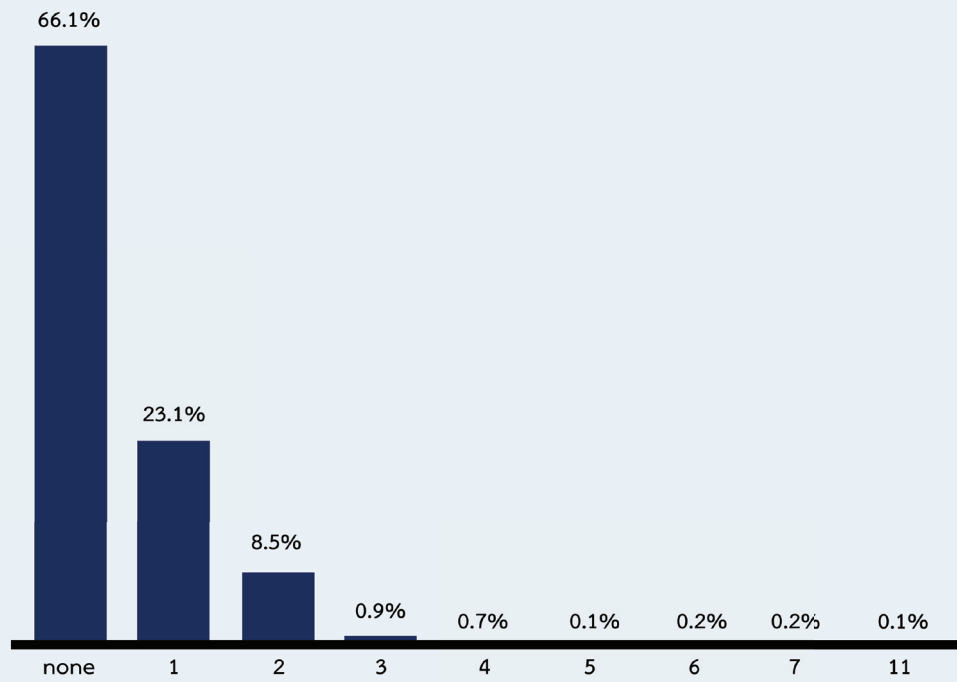


Figure 3 Number of children under 5 years of age in the household

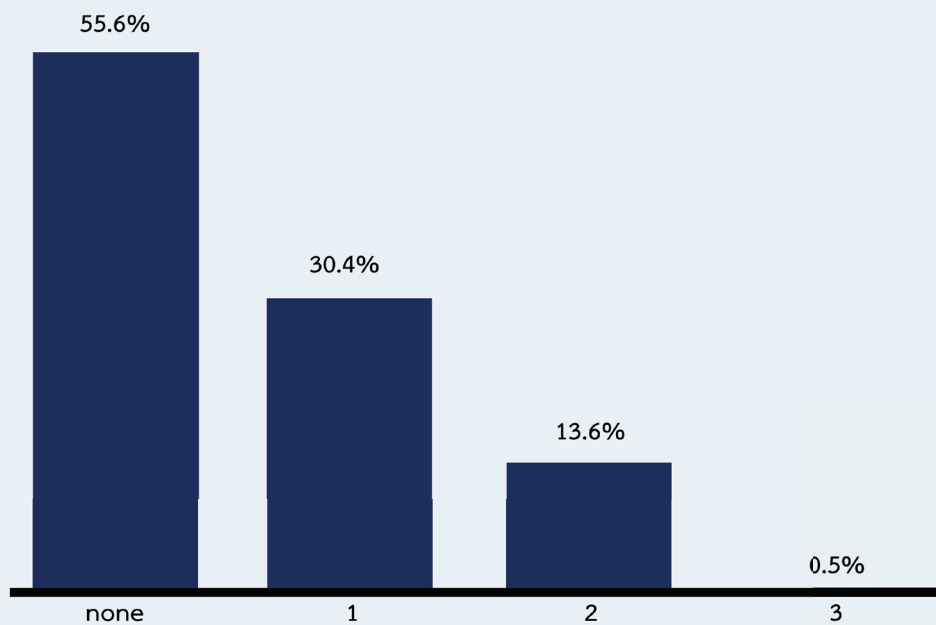
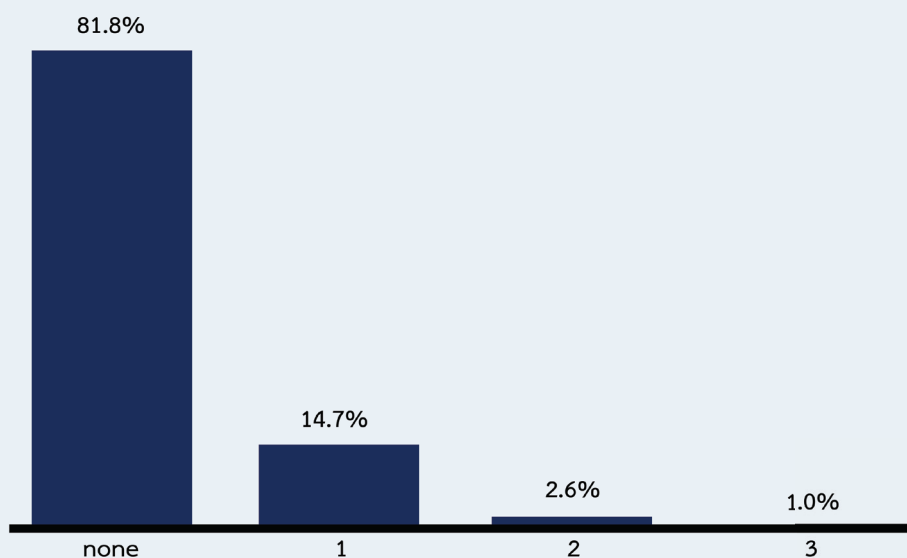


Figure 4 Number of elderly persons (age 60 years and over) in the household



**Figure 5** Number of persons with chronic illness or disability in the household

## Characteristics of the participants' community

The majority of the participants' households were located in a rural area (64.5 percent in Pattani, 70.0 percent in Yala, and 46.2 percent in Narathiwat) (Table 3). The most common reported primary economic activity in the community was growing cash crops (37.7% in Pattani, 54.2% in Yala, and 66.3% in Narathiwat) (Table 4). Among the 39 study communities, 6 villages (15.4%) had gone into lockdown during the first wave of the COVID-19 pandemic (Table 5).

**Table 3** Location of the study community, stratified by province

Details	Number of Households (Percent)		
	Pattani	Yala	Narathiwat
Suburban community	87 (31.9)	74 (27.1)	123 (45.0)
Rural community	176 (64.5)	191 (70.0)	127 (46.)
Urban community	10 (3.6)	8 (2.9)	23 (8.4)
<b>Total</b>	<b>273 (100)</b>	<b>273 (100)</b>	<b>273 (100)</b>

**Table 4** Primary economic activity in the study community, stratified by province

Detail	Number of Households (percent)		
	Pattani	Yala	Narathiwat
Commerce	56 (20.5)	26 (9.5)	33 (12.1)
Farming	98 (35.9)	49 (18.0)	49 (17.9)
Commercial plant cultivation, including rubber, oil palm, coconut, rambutan, mango-steen, durian, longkang.	103 (37.7)	148 (54.2)	181 (66.3)
Vegetable farming	16 (5.9)	50 (18.3)	10 (3.7)
<b>Total</b>	<b>273 (100)</b>	<b>273 (100)</b>	<b>273 (100)</b>

**Table 5** Experience of COVID-19 lockdown in the study communities

Detail	Number (Villages)	Percent
Villages never on lockdown	33	84.6
Villages on lockdown, details as follow: Min = 14 days Max = 30 days Average = 26 days	6	15.4
<b>Total</b>	<b>39</b>	<b>100</b>

## Economic impacts

Economic impacts on households include impacts on livelihood, income, expenditure, and consumer debts. Investigators compared the impacts before and after the COVID-19 pandemic and the findings were as follow:

### Impact on livelihood

The majority of the household members were manual laborers or agricultural workers. The proportion of unemployed household members rose of 10.6% before the first wave of COVID-19, to 19.1% during the first wave, and 15.9% after easing of disease control measures (i.e., after the first wave). Employment as manual laborers decreased from 38.7% (pre-pandemic) to 32.4% during lockdown and 35.1% (after the first wave). Salaried civil servants and government employees were only slightly affected (Figure 6).

The unemployment rate of family members, stratified by community type, is depicted in Figure 7. Suburban and urban communities experienced lower unemployment than rural communities, the latter of which saw a drop in unemployment. Most rural communities engaged in agriculture, which was less affected by the pandemic. Community members who migrated outside the region (to another province or overseas) were forced to return home because of unemployment during lockdown period resulting in suspension or termination of employment (86 household members in 54 households, or 7% of all households) (Tables 6-8).

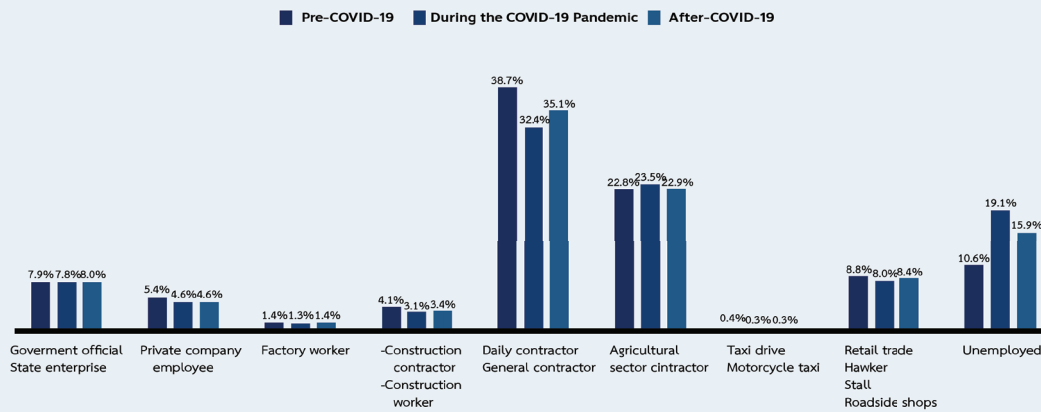


Figure 6 Proportion of occupation of household members before, during, and after the first wave of COVID-19 pandemic (n=1,774)

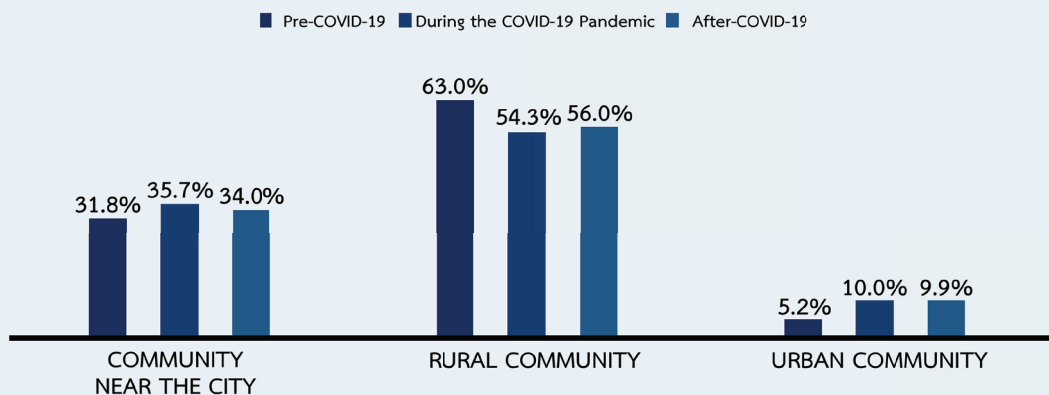


Figure 7 Household unemployment proportion by community type in the period before, during and after the first wave of COVID-19 epidemic



**Table 6** Households with members who were migrant returnees (from other provinces/abroad) during the COVID-19 pandemic

Household members	Number (households)	Percent
None	769	93.0
Members	54	7.0
1 member	31	3.8
2 members	14	2.0
3 members	9	1.2
<b>Total</b>	<b>819</b>	<b>100</b>

**Table 7** Situation of household members who were migrant returnees

Migration in the time of COVID-19	Number	Percent
Move back and live with the family without being able to find work or earn money	62	72.1
Move back to work in the community or earn money to take care of themselves.	16	18.6
Move back to help the family do farming or other agricultural occupation	5	5.8
Move back to do a new job in the community and help the family do farming	3	3.5
<b>Total</b>	<b>86</b>	<b>100</b>

**Table 8** Reason for returning home during the COVID-19 pandemic among household members who were migrant returnees

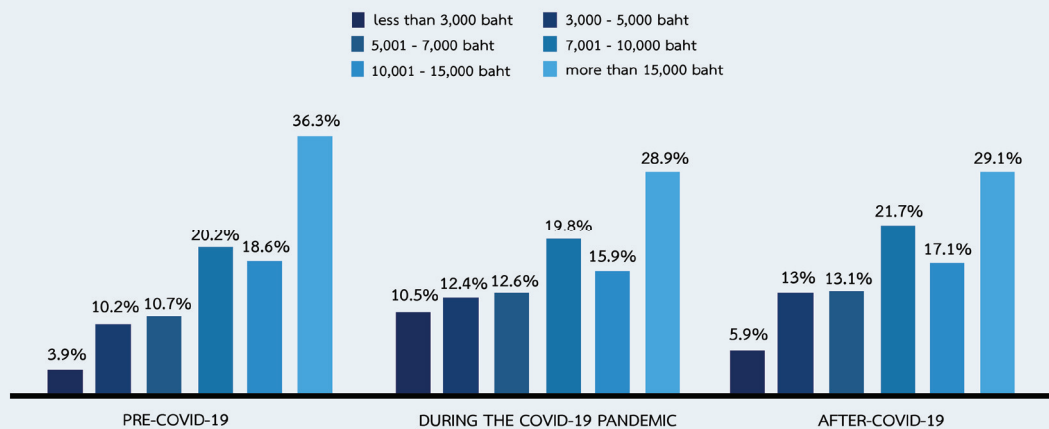
Motives for family members returning home	Number	Percent
Terminated (permanently)	35	40.7
Pause work because the workplace is closed or work from home	12	14.0
The workplace is closed or prohibited from trading.	31	36.0
Decrease in the number of purchasers/users using the service and unable to bear the cost	8	9.3
<b>Total</b>	<b>86</b>	<b>100</b>

### Impact on income

Before the COVID-19 pandemic, the proportion of households with income below the poverty line (below 3,000 THB per month) was approximately 4%. The proportion increased more than two folds (to 10%) during the first wave of the pandemic, then reduced to 6% after the first wave but remained 2% higher than the pre-pandemic period (Figure 8).

With regard to income of family members (n=1,269), the proportion of those with income of more than 5,000 THB per month decreased compared to the pre-pandemic period (Figure 9), whereas the proportion of those who earned less than 5,000 THB per month increased from 41.1% during the pre-pandemic period to 47.5% during the pandemic and lockdown, and to 46.3% after the first wave. Thus, although the restrictions eased, the impact on income was not mitigated. The proportion of household members who earned more than 10,000 THB per month decreased from 15.3% to 13.6%, then slightly increased to 14.4% after easing of lockdown restrictions.

With regard to the impact on income, stratified by occupation, during the lockdown and after the first wave compared to the pre-pandemic period (i.e., before March 2020), it was found that those who engaged in retail trade, hawkers, stalls, street shops, self-employed, minimum wage workers, and taxi-motorbike drivers experienced a significant reduction in income during the lockdown and after the easing of restriction measures compared to other occupations (Figure 10).



**Figure 8** Proportion of households by monthly income level before, during, and after the first wave of COVID-19 (n=736)

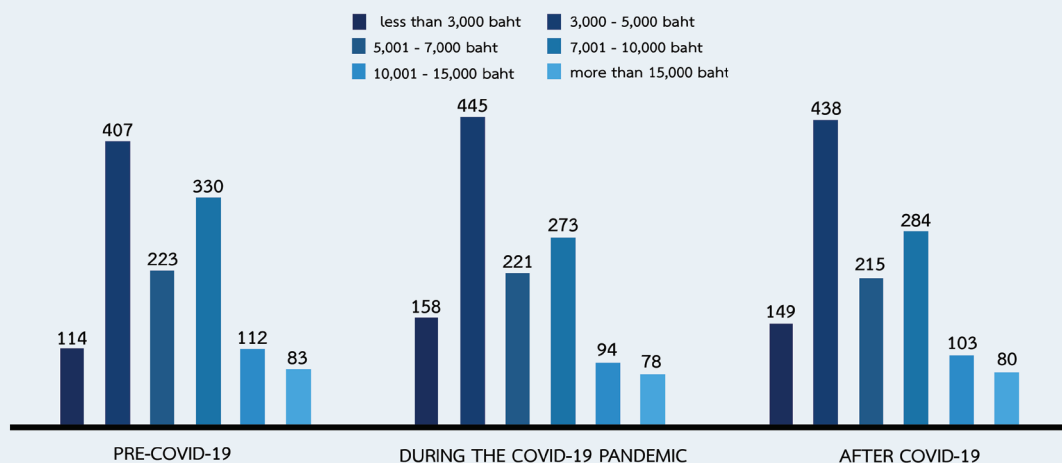


Figure 9 Number of household members by monthly income before, during and after the first wave of COVID-19 (n=1,269)

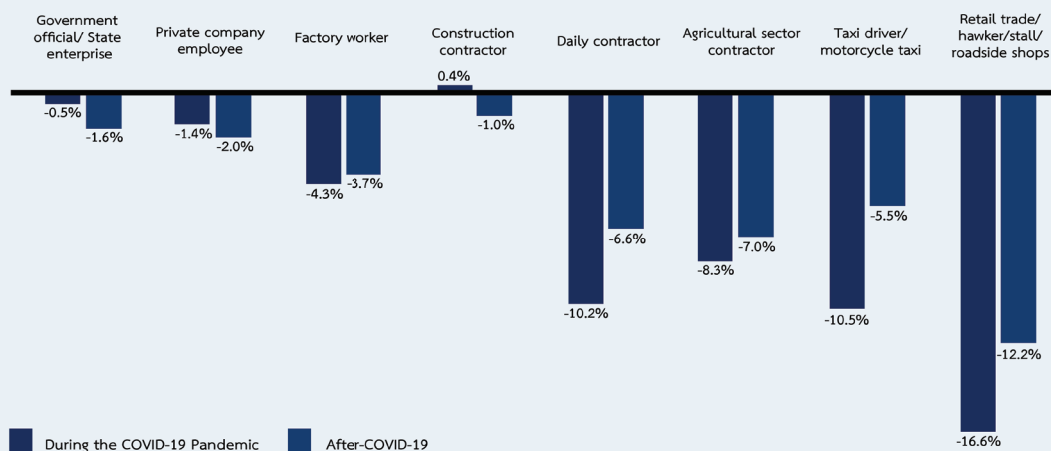
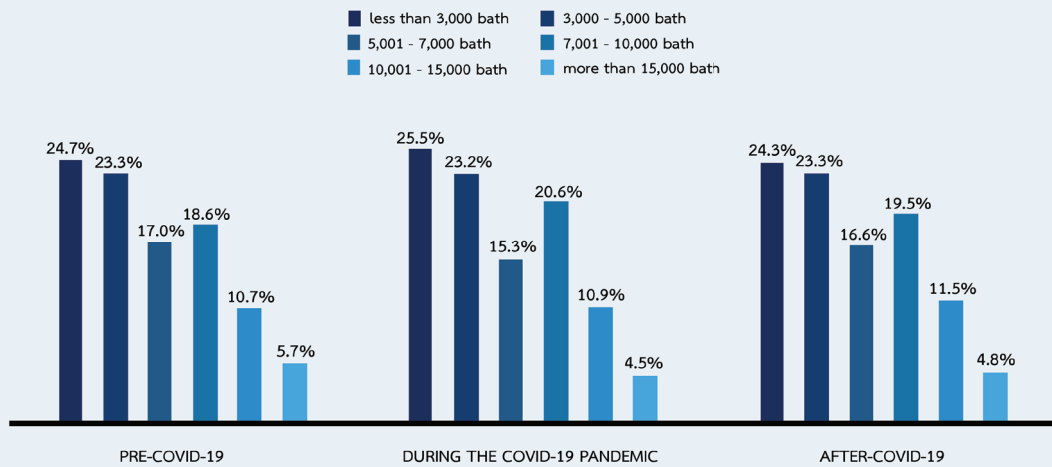


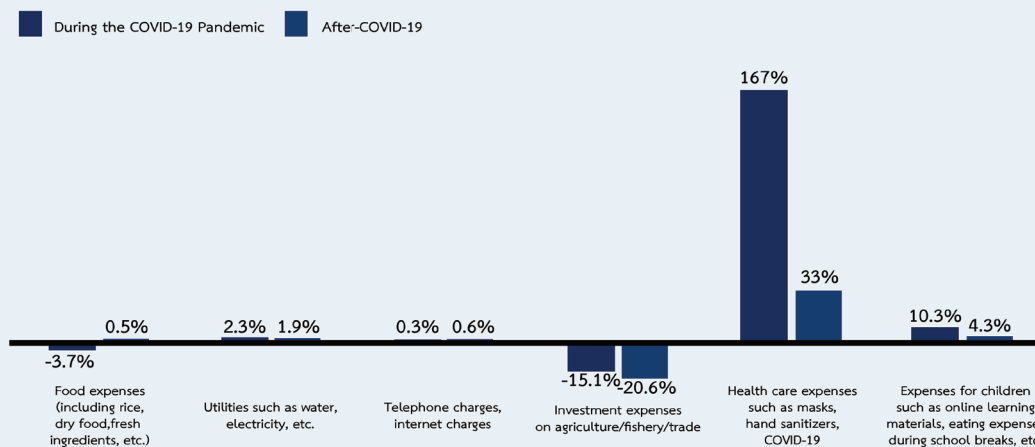
Figure 10 Changes in income of household members during and after the first wave of COVID-19 compared to before the first wave, stratified by occupation

### Impact on expenditures

The total expenditures for food, utilities, costs of agriculture or fishery or trade, health care expenses, and children-related expenses before, during, and after the first wave of the COVID-19 pandemic are as shown in Figure 11. Movements were in the same direction as income, i.e., expenditures fell during lockdown and after easing of restriction measures. Most households reported expenses at under 5,000 THB per month, whereas the proportion of households that spent more than 15,000 THB per month also decreased. The proportion of healthcare-related expenditures (e.g., the costs of masks, hand sanitizers, and COVID testing) notably rose, whereas expenditures on costs for agriculture, fishery and trade notably reduced (Figure 12).



**Figure 11** The proportion of households by monthly expenditure level in the period before, during and after the first wave of COVID-19 (n=819)



**Figure 12** Changes in expenditures during and after the first wave of COVID-19, compared to the pre-pandemic phase, stratified by type of expenditures.

## Impact on consumer debts

With regard to formal and informal debts among household members (n=293), the amount of formal sector debts (to cooperatives and banks, etc.) and informal debts (to relatives, friends, lenders, online loans, etc.) increased by 5.9% during the pandemic compared to the pre-pandemic period, it was still 5.1% higher after the first wave compared to the pre-pandemic period. Average household debts per month were 5,799 THB during the pre-pandemic period, 6,140 THB during the pandemic, and 6,097 THB after the first wave (Figure 13). The proportion of households with more than 3,000 THB in debts obligation increased during the pandemic and reduced to a level near the pre-pandemic period during the first wave (Figure 14). Those who experienced the most drastic changes in debts burden were those who work in construction, followed by those who worked in agriculture, vendors, and manual laborers (Figure 15).

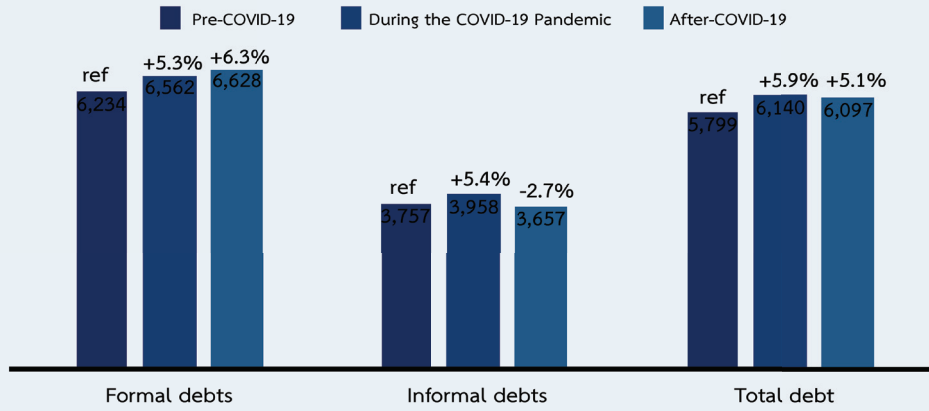


Figure 13 Average formal and informal Debt of Household Members Comparison between before, during and after the first wave of COVID-19 epidemic (n=293)

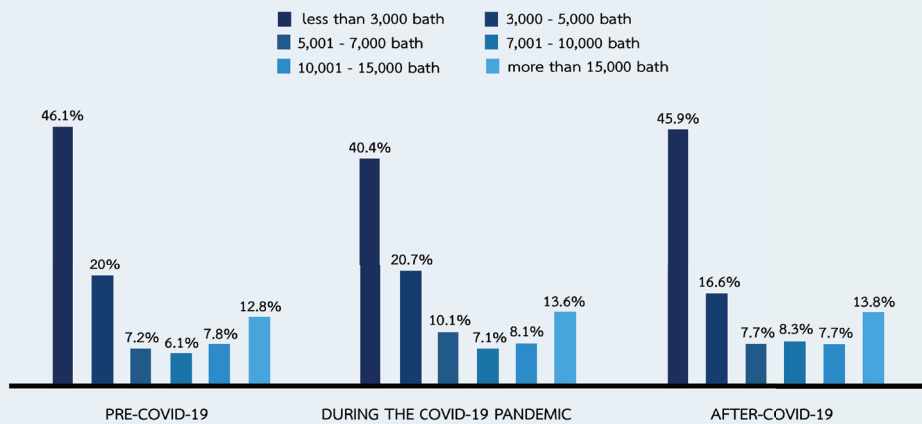


Figure 14 Household proportion by monthly debt obligation before, during, and after the first wave of COVID-19 (n=198)

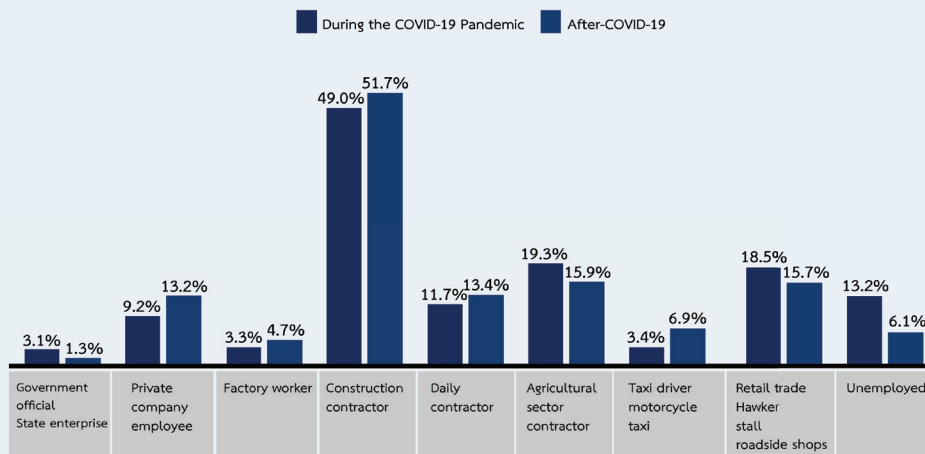


Figure 15 Changes in monthly debt obligation among household members during and after the first wave of COVID-19 compared to before the first wave, stratified by occupation (n=293 household members)

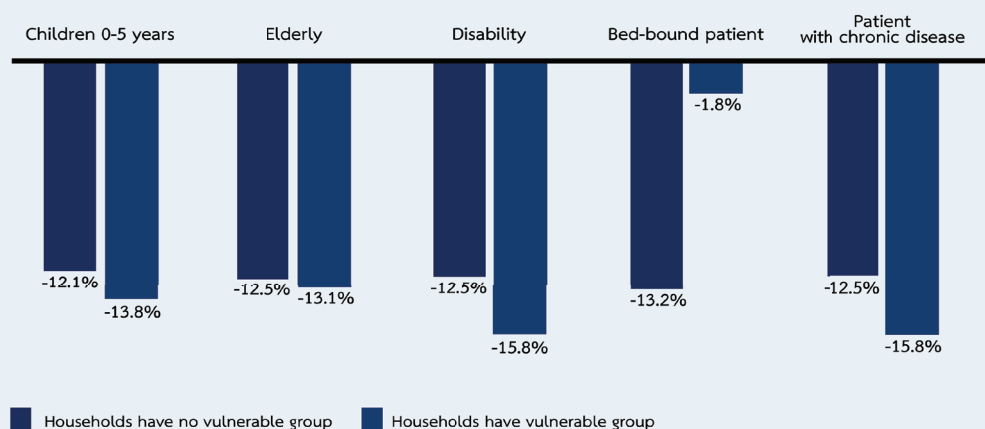
Comparing household income, debts, and expenditures before, during, and after the first wave of COVID-19, suburban communities (semi-urban/semi-rural) and rural communities had lower income and expenditures, but had higher debts. Households in urban areas had lower income but higher debts and expenditures.

**Table 9** Comparison of household income, debts and expenditures before-during-after the first wave of COVID-19, stratified by area

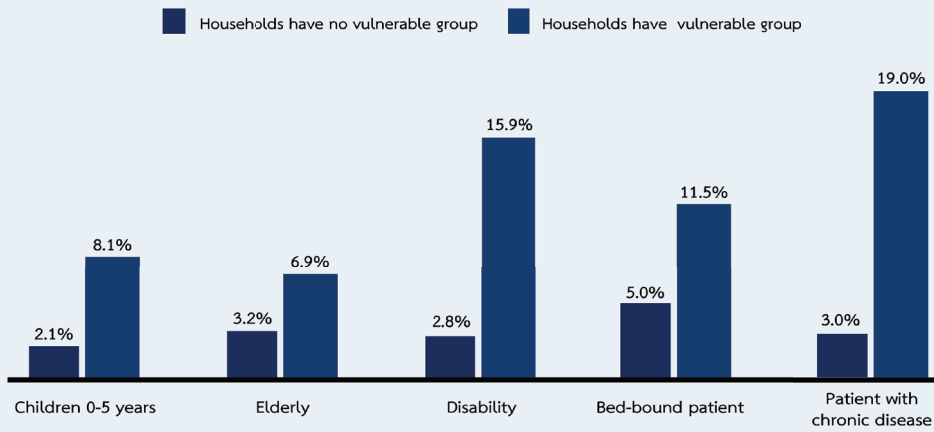
Detail	Average (Baht per month)		
	Before the first wave covid-19 (before March 2020)	During covid-19 (March-May 2020)	Before the first wave covid-19 (Jun 2020-May 2021)
<b>Suburban (semi-urban-semi-rural) communities</b>			
Income (249 households)	16,724 (references)	14,859 (decreased 11.2%)	14,822 (decreased 11.4%)
Income (54 households)	21,618 (references)	19,691 (decreased 9.0%)	19,701 (decreased 8.9%)
Debt (54 households)	6,441 (references)	6,876 (increased 6.7%)	7,012 (increased 8.9%)
Expenses (285 households)	6,630 (references)	6,452 (decreased 2.7%)	6,299 (decreased 5.0%)
<b>Rural communities</b>			
Income (445 households)	14,664 (references)	12,693 (decreased 13.4%)	13,002 (decreased 11.3%)
Income (128 households)	17,889 (references)	16,069 (decreased 10.2%)	15,942 (decreased 10.9%)
Debt (128 households)	7,431 (references)	8,133 (increased 9.4%)	8,467 (increased 13.9%)
Expenses (493 households)	6,586 (references)	6,409 (decreased 1.7%)	6,496 (decreased 1.4%)
<b>Urban Communities</b>			
Income (41 households)	15,421 (references)	13,205 (decreased 14.4%)	13,882 (decreased 10.0%)
Income (16 households)	22,930 (references)	19,825 (decreased 13.5%)	20,211 (decreased 11.9%)
Debt (16 households)	7,808 (references)	9,720 (increased 24.5%)	8,524 (increased 9.2%)
Expenses (41 households)	4,513 (references)	4,686 (increased 3.8%)	4,621 (increased 2.4%)

### Economic impact on households with vulnerable members

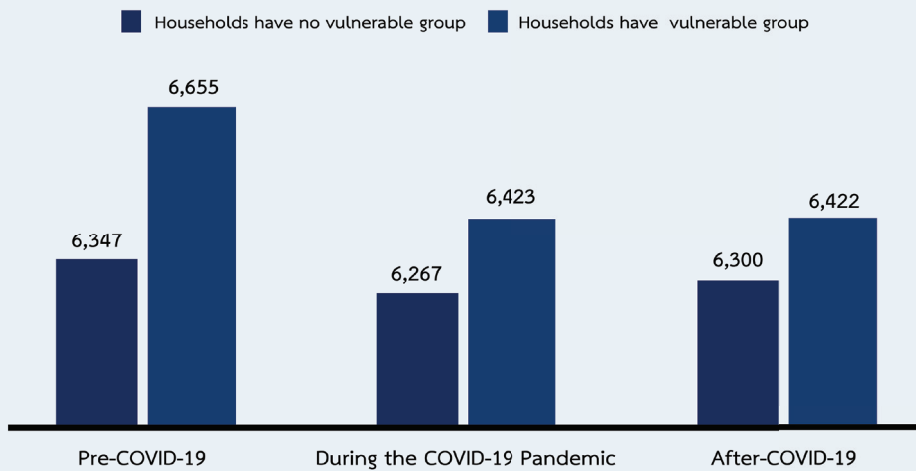
All types of households with members in vulnerable groups experienced a reduction in income during the lockdown period, to a greater extent than households without members in vulnerable groups (Figure 16). This reduction in income could be attributed to household members' working in the informal sector. Suspension of employment due to COVID-19 situation and preventive measures led to a reduction in income. Households with members in vulnerable groups also experienced a greater increase in household debts compared to households without members in vulnerable groups, particularly in households with chronic disease patients (Figure 17). The greater burden of debts also caused these households to experience hardship for a longer period than households without members in vulnerable groups (Figure 18). The difference in expenditures could be attributed to a number of reasons, including additional expenses in caring for young children and the medical needs of the elderly and disabled persons (Figure 18). However, comparison of household expenditures before versus after the first wave of COVID-19 showed that overall expenditures seemed to decrease, except for households with bedridden patients, which reported an increase in expenditures during the first wave (Figure 19).



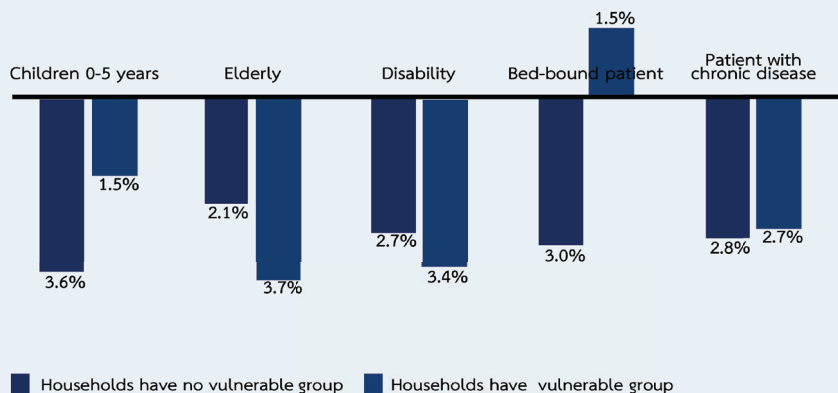
**Figure 16** Decrease of income in households during COVID-19 with and without each type of vulnerable group



**Figure 17** Increase in households' liabilities during COVID-19 with and without each type of vulnerable group



**Figure 18** Comparison of expenses in households with and without vulnerable groups before-during-after the first wave of COVID-19 epidemic



**Figure 19** Decrease and increase of households' expenditure during COVID-19 with and without each type of vulnerable group



### Social impacts impact on food security

This study included the Strategic Problem Solving Index (SPSI) questions. Participants answered the questions on their household’s behalf to assess the frequency applying various solutions during the period of 7 and 30 days prior to the interview. The survey found that 21.2% of households (174 households) experienced moderate to severe hunger (Figure 20). Households with less than 3,000 THB in monthly income were at the highest risk of experiencing severe hunger (Figure 21).

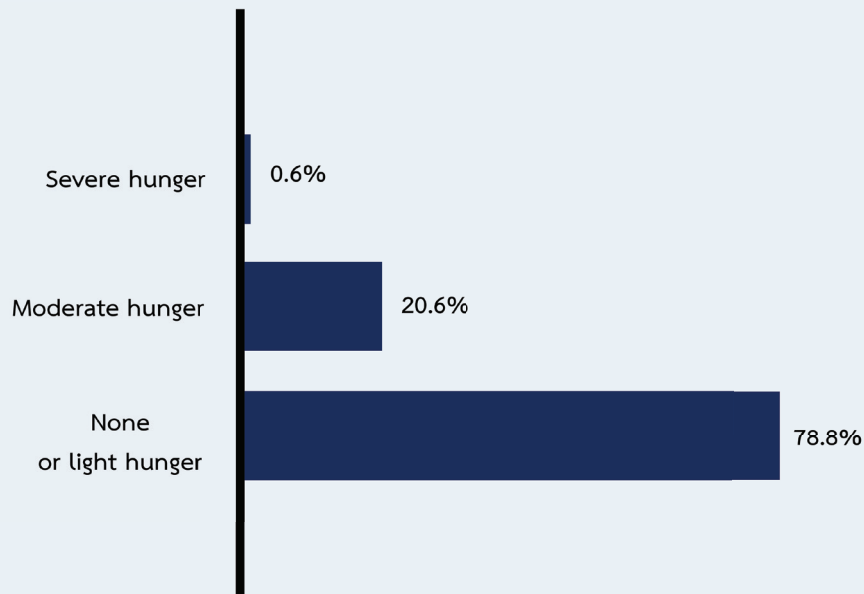


Figure 20 Participants’ households by level of hunger

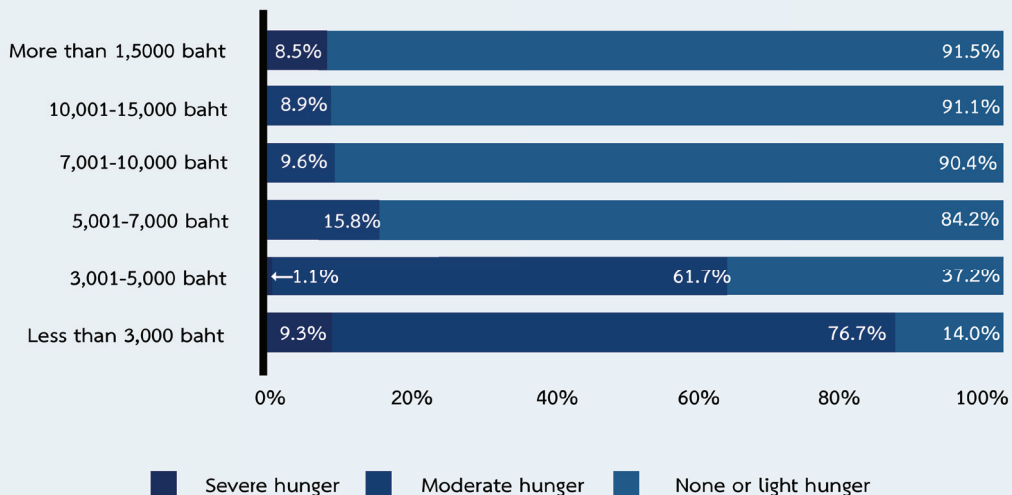


Figure 21 Reported experience of hunger, stratified by monthly household income

With regard to experience of hunger in past 30 days, 22.4% of households reported having inadequate food to consume at home, 24.2% of households had a family member who went to bed with hunger and anxiety of not having enough food, and 8.4% of households reported not having anything to eat all day due to having inadequate food (Figure 22).

With regard to solutions to problems of food insecurity in the past 7 days, 29.3% of households (240 households) had to consider less desirable and lower-priced food, 14.1% (115 households) had to ask for help from friends or relatives, 23.7% (194 households) had to reduce the portion of food in each meal, 17.4% (142 households) had to limit to reduce the amount consumed by adults in order to food young children, and 18.1% (148 households) had to reduce the number of meals consumed in a day. Calculation of the Coping Strategies Index (CSI) on Household Food Security using the mentioned five strategies, multiplying frequency of strategy with the severity of the strategy, five daily strategies, obtained by multiplying the frequency scale by the weight of severity, showed the mean CSI value of 3.5, with the maximum value of 50. The higher the CSI, the more severe the food insecurity issue in the household. It can be said that households in the three southernmost provinces are not as severely affected by food insecurity as in other places, considering that the maximum possible RCSI value for a 7-day period was 56 (Figure 23).

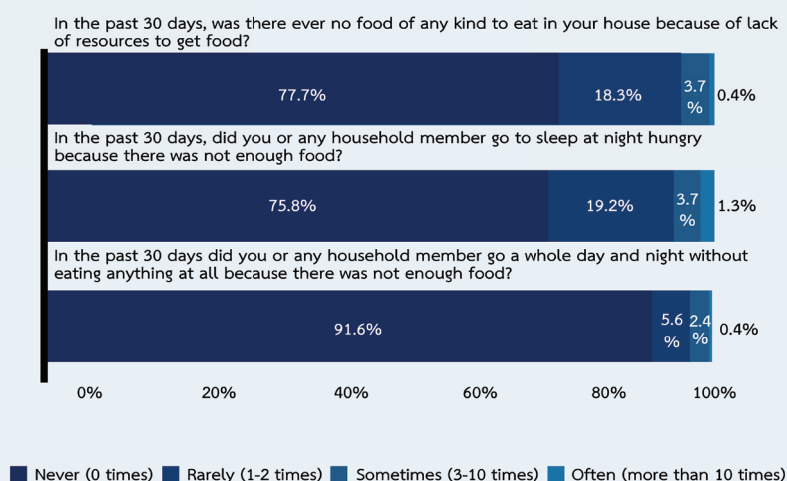


Figure 22 Measurement of hunger levels in the last 30 days

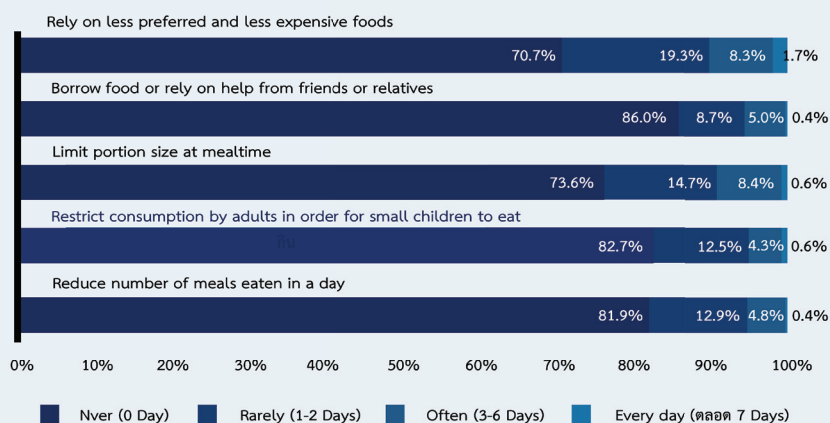
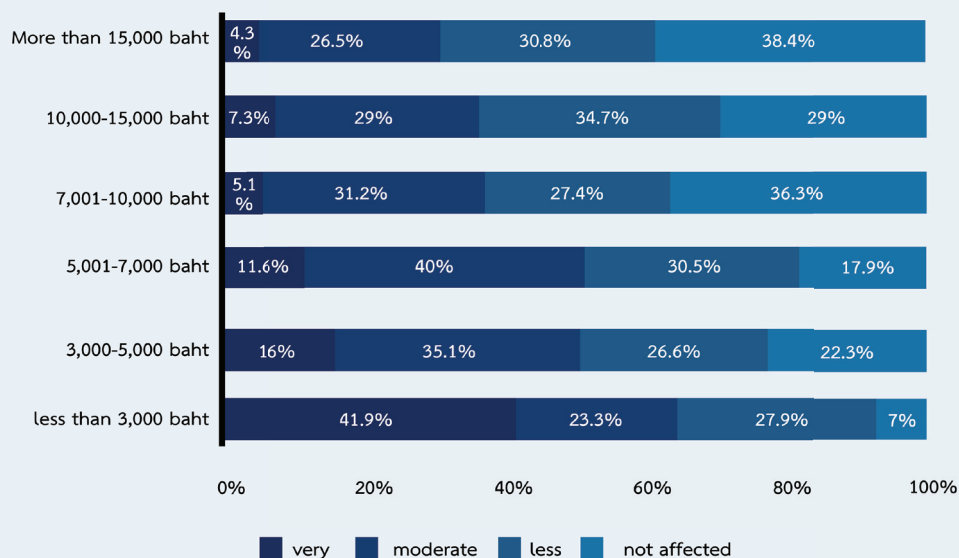


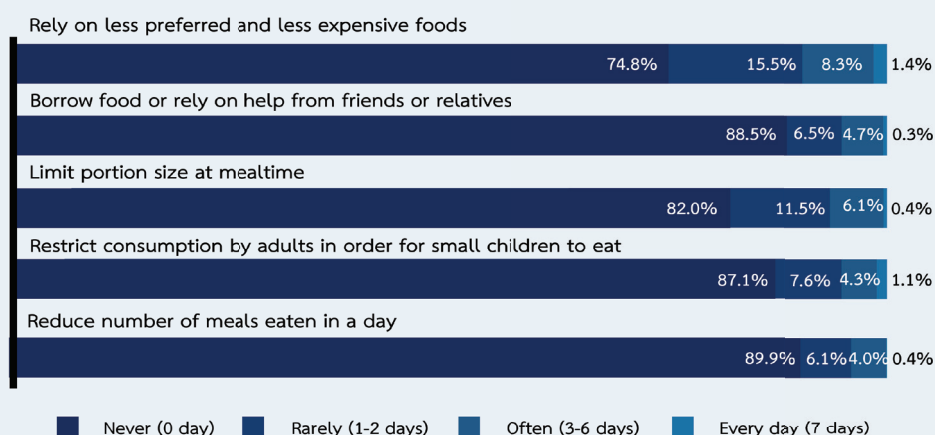
Figure 23 Households food problem solving in the last 7 days

The COVID-19 pandemic had the strongest effect on food security among low-income households, particularly those with less than 3,000 THB per month in income (Figure 24).



**Figure 24** Effects of lack of proper food consumption classified by household income level

With regard to food security situation among households with children under 5 years of age, approximately 10% of households in the region experienced food insecurity, which would have exacerbated the child malnutrition situation. The participating households' solutions included buying food at low price, decreasing the portion in each meal, and reducing the number of meals (Figure 25).



**Figure 25** Solving food problems for the past 7 days in households with children (0-5 years)

The practice of purchasing food from within the community slightly decreased during versus before the pandemic (-3%), whereas food purchase from the city dramatically decreased (-34%), and purchase from online shops and vendor carts increased by 9% and 5%. Farming households were relatively unaffected with regard to food security during the COVID-19 pandemic, due to access to food sources in the households and existing resources (Figure 26).

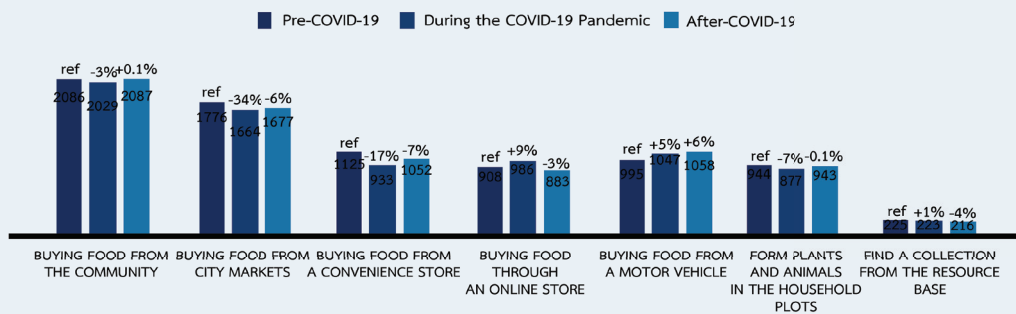


Figure 26 Comparison of spending in terms of food from various sources

### Impacts on everyday life of participants, household members, and communities

The survey found that both men and women were affected in their daily lives (e.g., getting haircuts, exercises) at the mild to moderate levels (Figure 27). Participants aged 40-49 years were the ones who the most commonly reported severe impacts (Figure 28).

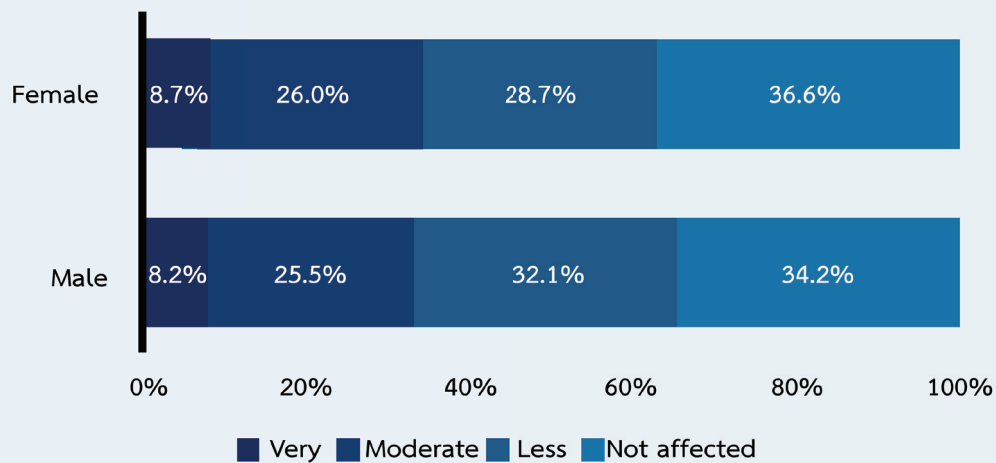
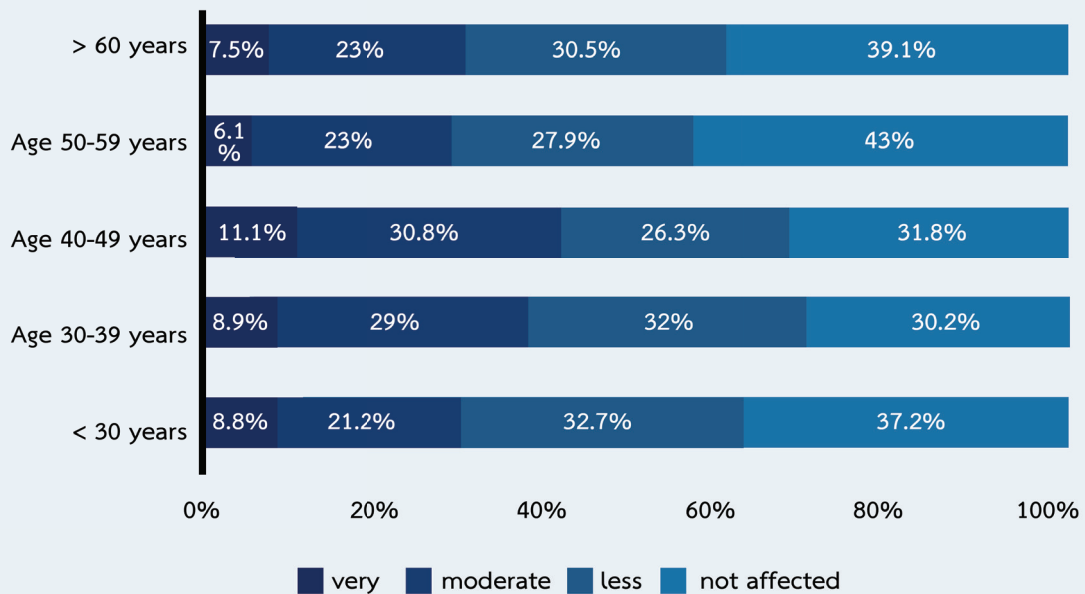
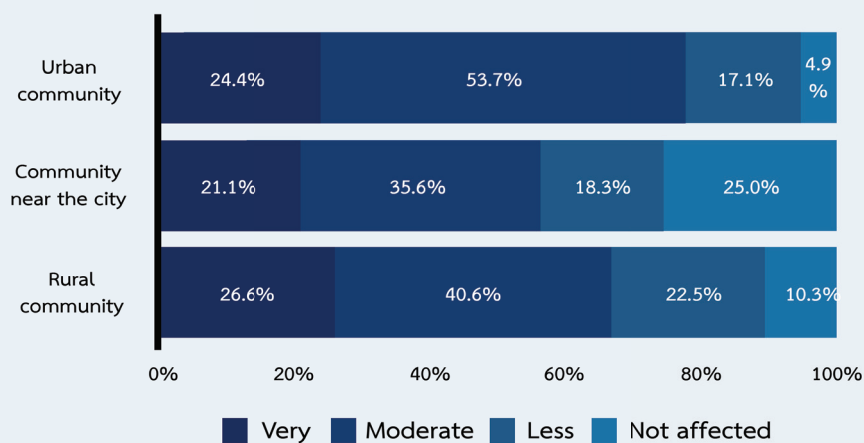


Figure 27 Level of impact of the pandemic on everyday activities (e.g., haircuts, exercises) by gender



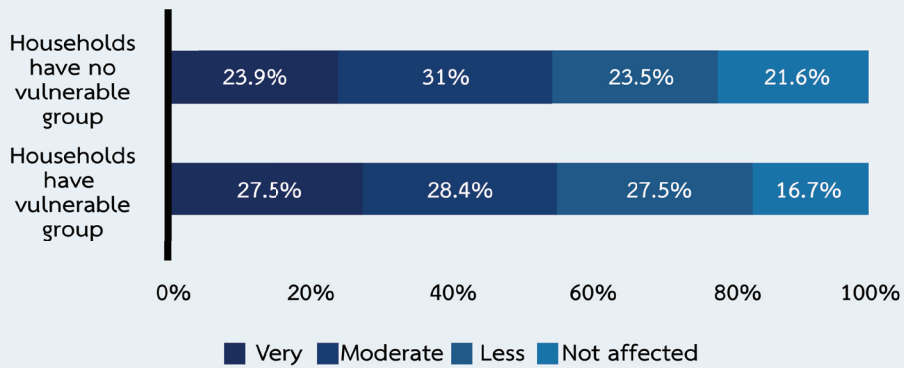
**Figure 28** Level of impact of the pandemic on everyday activities by age groups

In terms of the impact on purchasing of goods and going to markets, rural and urban communities were more likely to report high level of impact (26.6% and 24.4%, respectively) compared to suburban communities (21.1%) (Figure 29).



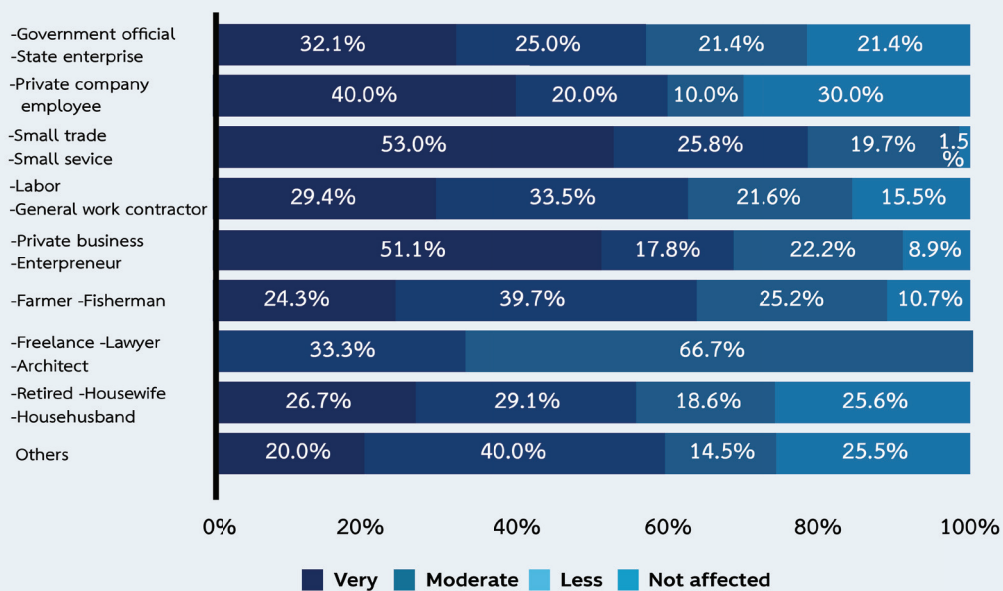
**Figure 29** Impact on purchasing of goods and going shopping at markets, stratified by community type

Among the 25% of households with reported impact on access to medical care, households with member (s) in the vulnerable population group were more likely to report severe impact on access to medical care compared to households without vulnerable members (27.5% vs. 23.9%, respectively) (Figure 30).



**Figure 30** Level of impact on access to medical care among household members, stratified by presence of member(s) in vulnerable population groups

With regard to loss of income, vendors and small-scale service providers were the group most likely to report severe loss of income, followed by business owners and entrepreneurs (Figure 31).



**Figure 31** Level of impact on loss of income, stratified by occupation

With regard to loss of income in different community types, participants living in urban communities were most likely to report severe loss of income (41.5%), followed by participants living in rural communities (38.5%) and participants living in suburban communities (28.5%) (Figure 32).

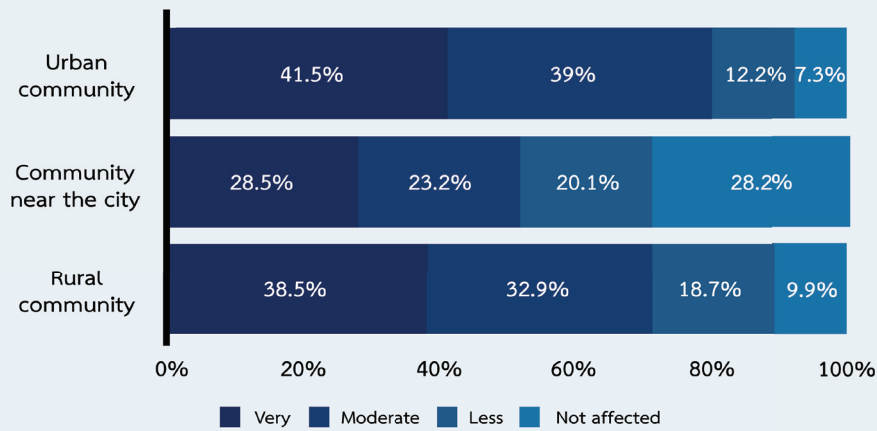


Figure 32 Level of loss of income, stratified by community type

Approximately 30% of study participants reported anxiety about everyday life. Women were more likely to report severe level of anxiety than men (33.4% versus 28.1%, respectively) (Figure 33). Severe anxiety about everyday life was most common among participants aged 40-49 years (37.4%) (Figure 34).

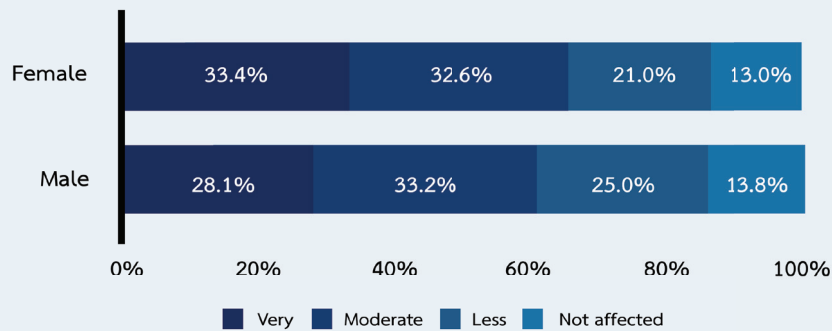


Figure 33 Level of anxiety about everyday life, stratified by sex

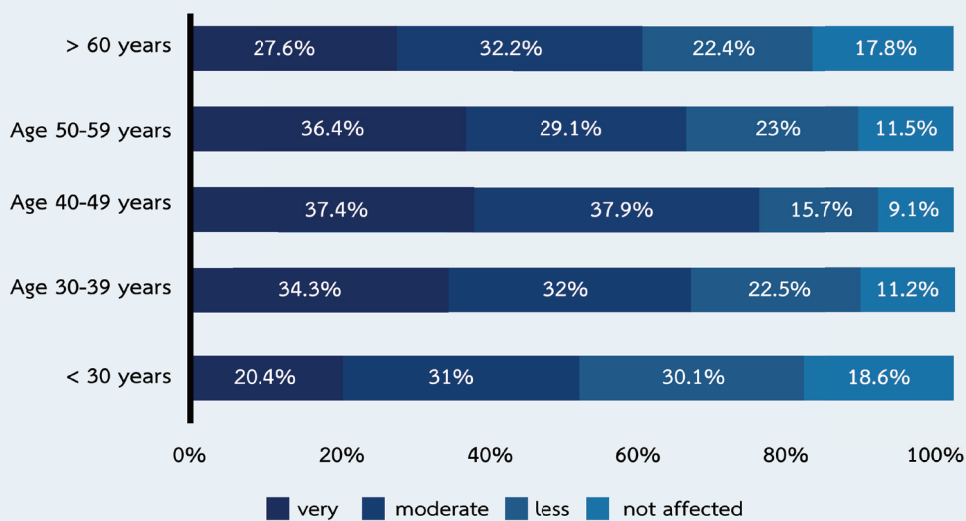
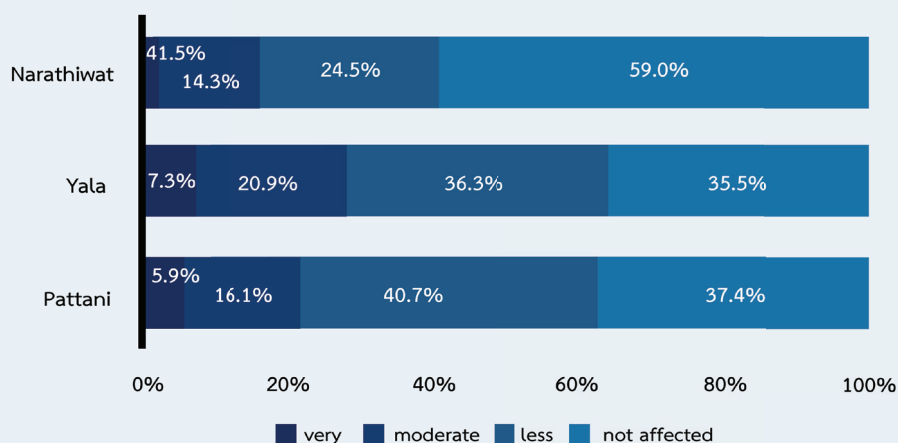


Figure 34 Level of anxiety about everyday life, stratified by age groups

Approximately 5% of the participants stated that the COVID-19 situation would have a severe impact on the South Thailand Insurgency violence, whereas most households stated that the pandemic would not increase the violence (Figure 35).



**Figure 35** Anticipated level of impact of the COVID-19 pandemic on the South Thailand Insurgency violence

### Social impact on vulnerable groups

Answers to the second question, i.e., the perceived impact of the COVID-19 pandemic on household member(s) in vulnerable population groups, are summarized in Table 10.

**Households with children aged 0-5 years** (n=278 participants, answering on behalf of household members): most households (77.4%) perceived no impact from the pandemic, and 18.3% of households reported reduction in income combined with increased expenses in caring for the mentioned household members. Other domains of impact included increased difficulty in accessing medical services, absorption of family stress, and being unable to access aid provided by the state (6.1%, 1.4%, and 1.1%, respectively).

**Households with children aged 6-12 years** (n=244 participants): most households (61.9%) perceived no impact from the pandemic, and 30.7% of households reported reduction in income combined with increased expenses in caring for the mentioned household members. Other domains of impact included absorption of family stress, increased difficulty in accessing medical services, inability to access aid provided by the state, and violence/physical harm (7.8%, 6.9%, 2.9%, and 0.4%, respectively).

**Households with children aged 13-18 years** (n=388 participants): most households (68.8%) perceived no impact from the pandemic, and 23.5% of households reported reduction in income combined with increased expenses in caring for the mentioned household members. Other domains of impact included absorption of family stress, inability to access aid provided by the state, increased difficulty in accessing medical services, and violence/physical harm (7.0%, 5.2%, 4.1%, and 0.3%, respectively).

**Households with elderly persons aged 60 years or older** (n=364 participants): most households (59.1%) perceived no impact from the pandemic, and 28.6% of households reported reduction in income combined with increased expenses in caring for the mentioned household members. Other domains of



impact included increased difficulty in accessing medical services, absorption of family stress, and inability to access aid provided by the state (16.8%, 15.1%, and 1.9%, respectively).

**Households with disabled or handicapped persons** (n=73 participants): slightly less than half of the households (45.2%) perceived no impact from the pandemic, and 30.1% of households reported reduction in income combined with increased expenses in caring for the mentioned household members. Other domains of impact included increased difficulty in accessing medical services, absorption of family stress, and inability to access aid provided by the state (27.4%, 16.4%, and 2.7%, respectively).

**Households with bedridden patients** (n=23 participants): slightly less than half of the households (47.8%) reported increased difficulty in accessing medical services. Other domains of impact included absorption of family stress, reduction in income combined with increased expenses in caring for the mentioned household members, and inability to access aid provided by the state (34.8%, 30.4%, and 8.7%, respectively).

**Table 10** Impact of the COVID-19 situation and disease control measures on vulnerable groups

Group	Effects	Amount	Percent
Children age 0-5 years Numbers of respondents=278 households	Not affected	215	77.4
	Affected: Absorbing family stress	4	1.4
	Affected: Reduction of income, increased cost of care	51	18.3
	Affected: Violence/physical assault	0	0.0
	Affected: Sexual harassment	0	0.0
	Affected: Difficulty in traveling to receive medical treatment	17	6.1
	Affected: Inability to access government assistance and aids	3	1.1
Children age 6-12 years Numbers of respondents=244 households	Not affected	151	61.9
	Affected: Absorbing family stress	19	7.8
	Affected: Reduction of income, increased cost of care	75	30.7
	Affected: Violence/physical assault	1	0.4
	Affected: Sexual harassment	0	0.0
	Affected: Difficulty in traveling to receive medical treatment	17	6.9
	Affected: Inability to access government assistance and aids	7	2.9
Children age 13-18 years Numbers of respondents=388 households	Not affected	267	68.8
	Affected: Absorbing family stress	27	7.0
	Affected: Reduction of income, increased cost of care	91	23.5
	Affected: Violence/physical assault	1	0.3
	Affected: Sexual harassment	0	0.0
	Affected: Difficulty in traveling to receive medical treatment	16	4.1
	Affected: Inability to access government assistance and aids	20	5.2

Group	Effects	Amount	Percent
Elderly persons age 60 years and older Numbers of respondents=364 households	Not affected	215	59.1
	Affected: Absorbing family stress	55	15.1
	Affected: Reduction of income, increased cost of care	104	28.6
	Affected: Violence/physical assault	0	0.0
	Affected: Sexual harassment	0	0.0
	Affected: Difficulty in traveling to receive medical treatment	61	16.8
	Affected: Inability to access government assistance and aids	7	1.9
Disabled persons Numbers of re- spondents=73 households	Not affected	33	45.2
	Affected: Absorbing family stress	12	16.4
	Affected: Reduction of income, increased cost of care	22	30.1
	Affected: Violence/physical assault	0	0.0
	Affected: Sexual harassment	0	0.0
	Affected: Difficulty in traveling to receive medical treatment	20	27.4
	Affected: Inability to access government assistance and aids	2	2.7
Bedridden pa- tient Numbers of re- spondents=23 households	Not affected	6	26.1
	Affected: Absorbing family stress	8	34.8
	Affected: Reduction of income, increased cost of care	7	30.4
	Affected: Violence/physical assault	0	0.0
	Affected: Sexual harassment	0	0.0
	Affected: Difficulty in traveling to receive medical treatment	11	47.8
	Affected: Inability to access government assistance and aids	2	8.7

### Impact on Mental Health and Access to Information

The impacts of the COVID-19 pandemic on anxiety are summarized by domains in Figures 36 (a) and (b). The findings are as follow:

Among the participants, 77% were anxious about safety (e.g., thefts, assaults, and crimes), and 30% had high to severe anxiety; 74% were anxious about workload of healthcare workers; 92% were worried about COVID-19 infection, and 74% were anxious about COVID-19 infection at the high to severe levels. Anxiety about economic impacts, most participants were anxious about the impacts of severe disease control measures; 84% were worried about income and household debts during the COVID-19 pandemic, and 58% had high to severe anxiety.

Anxiety about social problems: 78% of the participants felt anxious during period of severe disease control measures, 33% had high to severe anxiety. Furthermore, 33% of the participants were worried about domestic violence during the lockdown period, whereas 60% worried about substance abuse in

the community and the potential decrease in intra-community relations and mutual support. Women and those aged 40-49 years were more concerned about the impact on daily lives than other groups (Figure 37 and Figure 38).

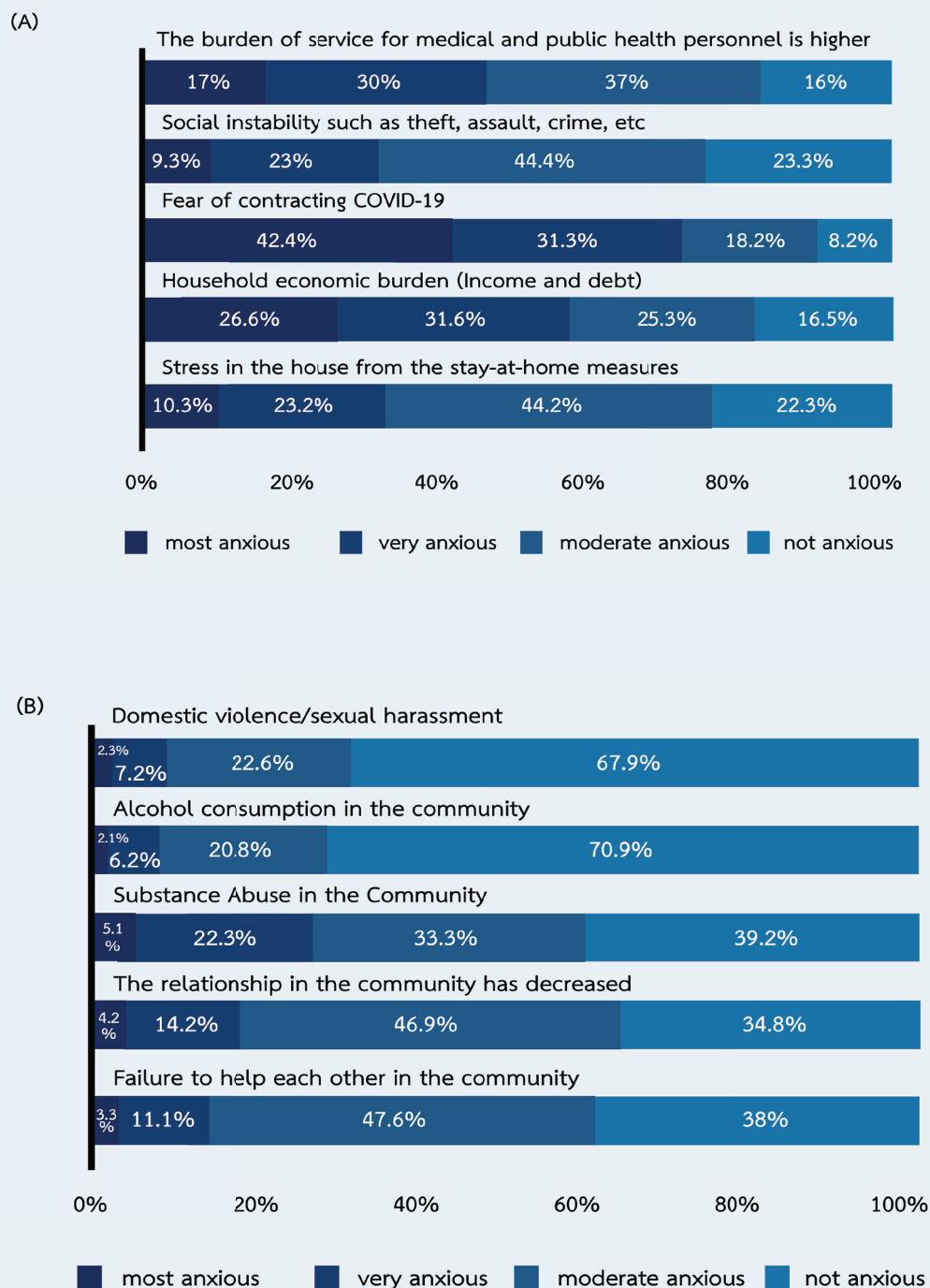


Figure 36 (a) and (b) Anxiety over economic and social problems during the COVID-19 pandemic

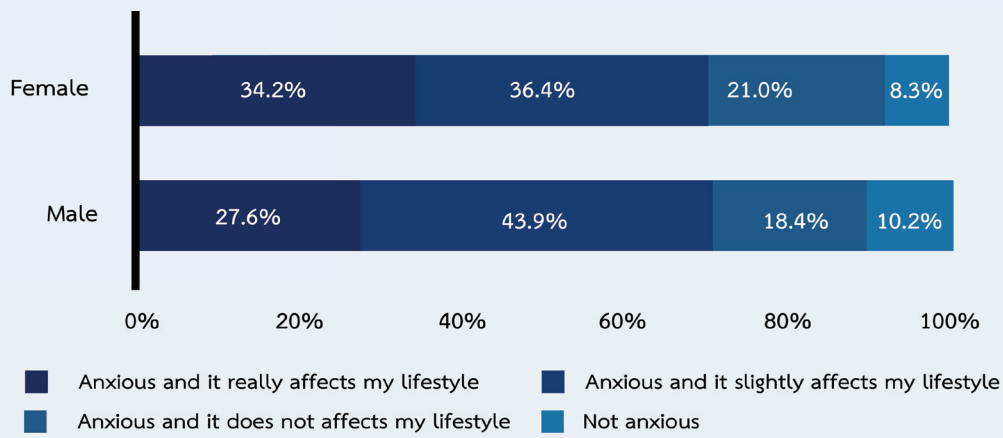


Figure 37 Anxiety from the COVID-19 pandemic and impact on everyday life, stratified by sex

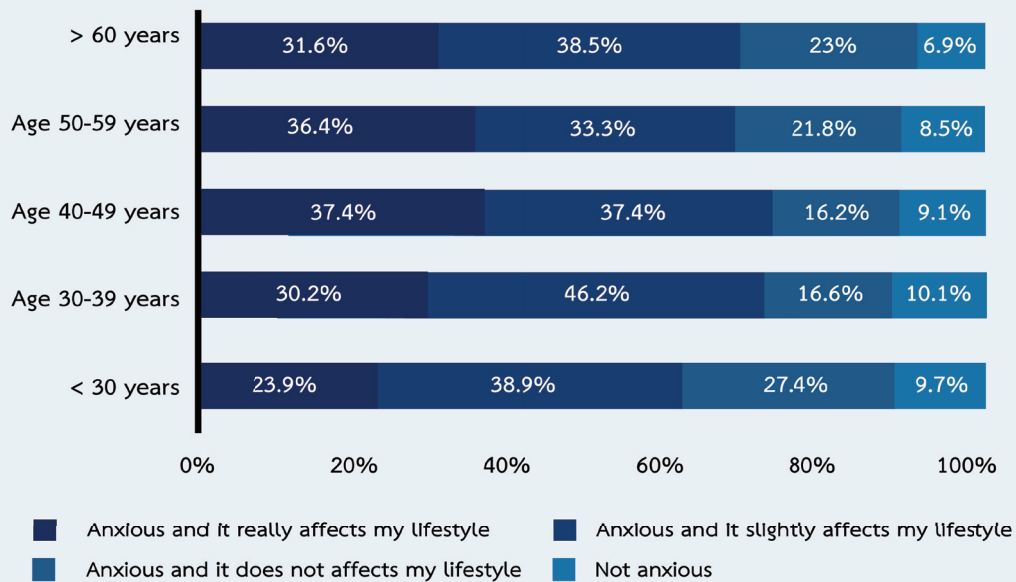


Figure 38 Anxiety from the COVID-19 pandemic and impact on everyday life, stratified by age groups

The most common coping method among the participants was talking to family members or friends, followed by relying on religion and online social media. There were no differences between men and women with the exception of exercise, which was more common among women than men (Figure 39). Coping methods also varied by age group (Figure 40).

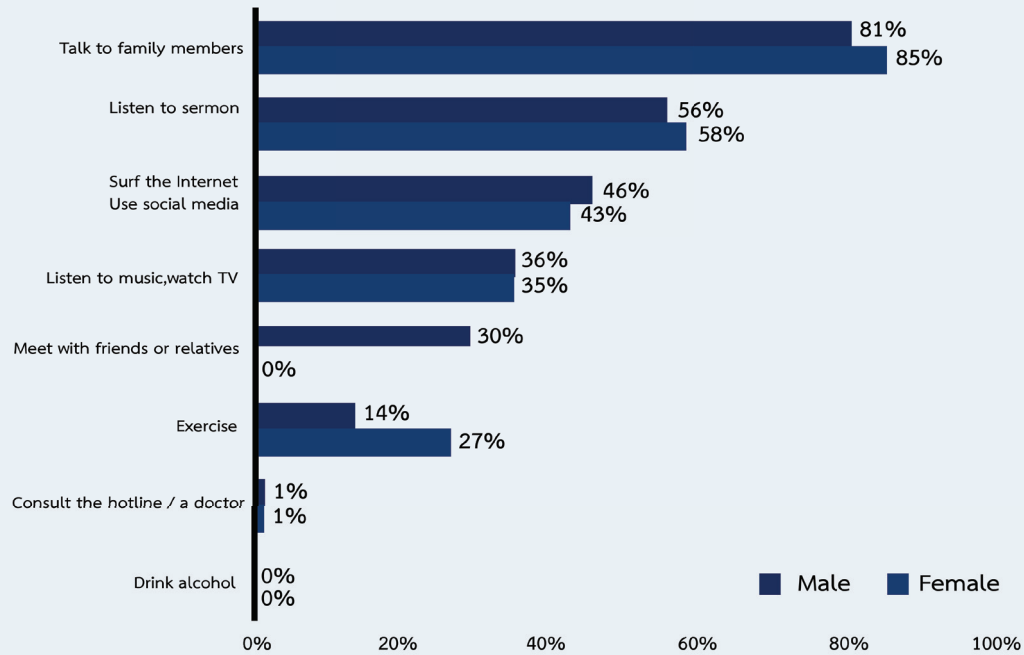


Figure 39 Methods for relieving anxiety from COVID-19, stratified by gender

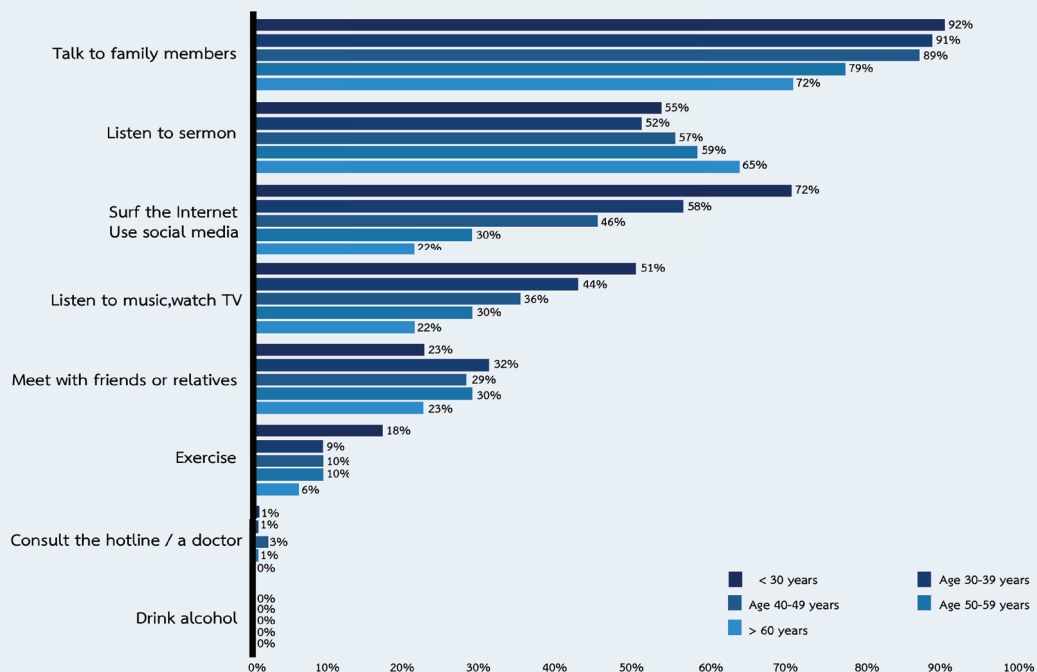


Figure 40 Methods for relieving anxiety from COVID-19, stratified by age group

Most participants received news and information directly from community leaders, public health personnel, friends, or relatives. Only a small proportion received information from government offices. There were no differences in communication media by gender (Figure 41), but there were differences by age. Participants aged over 30 years received information by direct communication, e.g., from community leaders, public health workers, or conversations with acquaintances. Participants aged younger than 30 years more commonly received information through online social media than other age groups (Figure 42).

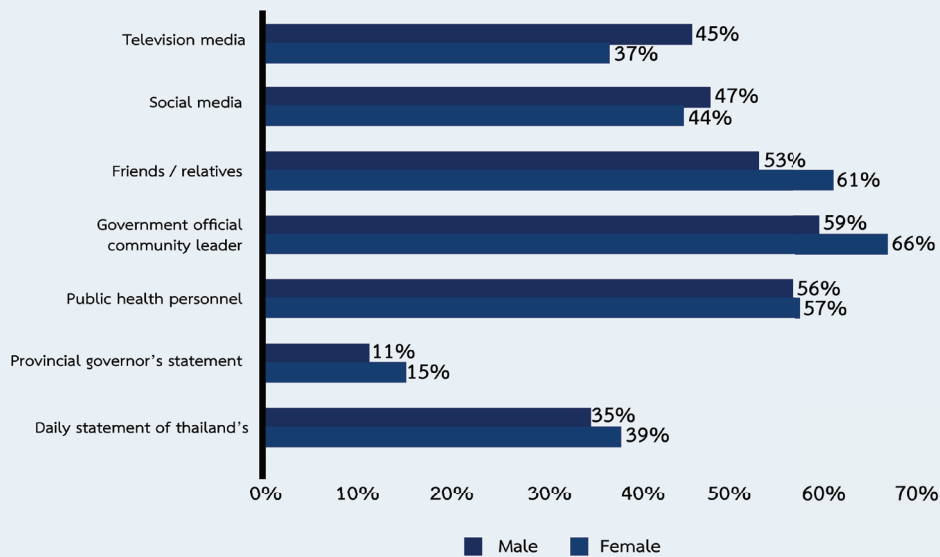


Figure 41 Source of information about the COVID-19 pandemic and the government's control measures, stratified by sex

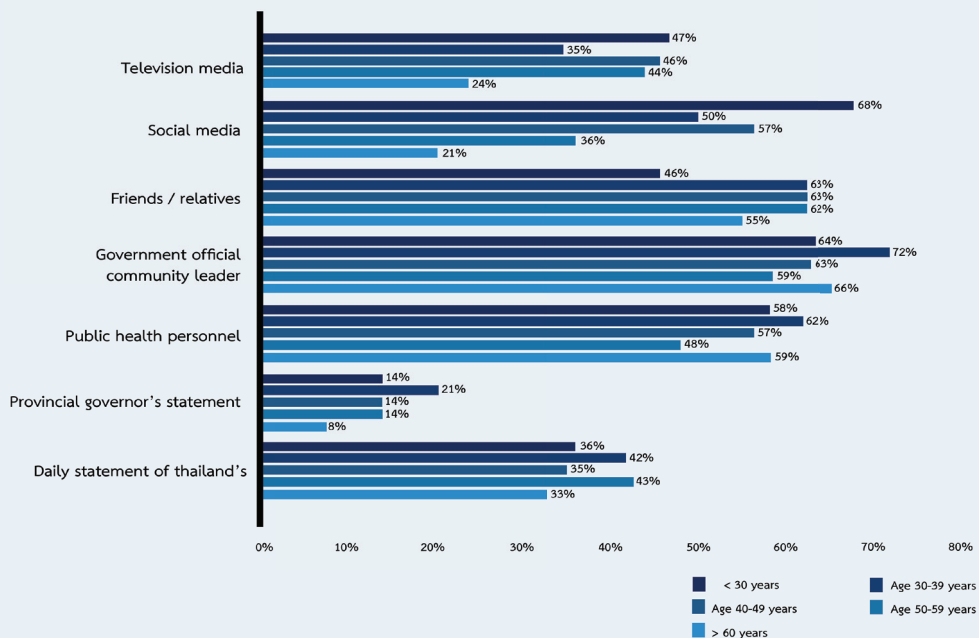


Figure 42 Source of information about the COVID-19 pandemic and the government's control measures, stratified by age group

### Impact on health care of household members

Access to face masks and alcohol gel was 95% and 78%, respectively. Households that could not access face masks and alcohol gel were low-income households.

**Table 11** Access to face masks for participants and family members

Access to masks	Number of households (percent)	Average number of members (person)	Average Income (THB per month)	
			Precovid-19	During Covid-19
Have enough masks	779 (95.0)	4	15,517 references	13,612 (decrease 12.3%)
Having not enough masks	40 (5.0)	5	13,031 references	9,914 (decrease 23.9%)

**Table 12** Access to hand gel or alcohol gel for participants and family members

Access to masks	Number of households (percent)	Average number of members (person)	Average Income (THB per month)	
			Precovid-19	During Covid-19
Have enough for alcohol gel	640 (78.1)	4	15,899 references	14,440 (decrease 9.2%)
Having not enough for alcohol gel	179 (21.9)	5	13,680 references	9,779 (decrease 28.5%)

Assessment of readiness of housing for home quarantine showed that only 26.1% of the households were ready, although an additional 22.5% could be modified (Table 13).

**Table 13** shows households' housing readiness for home quarantine and classified to describe the details of members and income in the household

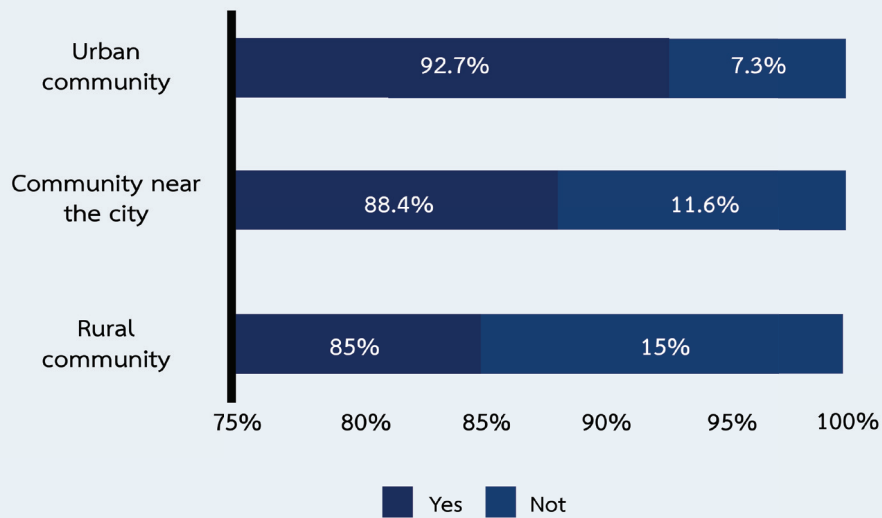
Housing readiness	Number of households (percent)	Average number of members (person)	Average Income (THB per month)	
			Precovid-19	During Covid-19
Ready	214 (26.1)	4	16,116 references	14,605 (decrease 9.4%)
Not ready but can be modified	184 (22.5)	4	17,313 references	15,871 (decrease 8.3%)
There is no space to self-quarantine at home.	421 (51.4)	5	14,074 references	11,565 (decrease 17.8%)

Access to assistance, aid, and rehabilitation measures from the government and non-governmental sector. Most participants were able to access welfare provided by the state (Table 14), although urban community residents had higher level of access to government assistance than those living in suburban and rural communities (Figure 43).

**Table 14** Results of registration to receive government assistance from Government’s COVID-19 Amelioration Programs

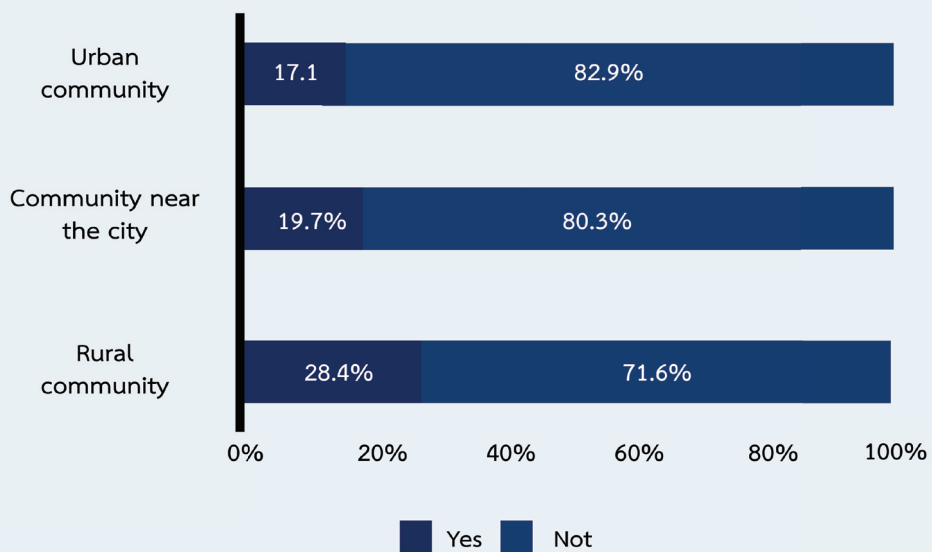
Government’s COVID-19 Amelioration Programs	Households (n=819)	Registered members	Members receiving assis- tance
	Households (n=819)	Number	Number
Raumaitinggun (No one left behind)	393 (48.0)	546	543
Rauchana	461 (56.3)	658	656
Raurackgun	35 (4.3)	40	39
M-33 We love each other	223 (27.2)	296	296
Khonlakreung	223 (27.2)	297	296
Social welfare card	581 (70.9)	787	787
Farmer amelioration program	144 (17.6)	161	161
Debt service suspension program	22 (2.7)	22	22
Unsecured loans program	2 (0.2)	2	2
Reducing electricity bills, water bills and internet bills	189 (23.1)	189	189
Social security	6 (0.7)	6	6
Compensation 70% of wages up to 200 days (being dismissed)	2 (0.1)	2	2
Bring the Thai People Home Program	1	1	1





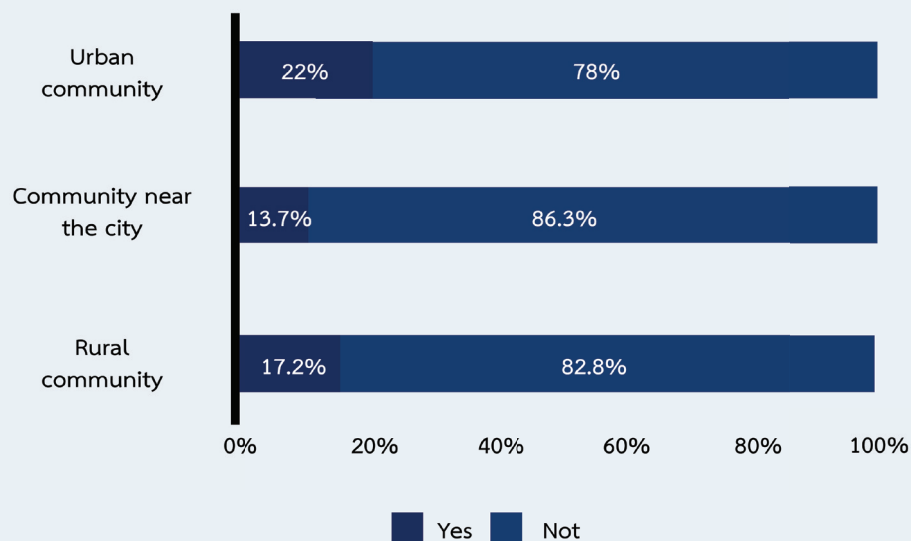
**Figure 43** Access to assistance, aid, and rehabilitation measures from the government during the Covid-19 pandemic, stratified by community type

With regard to receiving assistance from social networks such as foundations, non-government organizations (NGOs), religious institutions, alumni networks, and other non-governmental organizations, data showed that rural communities had higher access to aid from social network than urban and suburban communities, particularly in various supports e.g., food aid, material aid, and occupational training.



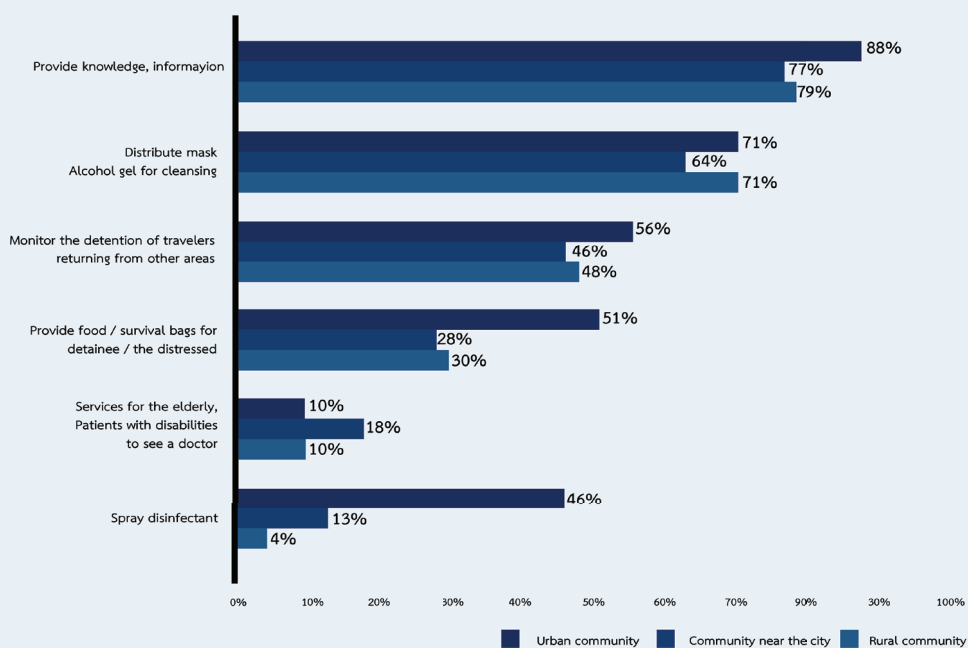
**Figure 44** Reported assistance from social networks including charities, NGOs, religious institutions, alumni networks, and other non-governmental organizations

Children in urban communities were more likely to receive assistance than children in rural and suburban communities at 22%, 17.2% and 13.7%, respectively (Figure 45).



**Figure 45** Reported assistance from state or non-state actors for children aged 0-18 years during the COVID-19 pandemic

Investigators asked participants about the ways in which the community protected, aided, or cared for community members in urban, rural, and suburban areas (Figure 46). The most common form of assistance was providing knowledge and information (88%, 79%, and 77%, respectively), followed by distribution of masks and alcohol gel (71%, 71%, and 64%, respectively).

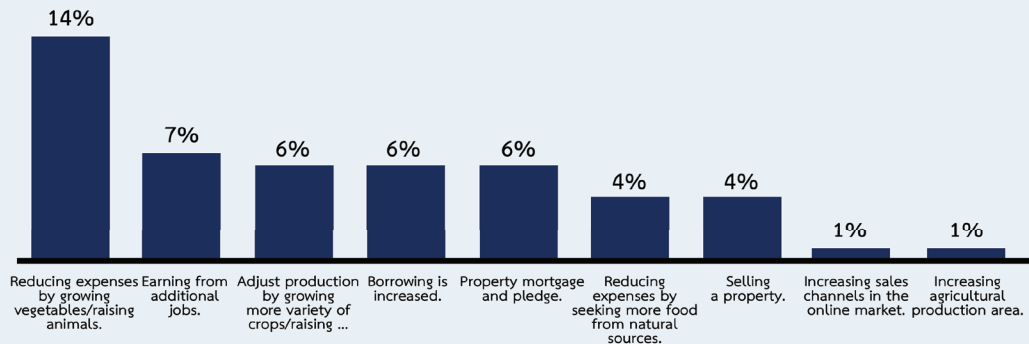


**Figure 46** Prevention, Assistance or taking care of people in the community

### Adaptation of households during the COVID-19 pandemic

With regard to adaptation by households as reported by the participants, the most common activity was reduction of spending by growing vegetables or raising animals for their own food (14.0%), followed by earning income from other occupations (7.0%), adjusting or planning producing by diversifying crops or livestock (6.0%), and taking more loans than usual (6.0%) (Figure 47). Farmers, fishers, and manual labor workers were most likely to report adaptation (Table 15).

**Figure 47** The activities of households in adapting during the COVID-19 crisis



In addition, occupational groups that were more likely to report adaptation were farmers/ fishers and labor users/general laborers ranked the first to adjust as shown in Table 15.

**Table 15** Adaptation of households during the COVID-19 crisis separated by occupation characteristics

Adaptation of households during the Covid-19 crisis	Occupation Characteristic (n = 819 households)									
	Farmers/ Fisheries	Laborer/ General Contractor	Unem- ployed	Retired	Retail traders	Government officials/ employees	Private busi- ness/ Entre- preneur	Private company employees	Freelancers	
Reducing expenses by growing vegetables/raising animals for consumption	48	21	23	12	2	4	6	1	1	1
Earning income from other occupations	12	14	-	4	6	10	4	2	-	-
Borrowing has increased more than usual	16	14	10	3	5	2	1	-	-	-
Adjusting production or planning production by growing diverse crops/raising animals	23	7	9	7	1	1	2	1	-	-
Mortgaging their property	19	14	6		5	1	2	-	-	-
Reducing expenditures by sourcing food from natural sources	14	6	6	2		2	2	1	1	1
Sold their property	4	11	7	3	4	2	1	-	-	-
Increasing sales channels for products in the online market	3	-	-	-	3	-	1	-	-	-
Increasing agricultural production area	5	-	-	2	-	-	-	-	-	-
<b>Total</b>	<b>144</b>	<b>87</b>	<b>61</b>	<b>33</b>	<b>26</b>	<b>22</b>	<b>19</b>	<b>5</b>	<b>2</b>	<b>2</b>



# Summary of Study Findings and Policy Recommendations

## Summary of study findings

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The goal of this research was to study how COVID-19 epidemic affected people in the southernmost provinces. Investigators collected data from 819 households in the provinces of Pattani, Yala, and Narathiwat. The main consequences of the COVID-19 epidemic were loss or reduction of household income, particularly among daily wage earners and vendors. Economic impacts were more common in urban areas than rural areas. Households reported little recovery and continued to face economic hardships despite easing of restrictions after the first wave of COVID-19, particularly in impoverished households and households with members in vulnerable population groups (e.g., chronic disease patients and disabled persons). About 10% of households reported severe food insecurity, higher than in other regions of the country. Severe food insecurity was more common in households with income below the poverty line. Farming households have higher levels of food security than households engaging in other occupations. Impoverished households and households with members in vulnerable groups were most severely affected by the pandemic. Social impacts from the pandemic included anxiety and stress caused by economic troubles, as well as fear of infection. Furthermore, access to health care became more difficult throughout the first wave of the pandemic, particularly for households with chronic illness patients and disabled persons. The majority of households could access government aid and assistance programs. Access to aid was higher in urban communities compared to suburban and rural communities. On the other hand, access to aid from non-state sectors was more common in rural communities than in urban communities.

## Policy Recommendations

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Due to loss or reduction of income, the COVID-19 pandemic led to an increase in the number of vulnerable persons. More households have become impoverished, which led to a number of other socioeconomic issues. The investigators have drafted the following policy recommendation for relevant stakeholders:

### Regional and national policy recommendations

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Daily wage earners and workers otherwise not covered by formal-sector benefits, e.g., self-employed workers and vendors, were the group most likely to be affected by the economic impacts of the pandemic and the disease control efforts. The income of people in this group plummeted during the first wave of the pandemic, and has not recovered despite changes in the pandemic situation and easing of restrictions. Although most participants reported access to government initiatives such as the Thai Chana Project and the Khon la kreung Project, the majority of those affected did not recover from their economic crisis. Moreover, such aid was insufficient to help the economy recover and enhance the quality of life for those who were unable to work owing to a lack of money. This was mostly due to a decrease in the number of people employed in the service industry. Even when households had agricultural resources such as farming, gardening, or fishing, those affected in these households still lacked other skills to seek employment when labor needs changed. The Southern Border Provinces and

Provincial Administrative Centers (SBPAC) should undertake a study on household resources as well as the necessity for unemployed workers to improve occupational skills. This is done to improve one's capacity to compete for job or to compensate for lost income from traditional occupations by seeking for new economic opportunities within the community.

The Ministry of Labor and the Social Security Office should undertake a public relations campaign and give information on insurance for informal workers in order for them to have access to the government's social welfare system, which could provide assistance in case of loss of income.

The proportion of households with income below the poverty line increased more than doubled after the first wave of COVID-19 compared to before the first wave. Households that became impoverished due to the impacts of the COVID-19 pandemic had not been able to access a number of government assistances, including the state welfare card and childcare aid. The Ministry of the Interior (Moi) and local administrative organizations must update demographic and household statistics in order to improve the likelihood that impoverished households could access available public assistance.

Households with members in vulnerable population groups (the disabled, chronic illness patients, children, and the elderly), were those who suffered the strongest economic impacts due to reduced income and increased expenditures for dependent family members. These households experienced hardship in everyday life, access to health services, and access other public services due to travel restrictions and expenses. The Ministry of Social Development and Human Security (MSDHS) and local administrative organizations must start collecting data of vulnerable groups as soon as possible, in order to enable these individuals to access state welfare in the most equitable manner.

## Local policy recommendations

1. Following the emergence of COVID-19, up to 20% of households experienced hunger due to food insecurity, the primary cause of which was the rise in poverty. This problem would impact household members, particularly in households with small children, further exacerbating the problem of child malnutrition in the southernmost provinces. Local administrative organizations should develop a database of the impoverished in their service areas and organize a community welfare system to reduce the problem of food insecurity, particularly in impoverished households and households with small children.

2. Local administrative organizations should organize a plan to respond to outbreaks and assist the population to manage the area and provide aid in a systematic manner. The system should also allow prioritization of those with immediate needs and allow consistent follow-up, particularly for individuals in vulnerable population groups.

3. Due to travel limitations and changes to health service delivery, access to health services for chronic illness patients and disabled persons had reduced during the COVID-19 pandemic. Because health personnel had to prioritize the pandemic, chronic patients have become "forgotten" by the healthcare system. Health personnel should consider organizing the health service delivery system for chronic illness patients and the disabled to be more home-based. Local governments should create a database of chronic illness patients and disabled persons, with guidelines on caring for community members who belong to these vulnerable groups, in case of future outbreaks and disasters.



# Bibliography





- Chalamwong, Y., Jitsuchon, S., & Tharisung, K. (2020, July 27). *The Impact of COVID-19 on the Thai Labor Market: Empirical Data*. Retrieved from Thailand Development Research Institute (TDRI): <https://tdri.or.th/2020/06/covid-19-labour-market-impact-in-thailand/>
- Deeod, P. (2020). The Impact of Spread of the Coronavirus 2019 (COVID-19) on Occupation of a Food Delivery Service. *Journal of MCU Nakhondhat*, 7(6), 131-144.
- Lekfuangfu, N., Piyapromdee, S., Porapakkarm, P., & Wasi, N. (2020, April 17). *The City Lockdown due to COVID-19: The Impacts on Thai workers in Supply-Side Dimensions*. Retrieved from Puey Ungphakorn Institute for Economic Research: <https://www.pier.or.th/en/abridged/2020/08/#top>.
- Manlae, W., Prathum, B., Kaew-On, S., & Chamnian, K. (2021). Effects and Adjustment of People during COVID-19 Pandemic in Nakhon Si Thammarat. *Journal of MCU Nakhondhat*, 8(11), 327-340.
- Office of the National Economic and Social Council. (2020, February 26). Situation Analysis of Poverty and Inequality in Thailand 2017 Report. Retrieved from Office of the National Economic and Social Development Council: [https://www.nesdc.go.th/ewt\\_dl\\_link.php?nid=10855](https://www.nesdc.go.th/ewt_dl_link.php?nid=10855).
- Rungrut, S., Maso, S., & Kadem, Y. (2021). The Economic and Social Impacts from the COVID-19 Pandemic toward the People in Yala City Municipality Yala Provinces. *Journal of Social Science and Buddhist Anthropology*, 6(2), 160-174.
- United Nations in Thailand. (2020, February 26). *Socio-Economic Impact Assessment of COVID-19 in Thailand*. Retrieved from UNICEF Thailand: [https://www.th.undp.org/content/dam/thailand/docs/UNDP\\_TH\\_Socio-Economic%20report%202020\\_Thai.pdf](https://www.th.undp.org/content/dam/thailand/docs/UNDP_TH_Socio-Economic%20report%202020_Thai.pdf).
- World Health Organization Thailand, . (2020, March 12). *Coronavirus disease 2019 (COVID-19) WHO Thailand Situation Report – 12 March 2020*. Retrieved from World Health Organization Thailand: [https://www.who.int/docs/default-source/searo/thailand/2020-03-12-tha-sitrep-19-covid19-pb-th.pdf?sfvrsn=1e179bd4\\_2](https://www.who.int/docs/default-source/searo/thailand/2020-03-12-tha-sitrep-19-covid19-pb-th.pdf?sfvrsn=1e179bd4_2).



# Appendix



# Survey Questionnaire

## "The Social and Economic Impact of COVID-19 on Southern Border Provinces"

### Explanation

This questionnaire has been prepared to survey the COVID-19 situation and relevant opinions in this local area for research purpose. You are not required to state your name or place of work to the data collectors. ***Your information will be kept confidential, so please answer truthfully.*** There is no binding commitment of any type from answering this survey.

Thank you for your kind cooperation.

The Investigators

Explanation: Please fill ✓ in  or fill in the blank with the most appropriate answer.

### Part 1: Community Type

#### 1.1 Community type based on area base

- 1. Suburban community; community near the city (semi-urban, semi-rural)
- 2. Rural community
- 3. Urban community
- 4. Local fishing community

#### 1.2 Communities along the Thai-Malaysian border

- 1. No
- 2. Yes

#### 1.3 Community type based on economic and social base characteristics

- 1. Commercial community
- 2. Farming community
- 3. Commercial planting community (please specify type of plants such as rubber, oil, palm or others) please specify .....
- 4. Fruits/vegetables community, please specify .....

#### 1.4 Community type based on characteristics of COVID-19 prevention and control

- 1. The community has never been locked down
- 2. The community has been locked down

#### 1.5 Have there been any cases of COVID-19 in the community in the past?

- 1. No
- 2. Yes

## Part 2: Basic information of households

### 2.1 Household location

Pattani Province	Specify
Ban Talubo, Moo 1, Chabangtiko Sub-district, Muang District	<input type="checkbox"/>
Ban Tarab, Moo 1, Kamiyo Sub-district, Muang Sub-district	<input type="checkbox"/>
Ban Tungsala, Moo 1, Bangkro Sub-district, Khokpo District	<input type="checkbox"/>
Ban Takamcham, Moo 1, Takamcham Sub-district, Nongchik District	<input type="checkbox"/>
Ban Takham, Moo 1, Takham Sub-district, Panare District	<input type="checkbox"/>
Ban Khaentao, Moo 1, Kohchan Sub-district, Mayo District	<input type="checkbox"/>
Ban Buera-ngae, Moo 2, Namdam Sub-district, Tungyangdaeng District	<input type="checkbox"/>
Ban Tabing, Moo 1, Tabing Sub-district, Saiburee District	<input type="checkbox"/>
Ban Khoknibong, Moo 1, Kraitong Sub-district, Kraitong District	<input type="checkbox"/>
Ban Tanyongdalo, Moo 1, Tanyongdalo Sub-district, Yaring District	<input type="checkbox"/>
Ban Samu, Moo 1, Pitumudee Sub-district, Yarang District	<input type="checkbox"/>
Ban Khaotoom, Moo 1, Khaotoom Sub-district, Yarang District	<input type="checkbox"/>
Ban Plakprue, Moo 1, Muangtia Sub-district, Maelan District	
Yala Province	Specify
Ban Budee, Moo 1, Budee Sub-district, Muang District	<input type="checkbox"/>
Ban Payo, Moo 2, Tasap Sub-district, Muang District	<input type="checkbox"/>
Ban Aiyeweng, Moo 1, Aiyeweng Sub-district, Betong District	<input type="checkbox"/>
Kunungchon Community, Betong Municipality, Betong District	<input type="checkbox"/>
Ban Kilomet 26 Nok, Moo 1, Tanoputeh Sub-district, Bannagsata District	<input type="checkbox"/>
Ban Thanto, Moo 1, Thanto Sub-district, Thanto District	<input type="checkbox"/>
Ban Rae, Moo 1, Ban Rae Sub-district, Thanto District	<input type="checkbox"/>
Ban Bayo, Moo 1, Patae Sub-district, Yaha District	<input type="checkbox"/>
Ban Buke, Moo 2, Bangoysinae Sub-district, Yaha District	<input type="checkbox"/>
Ban Raman, Moo 1, Kayuboko Sub-district, Raman District	<input type="checkbox"/>
Ban Kasamae, Moo 1, Wangpaya Sub-district, Raman District	<input type="checkbox"/>
Ban Bala, Moo 1, Bala Sub-district, Kabang District	
Ban Kuwa, Moo 1, Huaykrating Sub-district, Krongpinang District	<input type="checkbox"/>

Narathiwat Province	Specify
Ban Khokkhan, Moo 1, Khokkhan Sub-district, Muang District	<input type="checkbox"/>
Ban Taba, Che-he Sub-district, Takbai District	<input type="checkbox"/>
Ban Buenaebeyae, Moo 1, Palukasamo Sub-district, Bacho District	<input type="checkbox"/>
Ban Tapoyoh, Moo 1, Palukasamoh Sub-district, Bacho District	<input type="checkbox"/>
Ban Tanyonmas, Moo 1, Tanyongmas Sub-district, Ra-Ngae District	<input type="checkbox"/>
Ban Bueraeng, Moo 1, Talo Sub-district, Rueso District	<input type="checkbox"/>
Ban Tolang, Moo 1, Tamayung Sub-district, Sisakhon District	<input type="checkbox"/>
Ban Krueso, Moo 4, Waeng Sub-district, Waeng District	<input type="checkbox"/>
Ban Kalubee, Moo 1, Tamong Sub-district, Sukhirin District	<input type="checkbox"/>
Ban Bangosarayo, Moo 1, Pasemas Sub-district, Sungai Kolok District	<input type="checkbox"/>
Ban Tohdeng, Moo 1, Tohdeng Sub-district, Sungaipadee District	<input type="checkbox"/>
Ban Dusongyo, Moo 1, Dusongyo Sub-district, Chanae District	<input type="checkbox"/>
Ban Maruebo-ok, Moo 1, Maruebo-ok Sub-district, Cho-airong District	<input type="checkbox"/>

2.2 Basic Information of Respondents (Interview with the head of the household or someone who can provide a good overview of the household)

2.2.1 Gender  1. Male  2. Femal  3. Others.....

2.2.2 Age ..... years

2.2.3 Religion  1. Buddhism  2. Islam  
 3. Christianity [  4. Others.....

2.2.4 Education Background

- 1. Illiterate
- 2. Primary (Grade 4, 5, or 6)
- 3. Lower Secondary Level
- 4. Higher Secondary Level
- 5. Vocational Certificate/Diploma
- 6. Bachelor's degree
- 7. Graduate degree

## 2.2.5 Occupation

Type of Occupation	Before the first wave of COVID-19 (Before March 2020)	During the first wave of COVID-19 (March 2020-May 2020)	After the first wave of COVID-19 (June 2020- Present)
1. Civil servants / State enterprise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Private company employee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Vendor / service providers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Business owner / Entrepreneur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Manual labors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Retired / Househusband / Housewife	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Farmer/Fisher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Independent professional (e.g., lawyer, architect)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Unemployed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Others (please specify)	.....	.....	.....

## 2.3 Household Members Information

2.3.1 How many members are in this household? (Sleeping and eating here on a regular basis)

Members of Household		Male	Female
Age 0-2 Years	number	..... person(s)	..... person(s)
Age 3-5 Years	number	..... person(s)	..... person(s)
Age 6-18 Years	number	..... person(s)	..... person(s)
Age 19-39 Years	number	..... person(s)	..... person(s)
Age 40-59 Years	number	..... person(s)	..... person(s)
Age 60 Years and over	number	..... person(s)	..... person(s)
No (note as 0 person)	number	..... person(s)	..... person(s)

2.3.2 Is there any household member who has health problems or disabilities that require constant care by another person.

- No (skip to item 2.3.3)       Yes

Members of household	Numbers
Disability	..... person(s)
Bedridden patient	..... person(s)
Patient with chronic disease	..... person(s)

2.3.3 During the COVID-19 crisis (since March 2020), has there been any household member who was living elsewhere and moved back home or is currently waiting to return home?

- No (skip to item 2.3.4)       Yes. number.....person(s)

Members of Household	Province / State	Country
1 <sup>st</sup> person	.....	.....
2 <sup>nd</sup> person	.....	.....
3 <sup>rd</sup> person	.....	.....
4 <sup>th</sup> person	.....	.....
5 <sup>th</sup> person	.....	.....

2.3.4 How many household members receive the following benefits? (can answer more than 1)

State Benefits	Numbers of household receivers
Social welfare card	number.....person(s)
Newborn and baby subsidy 600 Baht	number.....person(s)
Social security child allowance	number.....person(s)
Elderly living allowance	number.....person(s)
Disability allowance	number.....person(s)

2.3.5 Does the number of members in your household have the following status?

No (skip to item 3.1)

Yes

Members of Household	Before the COVID-19 Pandemic (Before March 2020)	During the COVID-19 Pandemic (Starting from March 2020-May 2020)	After the COVID-19 Pandemic (Starting from June 2020-Present)
Unemployed (Working age 22-60 years)	number.....persons(s)	number.....persons(s)	number.....persons(s)
Fall out of the education system			
- Basic education From Kindergarten	number.....persons(s)	number.....persons(s)	number.....persons(s)
- M.6, Vocational Certificate)			
- Higher education (from high school diploma, diploma - degree)	number.....persons(s)	number.....persons(s)	number.....persons(s)

### Part 3: Impact on Individuals, Household Members and Communities (Social Aspect)

3.1 Does the COVID-19 pandemic situation and government epidemic control measures affect your lifestyle in the following areas?

Details	Impacts			
	Severe	Moderate	Mild	Not affected
Self-care such as hair cutting, exercise etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buy goods, supplies, and go to market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to medical service in case of illness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Loss of income from occupation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Travel to various places	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is a feeling of anxiety about everyday life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is not enough food intake.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Violence from unrest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



3.2 How the situation of COVID-19 pandemic and government measures to control the the pandemic affect the care of children, elderly, disabled/handicapped, and bed-bound patient? (can answer more than 1)

Impact	Children 0-5 years	Children 6-12 years	Children 13-18 years	Seniors 60 years and over	Disabled persons	Bedridden patient
No household members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not affected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Affected about absorbing stress in the family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Affected with lower income and increased cost of parenting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Affected by violence/assault	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Affected by sexual harassment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
More difficult to get into medical services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Affected by the inability to access government aid measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.3 During the COVID-19 pandemic, how has your community provided aid or care for community members (more than 1 answers allowed):

- 1. Provide knowledge and information on prevention, aid measures, etc.
- 2. Monitor the quarantine of travelers returning from other areas
- 3. Provide food/survival bags for detainee/the distressed/elderly/disabled
- 4. Close access to the community
- 5. Spray disinfectant
- 6. Distribute mask, alcohol gel for cleansing, body temperature check, etc.
- 7. Services for the elderly, patients with disabilities to see a doctor
- 8. Did not take any action
- 9. Don't know

## Part 4: Effects on Mental Health and Access to Information (Social Aspect)

4.1 From the situation of the COVID-19 pandemic, how anxious are you about the following?

Details	Anxiety			
	Severe	Strong	Mild	Not anxious
The service burden of medical personnel and public health are increased	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social instability such as theft, assault, crime, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fear of COVID-19 infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economic burden on the family (income and debt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The tension in the house from the stay-at-home measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Violence in the family/sexual abuse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The consumption of alcohol in the community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drug use in the community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relationships in the community decreased.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Failure to help each other in the community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4.2 Do you have any concern regarding the COVID-19 pandemic that affects your daily life?

- 1. Anxious, and it really affects my lifestyle.
- 2. Anxious, and it slightly affects my lifestyle
- 3. Anxious, but it does not affect my lifestyle
- 4. Not anxious

4.3 How do you alleviate anxiety? (can select more than 1 answer)

- 1. Talk to family members, relatives or friends through various channels.
- 2. Surf the Internet/use social media such as Facebook, Twitter, Line, etc.
- 3. Listen to the music, watch TV
- 4. Listen to sermon
- 5. Consult the hotline/a doctor
- 6. Drink alcohol
- 7. Meet with friends or relatives
- 8. Exercise
- 9. Others, please specify .....

4.4 Normally, how do you receive information on COVID-19 pandemic and government control measures? (can select up to 3 answers)

- 1. Daily statement of Thailand's Centre for COVID-19 Situation Administration (CCSA)
- 2. Provincial governor's statement
- 3. Public health personnel
- 4. Government official/village chief/ village headman/community leader
- 5. Friends/relatives/acquaintances
- 6. Social media
- 7. Television media
- 8. Others, please specify.....

## Part 5: Impact of COVID-19 on Household Economic Dimension

5.1 Compare household income and debt before, during and after COVID-19 pandemic in the three southernmost provinces (Please select the code below the table and fill it in the fields of each household member or fill in the blank)  
Identify household members in the working age group only (between 18-60 years old)

Members of Household	Main Occupation			Average Monthly Income			Average Monthly Debt		
	Before the COVID-19 Pandemic (Before March 2020)	During the COVID-19 Pandemic (Starting from March 2020-May 2020)	After the COVID-19 Pandemic (Starting from June 2020-Present)	Before the COVID-19 Pandemic (Before March 2020)	During the COVID-19 Pandemic (Starting from March 2020-May 2020)	After the COVID-19 Pandemic (Starting from June 2020-Present)	Before the COVID-19 Pandemic (Before March 2020)	During the COVID-19 Pandemic (Starting from March 2020-May 2020)	After the COVID-19 Pandemic (Starting from June 2020-Present)
1 <sup>st</sup> person									
2 <sup>nd</sup> person									
3 <sup>rd</sup> person									
4 <sup>th</sup> person									
<b>Codes</b>	1. Private company employee 2. Government employee (any level) 3. Factory worker 4. Construction worker 5. Manual laborer 6. Agricultural worker 7. Taxi driver / motorcycle taxis 8. Vendor / Roadside shop owner 9. Unemployed			Specify the amount of money received. If you get your wages daily, multiply by the number of days worked in a month. Remark: If no information, write 0			Remark: State average amount per month, followed by the code / answer 1. Formal debts include savings cooperatives, banks, etc. 2. Informal debts include relatives, friends, online loans, lenders ***If no information, write 0		

5.2 Compare expenses of households before, during, and after COVID-19 epidemic In the three southernmost provinces

Type of Expenses	Monthly Average Expense		
	Before the COVID-19 Pandemic (Before March 2020)	During the COVID-19 Pandemic (Starting from March 2020-May 2020)	After the COVID-19 Pandemic (Starting from June 2020-Present)
1. Food expenses (including rice, dry food, fresh ingredients, etc.)			
2. Utilities such as water, electricity, etc.			
3. Phone and internet bills			
4. Investment expenses on agriculture/ fishery/trade			
5. Health care expenses such as masks, hand sanitizers, COVID-19 testing, etc.			
6. Expenses for children such as online learning materials, eating expenses during school breaks, etc.			
7. Other expenses (such as quarantine costs), please specify .....			

5.3 During the COVID-19 crisis (from March 2020), has there been any household member who traveled out of the Deep South to earn income (either in another province/abroad) and has been affected to the point where they needed to return home? How? Has that person returned? No (skip to item 6) “  
 Yes number.....person (s)

Members of Household	Return Migration during COVID-19 (Starting from March 2020)	Reasons of Return Migration
1 <sup>st</sup> person		
2 <sup>nd</sup> person		
3 <sup>rd</sup> person		
4 <sup>th</sup> person		
5 <sup>th</sup> person		
<b>Answer code</b>	1. Come back and live with the household without being able to find work or earn money. 2. Come back and work for a new job in the community or earn money. 3. Come back and help the family in agriculture work. 4. Do both 2 and 3 5. Others, please specify.....	1. Being laid off (permanently) 2. Leave work due to the close of office (but have to work from home) 3. The workplace has been closed or prohibited to get-in. 4. There is a decrease in purchasing products and cannot bear the expense 5. Others, please specify.....

## Part 6: COVID-19's Effects on the Household Diet Dimension

6.1 Compare household expenses before, during and after COVID-19 pandemic in the three southernmost provinces. (If never bought/consumed from any source, put "0")

Type of Expenses	Monthly Average Expenses		
	Before the COVID-19 Pandemic (Before March 2020)	During the COVID-19 Pandemic (Starting from March 2020-May 2020)	After the COVID-19 Pandemic (Starting from June 2020-Present)
1. Buying food from the community, such as local shops, community markets, green markets in the community			
2. Buying food from city markets, city green markets			
3. Buying food from a convenience store, shopping malls/supermarkets in the city			
4. Buying food through an online store 4.1 Kerry, Flash, 7-ELEVEN 4.2 Sending via GRAB, Food Panda, Line Man 4.3 Buying directly through online restaurants such as KFC, The Pizza.			
5. Buying food from a motor vehicle/mobile supermarket			
6. From plants and animals in the household plots 6.1 Rice (Kilogram) 6.2 Vegetables (Kilogram) 6.3 Eggs, meat and fish (estimate in kilogram) * The researchers calculated the average money per month.			
7. Find a collection from the resource base such as catch fish in the canal, collect bamboo shoots in the forest, etc. (Estimated as an approximate amount of money)			

6.2 In the last 7 days, have you had enough money to buy food? or not having enough food for consumption How many days that your family....

Coping Strategy Index : CSI	Days							
	0	1	2	3	4	5	6	7
1. You have to consider the food that you want less and are cheaper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Need to ask for help from friends or relatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Must reduce the amount of food per meal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Must limit or reduce the consumption of adults for young children to eat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Must reduce the number of meals to eat in one day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6.3 In the past 30 days, have you experienced a lack of food to eat at home due to lack of resources to provide food?

Household Hunger Scale: HHS	Level			
	Never (0 time)	Seldom (1-2 times)	Sometimes (3-10 times)	Often (> 10 times)
In the last 30 days, how often has this happened?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6.4 In the past 30 days, have you or a family member gone to bed at night with anxiety due to insufficient food to eat?

Household Hunger Scale: HHS	Level			
	Never (0 time)	Seldom (1-2 times)	Sometimes (3-10 times)	Often (> 10 times)
In the last 30 days, how often has this happened?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6.5 In the past 30 days, you or a family member has had nothing to eat all day and night because there's no food to eat?

Household Hunger Scale: HHS	Level			
	Never (0 time)	Seldom (1-2 times)	Sometimes (3-10 times)	Often (> 10 times)
In the last 30 days, how often has this happened?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## Part 7: Impact of COVID-19 on the Household Members Healthcare Dimension

7.1 Do you and your household members have a face mask/cloth face mask to wear when you leave the house?

1. Yes, there are enough masks for me and household members when going out.  
 2. No, there are no enough masks for me and household members when going out.

7.2 Do you and your household members have sufficient hand sanitizer or alcohol to use when leaving the house?

1. Yes, there is enough for me and household members when going out.  
 2. No, there is no enough (or can't find) for me and household members when going out.

7.3 If members of your household are at risk of contracting COVID-19 or are a high-risk group, do you think your residence or home is appropriate for family members to isolate themselves from others?

1. Yes  
 2. Not available but can be modified.  
 3. No space to isolate at home.

7.4 Have you or a member of your household been tested for COVID-19?

1. No  2. Yes number.....person(s)

7.5 Are there any members of your household with COVID-19?

1. No  2. Yes number.....person(s)

7.6 How do you feel if COVID-infected people live in or quarantine in your community?

1. Willing to allow them to live in the community.  
 2. There are many feelings of embarrassment or reluctance to allow infected people to join

the community

3. No comment/no reply

7.7 In the past year, have you had a need for health care services in a public or private hospital?

How are you satisfied with their services?

- no, I haven't (skip to no.8)  yes (you can answer more than one)

Details	Used service	Service quality satisfaction level				
		Very good	Good	Fair	Poor	Very poor
1. Non-emergency health treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Emergency health treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Health check-up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Specialized treatments such as psychiatry, drug therapy, physical therapy, dialysis, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Part 8: Access to Governmental/non-governmental Amelioration Measures**

8.1 Have you and your household members registered for the “COVID-19 amelioration Project” from the government to receive aid, and what is the result of the registration? (only registered members answer this)

- No (If 0 people skip to question 8.3)
- Yes, there are a number of registered members .....people

(Please select the code below the table to fill in the fields of each household member or fill in the blank)

Government’s COVID-19 Amelioration Programs	Members of Household				
	1 <sup>st</sup> person	2 <sup>nd</sup> person	3 <sup>rd</sup> person	4 <sup>th</sup> person	5 <sup>th</sup> person
Raumaitingun (No one left behind)					
Rauchana					
Raurackgun					
M33 We love each other					
Khonlakreung					
Social welfare card					
Farmer amelioration program					
Debt service suspension program					
Unsecured loans program					
Reducing electricity bills, water bills and internet bills					
Social security - In the case of being dismissed, receive compensation 70% of wages up to 200 days - In the case of resignation, the compensation is 45% of the wages, not over 90 days.					
Bring the Thai People Home Program					
Scholarships for Occupational Education (SBPAC)					
Quality improvement in general agricultural promotion (SBPAC)					

Government's COVID-19 Amelioration Programs	Members of Household				
	1 <sup>st</sup> person	2 <sup>nd</sup> person	3 <sup>rd</sup> person	4 <sup>th</sup> person	5 <sup>th</sup> person
Answer code	1. Successfully registered and it has been ameliorated. 2. Successfully registered, but was told that did not have the right to receive the amelioration and has no right to appeal 3. Successfully registered, and was notified that the amelioration was not eligible, and was pending appeal. (Provide additional information) 4. Successfully registered, but was told that did not have the right to receive the amelioration, then appealed and received the amelioration money. 5. Successfully registered, but was told that did not have the right to receive the amelioration, then appealed and have been confirmed that the amelioration was not received. 6. Others.....				

8.2 How does the government's "COVID-19 amelioration Project" in table 8.1 affect the you and your households' quality of life?

1. Such welfare does not change the quality of life  
because .....

2. Such welfare does change the quality of life  
because .....

8.3 How are you satisfied with the government's COVID-19 treatment measures?

Project/measure 'COVID benefit'	Satisfaction Level				
	Very good	Good	Fair	Little	No comments
<i>Rao mai ting gun</i> (No One Left Behind)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Rao chana</i> (We Win)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Rao rak gun</i> (We Love One Another)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>M33 Rao rak gun</i> (Sect.33 We Love One Another)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Khon la kreung</i> (Each Pay Half)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social welfare card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farmer's relief program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debt service suspension program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unsecured loans program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Project/measure 'COVID benefit'	Satisfaction Level				
	Very good	Good	Fair	Little	No comments
Electricity, water, and internet fees discount program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social security - Compensation at 70% of wages for up to 200 days in case of dismissal - Compensation at 45% of wages for up to 90 days in case of resignation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bring the Thai People Home Program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scholarships for Occupational Education (SBPAC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality improvement in general agricultural promotion (SBPAC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.4 During the COVID-19 pandemic, has your household received help from non-government social organizations such as foundations, NGOs, religious institutions, alumni networks, and other organizations?

- No (If 0 people skip to question 8.5)  
 Yes (can select more than 1 answer)

Details	Received Support
1. Food support	<input type="checkbox"/>
2. Cash support	<input type="checkbox"/>
3. Equipment supports	<input type="checkbox"/>
4. Career promotion support	<input type="checkbox"/>

8.5 Has any child (age 0-18 years) in your household received help from government and social organizations such as schools, foundations, child and family aid funds during COVID-19 Pandemic?

- No (If 0 people skip to question 8.6)  
 Yes (can select more than 1 answer)

Details	Received Support
Education subsidy	<input type="checkbox"/>
Basic subsistence funding	<input type="checkbox"/>
Online learning materials such as computer tablet, smartphone, etc.	<input type="checkbox"/>
Procurement of protective equipment such as masks, alcohol, hand sanitizer, etc.	<input type="checkbox"/>
Educating on how to prevent COVID-19 infection	<input type="checkbox"/>
Psychological remedy	<input type="checkbox"/>

8.6 What kind of assistance do you want from the government/non-government sector?"

- 1.....
- 2.....
- 3.....

### Part 9: Household Adaptation During the COVID-19 Crisis

During the COVID-19 Crisis, has your household adjusted by carrying out activities in the following?

9.1 Increasing product sales channels, converting them into online marketplaces, or using communication channels.

- 1. No
- 2. Yes, please specify the product type and sales channels.....

9.2 Adjustment of production or production planning by growing more variety of crops/ livestock.

- 1. No
- 2. Yes, please specify crops/animals.....

9.3 Increasing agricultural production area

- 1. No
- 2. Yes, please specify the methods of purchase, rent .....

9.4 Reducing expenses by growing vegetables/raising animals

- 1. No
- 2. Yes, please specify the vegetables/animals.....

9.5 Reducing expenses by seeking more food from natural sources

- 1. No
- 2. Yes, please specify food sources.....

9.6 Take loans in more-than-usual amount

- 1. No
- 2. Yes, please specify borrowing sources.....

9.7 Pawning properties

- 1. No
- 2. Yes, please specify a property.....

9.8 Selling a property

- 1. No
- 2. Yes, please specify a property.....

9.9 Earning from additional jobs

- 1. No
- 2. Yes, please specify additional jobs.....

9.10 During the COVID-19 crisis, what role have you or members of your household played in helping others? (can select more than 1 answer)

- 1. No
- 2. Yes, donating or sharing money, product, food, etc., with relatives, neighbors in the community
- 3. Yes, donating or sharing money, product, food, etc., with others outside the community.
- 4. Yes, joining monitoring activities within the community or in nearby areas
- 5. Yes, others, please specify.....

\*\*\* Thank you very much for taking the time to complete this questionnaire\*\*\*



โครงการนี้สนับสนุนโดย  
สหภาพยุโรป



**Save the Children**



**Deep South COVID-19 and Sustainable Development  
Goals Resource Center**

Faculty of Nursing,  
Prince of Songkla University, Pattani Campus

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