



FINAL REPORT

INVESTIGATION OF THE IMPACTS OF THE COVID-19 PANDEMIC ON LOCAL AND INDIGENOUS COMMUNITIES' SOCIO-ECONOMIC STATUS



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ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
AM	Ante Meridiem
CC	Community Chief
CCWC	Commune Committee for Women and Children
CFiMC	Community Fishery Management Committee
CFMC	Community Forestry Management Committee
COVID-19	Coronavirus Disease-2019
DFID	Department for International Development
EIGE	European Institute for Gender Equality
FGD	Focus Group Discussion
HIV	Human Immunodeficiency Virus
IOM	International Organization for Migration
IP	Indigenous People
LGBTIQA	Lesbian, Gay, Bisexual, Transgender, Intersex, Queer, and Asexual
MOEYS	Ministry of Education, Youth and Sport
NRM	Natural Resources Management
NTFP	Non-Timber Forest Products
PDoA	Provincial Department of Agriculture
PM	Post Meridiem
PWD	People with Disability
RFA	Radio Free Asia
RGC	Royal Government of Cambodia
TV	Television
UNDP	United Nations Development Program
USAID	United States Agency for International Development
USD	United States Dollar
VHS	Village Health Support
WHO	World Health Organization

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We would also like to thank officials from the Department of Education, Stung Treng Youth and Sport, Stung Treng Department of Agriculture, Stung Treng Department of Health, Provincial Administration, village heads, village vice-chiefs, and commune councilors for their collaboration and support of this research.

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CHAPTER 1: INTRODUCTION

1.1. Background

The COVID-19 pandemic has impacted the globe as COVID-19 has spread across all continents. In the Mekong region, the virus has especially affected many migrant workers, garment industry workers, indigenous and ethnic minorities, refugees, internally displaced people, migrants, urban slum-dwellers, and people working in the informal sector, such as female sex workers (CARE, 2020).

The pandemic spreading in Cambodia, 90,9585 confirmed cases of COVID-19 as of August 25, 2021, and 86,993 cases of recovery and 1,841 deaths have affected economic conditions in Cambodia (MoH, 2021).

In Cambodia, surveys were conducted in 2020 by Future Forum and Angkor Study on the impact of COVID-19 on Cambodia. This research included findings on the economic impact of COVID-19, impacts on wage workers, the effect of COVID-19 on farmers, the effect of COVID-19 on household enterprises, and the effect of COVID-19 on savings and debt. Those studies focused on quantitative information, but an identified gap was that indigenous people were not included in the research.

Indigenous communities and rural people were already vulnerable before the pandemic due to development projects including economic land concessions, hydropower dams, and others, and because of predatory practices such as eviction, loss of lands, rivers, forests, soil, fish, and plants (Earth Rights International, 2014). The pandemic heightened this vulnerability. More than 476 million indigenous people around the world have been hit by COVID-19 (Phnom Penh Post, 2020).

In Cambodia, there are 24 indigenous groups (Open Development Cambodia, 2020) who are hypothesized to have faced challenges during the COVID-19 pandemic. But no specific research has been conducted with indigenous communities. Therefore, this participatory study was designed to explore the ***“Impacts of COVID19 Pandemics on Local Indigenous Communities’ Socioeconomics”*** and to fill this gap.

1.2. Study Problems

Cambodia has been a leader in rolling out a national vaccination campaign, but still suffers from many cases of COVID-19. The rising number of cases starting in February 2021 had a ripple effect on the economic livelihoods of many people, especially the most vulnerable. Because indigenous people in Cambodia already had higher levels of poverty, the effects of the pandemic on the socioeconomic status of this group need to be explored.

1.3. Study Objectives and Questions

1.3.1. Objectives

This study has the following objectives:

- To investigate indigenous communities' socio-economic impacts as a result of the COVID-19 pandemic.
- To explore coping strategies to aid in the socio-economic recovery of indigenous communities.

1.3.2. Research Questions

Two key questions were explored to collect the information pertaining to the study objectives:

- How did the indigenous communities' socio-economic conditions change during the COVID-19 pandemic?
- What strategies were employed to cope with the socio-economic conditions of indigenous communities and what additional strategies should be implemented for the socio-economic recovery of indigenous communities?

1.4. Study Significances

The findings of this study are very important for decision-makers, policy-makers, civil society organizations (CSOs), and local communities. The study findings will be used to influence decision-makers or policy-makers for better policy development, which would benefit indigenous communities and aid in their socio-economic recovery. The study findings can be used by sub-national authorities to develop plans in order to respond to the needs of indigenous communities. The CSOs and local communities

can use the study findings to develop and design their interventions to address the socio-economic status of indigenous communities.

1.5. Study Scope and Limitations

This study applied qualitative analysis and drew upon the knowledge of the community and local authorities. The study was conducted from January 1–August 30, 2021. The study focused on several aspects of indigenous livelihoods, including:

- Education
- Health
- Income generation
- Domestic violence
- Migration conditions
- Natural resources

The majority of respondents to the study included people from low-income households, vulnerable people, local authorities, and community committees. Respondents were also recruited from the following categories: poor level 1 and poor 2 status; lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGTBQIA) people; PWDs; widows; elderly people; and youth. These groups were studied to better understand the impact of the COVID-19 pandemic on their livelihoods and coping strategies.

1.6. Study Framework

MVi applied three approaches to conceptualize this study: the Sustainable Livelihood Approach, the Gender Approach, and an Inclusive Approach, as shown in Figure 1 and described below.

- The Sustainable Livelihood Approach was developed by DFID in 1987 (DFID, 2000). This was used to identify livelihood assets and livelihood outcomes. Human resources, natural resources, social resources, physical infrastructure, and financial resources are examples of assets that comprise a livelihood. The livelihood outcome refers to the employment and income of indigenous people. This study used this approach to identify the impacts of those resources

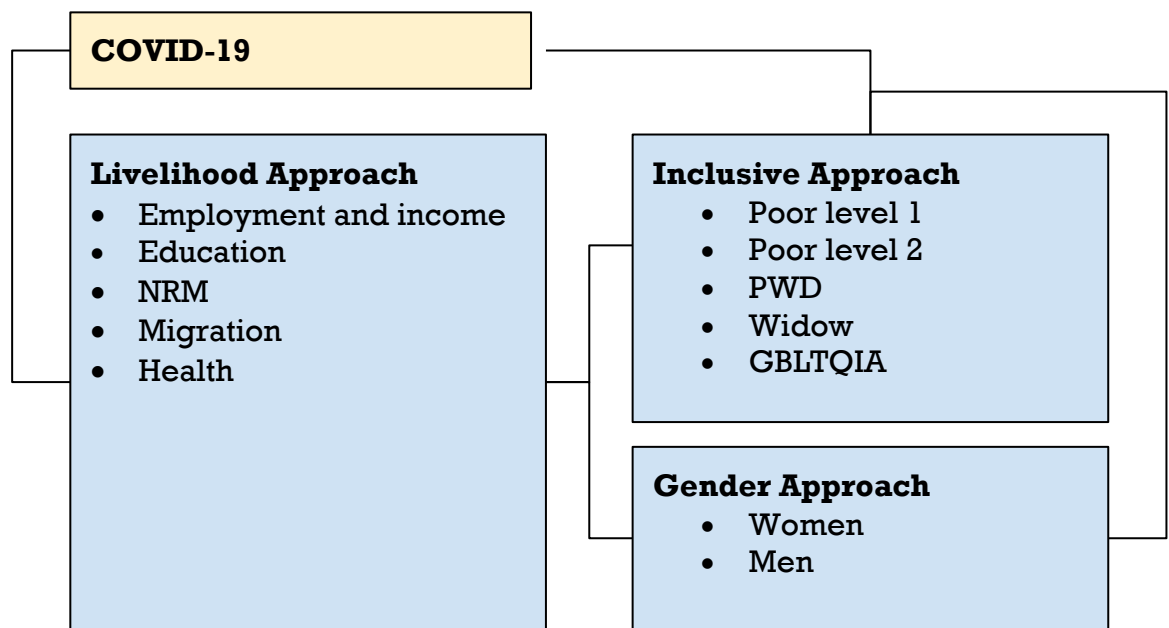
and livelihood outcomes. This approach was also used to identify the coping strategies to address the livelihood of the indigenous communities.

- The Gender Approach refers to gender-based differences in status and power and the discrimination that shapes the needs of women and men (European Institute for Gender Equality [EIGE], n.d). This approach was used to identify the impacts of COVID-19 on women and men, and boys and girls in indigenous communities in terms of employment and income, health, migration, violence, and natural resources. This approach helped the research team to identify the coping strategies of local indigenous communities and the responsiveness of the stakeholders in addressing the impacts of COVID-19 on women, men, boys, and girls.
- An inclusive approach was used to ensure that marginalized groups were included in the development process and that they also gained benefits from development (USAID, 2018). This approach was used to explore the impacts of COVID-19 on different groups, including people from poor level 1-families, people from poor level 2-¹[1] families, PWDs, widows, elderly, youth, and LGBTQIA.

The three approaches mentioned above were incorporated into the study, as illustrated in Figure 1 below.

¹ *There are two poverty categories to which poor households can be assigned: poor level 1 (very poor) and poor level 2 (poor). These poverty categories are assigned based on the questionnaire scores and consideration of the special circumstances of households.*

Figure 1: Research Framework



Source: UNDP, 2000; EIGE, n.d; USAID, 2018

1.7. Limitations of the Study

Travel and gathering restrictions due to a local ongoing outbreak of COVID-19 impacted the timeline of the study and data collection. The field collection was delayed, and the original submission date of July 2021 was pushed back. In order to follow the policies and to continue with the study, the data from the last two villages was accumulated by using the Telegram and Messenger online platforms, which may have impacted what information was provided since the format of collection differed.

The study focused only on qualitative data and did not collect quantitative data. This limits our ability to deduce quantitative information about the study group's socioeconomic status or to draw upon quantitative data around changes in their socioeconomic status.

CHAPTER 2: RESEARCH METHODOLOGY

2.1. Research Steps

The study followed seven steps: an inception workshop, drafting of study tools, consultations on the research tools, field data collection, data analysis, and report writing, a consultation workshop on the research findings, and a dissemination workshop on the research findings.

Step 1: Inception workshop

The first step of the study was to hold an inception workshop in March 2021 with 20 participants (11 women, one person from poor level 1, two people from poor level 2², one widow, and one youth), including provincial line departments, local authorities, dowers, 1 representative of persons with disabilities (PWDs), and 8 committee members of community fishery and forestry) to brief them about the process of the study project.

Step 2: Draft Research Tools

In collaboration with advisors, research tools, including questionnaires, were drafted. Several questionnaires were developed for different respondents. The first type of questionnaire was used to gather information from focus group discussions. The second type of questionnaire was developed to conduct key informant interviews, including those with local authorities, provincial line department officials, and marginalized people.

Step 3: Consultation Workshop on Research Tools

The consultation workshop on research tools was organized in March 2021. This workshop was conducted with 20 participants (including 11 women, one person from a poor level 1-family, two people from poor level 2-families, one widow, and one

² There are two poverty categories to which poor households can be assigned: Poor Level 1 (very poor), Poor Level 2 (poor). These poverty categories are assigned based on the questionnaire scores and consideration of the special circumstances of households.

youth). The workshop also included local communities, commune chiefs of the study sites, and provincial line department officials from the Provincial Department of Agriculture (PDoA), Provincial Department of Education, Youths, and Sport (PDoEYS), Provincial Department of Health (PDoH), and Provincial Government Administration Office. These participants were invited to verify and validate the objectives of the study and to provide feedback.

Step 4: Field Data Collection with Communities

The field data collection occurred from June 8–July 21, 2021, through interviews, group discussions, and observation. 69 key informants were interviewed in individual interviews (IDIs). The information was gathered from poor level 1-families, poor level 2-families, widows, PWDs, commune councils, village heads, CFIs (Community Fisheries), school principals, department officials from PDoA, PDoEYS, PDoH, and the Provincial Government Administration Office). Group discussions (GDs) were held with poor level 1-families, poor level 2-families, widows, PWDs, vice village heads, village secretaries, LGBTQIA representatives, HIV positive representatives, elderly, and youth respondents. More information can be found in the field data collection section in 2.4..

Step 5: Data Analysis and Reporting

The data was analyzed using ATLAS software to categorize the responses based on the research objectives. This analysis formed the basis of the research report. Feedback on the draft report was provided by a research consultant.

Step 6: Validation Workshop on Research Finding

The validation workshop was conducted on October 26, 2021, with 35 participants (14 women), including provincial department officials, commune chiefs, commune councilors, community leaders, PWDs, and widows. The session was held to validate the research findings.

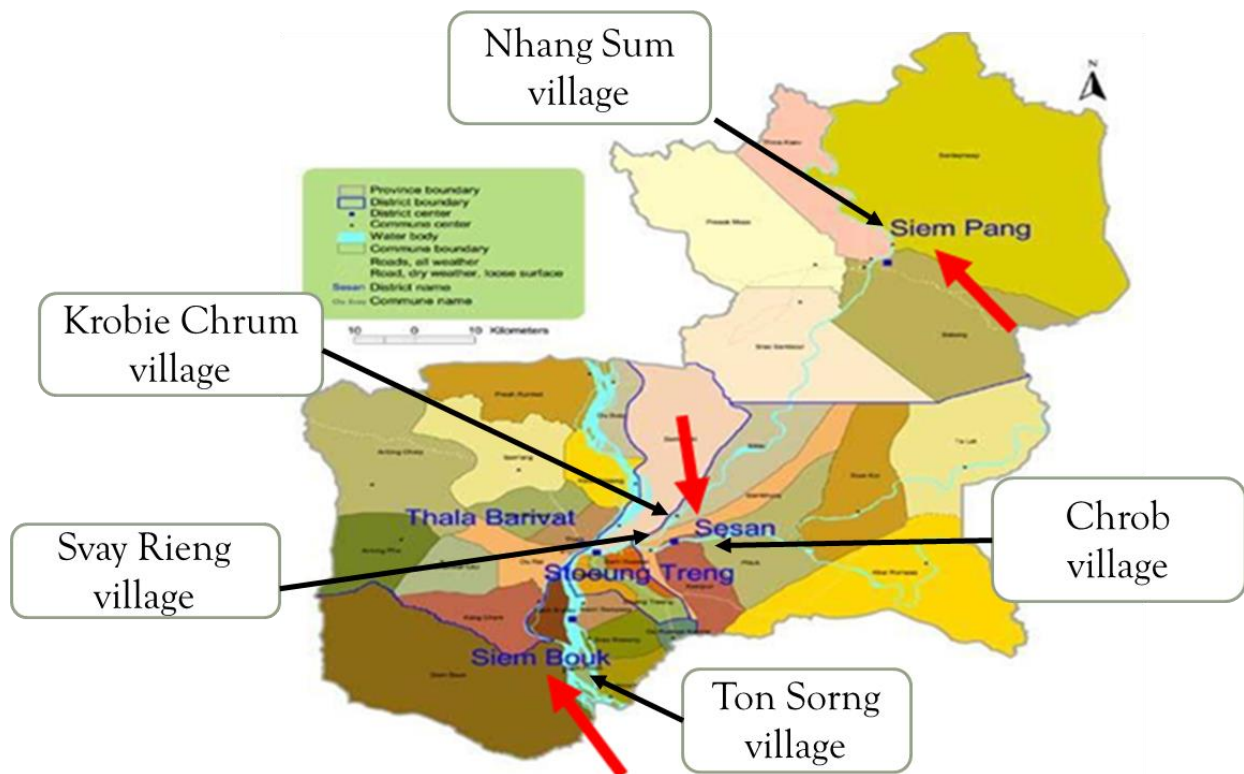
Step 7: Launch Research Workshop

MVi organized a launch workshop on November 22, 2021, to disseminate the findings to relevant stakeholders, including local authorities, provincial line departments, CSOs, community leaders, widows, women, PWDs, and LGBTQIA representatives.

2.2. Research Sites

The research focused on Stung Treng province, which is divided into six districts/cities (Stung Treng, Thalaboriwat, Siem Bok, Sesan, Siem Pang, and Borei O'Svay Sen Chey), comprising 34 communes and 128 villages, with a total population of 164,598 (82,418 women and 82,280 men) (Data source from Stung Treng Provincial Department of Planning: 2020). The study was conducted in five indigenous communities such as Nhang Sum (Khmer Khe), Krobie Chrum (Khmer Khe), Svay Rieng (Khmer Khe), Ton Sorng (Kouy), and Chrob villages (Prov) along the Sekong, Mekong, and Sre Pok rivers located in three districts, namely Siem Pang, Siem Bok, and Sesan (Provincial Administration, 2020).

Figure 2: Map of Research Sites

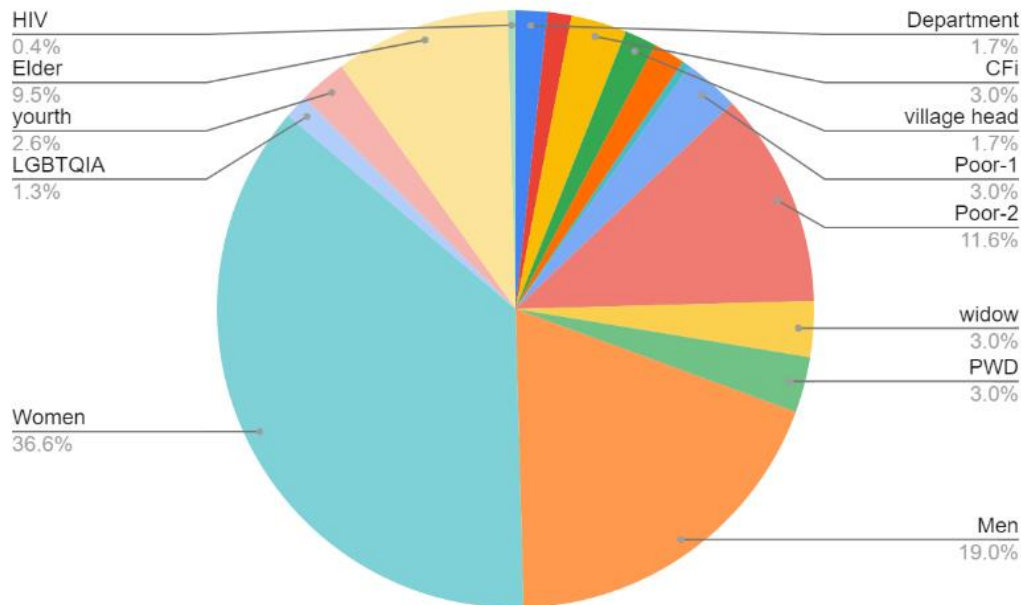


2.3. Sampling and Sample Sizes

Stratified random sampling was employed. In total, 125 people from Nhang Sum village, in Siem Pang district; Chrob village, Krobie Chrum village, and Svay Rieng village in Sesan district; and Tonsorng village in Siem Bok district were selected as samples. These were people from poor levels 1 and 2, widows, PWDs, LGBTQIA,

youths, and HIV positive people. As shown in Figure 2, those are also counted with departments, commune councils, village chiefs, committee members, and school principals as shown in Figure 2.

Figure 3: Sample Sizes



Source: Author, 2021

2.4. Data Collection

Two types of data were gathered including primary data and secondary data.

2.4.1. Secondary Data

The secondary data was gathered from provincial line departments and relevant government agencies and was used to triangulate and add to the primary data collected.

2.4.2. Primary Data

The primary data was collected through focus group discussions, case documentation, and key informant interviews.

- a. Focus Group Discussions:** Focus group discussions (FGDs) were employed in this study in order to gather information about the respondents/participants

and were grouped by similar backgrounds and experiences (60 Years of Impacts, 2009).

During field data collection, one FGD was conducted in each of the study villages. In total, 56 respondents were invited to participate in five different FGDs, ranging from five to 12 people. Indigenous community representatives were grouped by the following categories: indigenous women, indigenous youths, PWDs, widows, elderly, poor-1, poor-2, and LGBTQIA. The FGDs focused on the changes in their socio-economic conditions and communities caused by the COVID-19 pandemic, as well as coping strategies.

FGDs were also conducted during the consultative workshops at the provincial level with relevant stakeholders, including two groups of indigenous community representatives, one group of provincial department officials, and one group of local authorities. The GDs were preceded by a presentation from indigenous community representatives and a discussion that asked the following questions:

- *What were the additional impacts of COVID-19 on IP socio-economic conditions? What has been done to cope with the impact of COVID-19?*
- *What actions should be taken to support socio-economic recovery?*
- *What are the planning activities that will be done to recover from the worst socio-economic conditions?*

b. Key Informant Interview: There were 69 respondents interviewed, including women, men, PWDs, widows, poor-1 and poor-2, as well as other relevant stakeholders (Health Department, Administrative Department, Agriculture Department, Education Department, Commune Chief, and village heads). All key informants were asked the same questionnaires as used during the FGDs. The findings from the key informant interviews were used for case study documentation.

c. Case study documentation Two case studies on the socio-economic changes of the households in the study sites were produced. The case studies are related to the socio-economic impacts on women, men, PWDs, and youths.

d. Observations: Field visits were conducted to observe the real situation of the socio-economic conditions of the indigenous communities. This approach enabled the study team to better visualize the reality of the socio-economic conditions in the indigenous communities of the study sites. Photos of those conditions were taken and will be attached to the study findings report.

2.4.3. Data Analysis and Reporting

Most of the data is qualitative data. Three types of analysis were applied in this study: content analysis, narrative analysis, and framework analysis, as described below:

- The data was classified and summarized based on the contents and objectives.
- Narrative analysis: the stories or case studies were produced and presented in the study;
- Framework analysis: mapping and interpretation were used to describe the socio-economic changes.

CHAPTER 3: STUDY FINDINGS

3.1. Indigenous Communities' Livelihood Profile

3.1.1. Occupation and Income

The indigenous communities in research sites relied on rice production, farming, fishing, non-timber forest products (NTFPs) collection, and worked as shop sellers, laborers, teachers, government officials, and loggers for their livelihood and income generation. Of those occupations, most relied on rice production (Group Discussion, 2021; Key Informant Interview, 2021).

Rice production and Farming: 80–90% of the people in the research sites (except in Krabei Chrum village) relied on rice production for consumption, but only a few families had income from rice sales as an income generator. Of those research sites, only 50% of the people in Krabei Chrum village relied on rice production (Interview with Village Head, 2021). The agricultural land for each of the families in the research sites was 1.5–4 hectares. Some families in Chrob village had more agricultural land in comparison with the people in other research target villages. The indigenous people in Chrob village had around 10 hectares per family for rice production and farming. Rice production occurs only once a year in the rainy season from May to December. The average rice yield was between 1 and 5 tons per household (Key Informant Interview, 2021).

Besides their consumption, they also had income from rice sales. The income from rice sales was mostly reported in Chrob and Nhang Shum villages. About 50% of the families in those villages sell 1-2 tons per year per family. Few families (10%) of the families have sold 500-1000 kg per family in Krabei Chrum village (Interview with Village Head, 2021; Interview with Poor Level 1, 2021). Most of the families growing rice were middle-class or better-off families in the research sites. Most of the families with poor levels 1 and 2 didn't have the capacity to grow rice as they lacked some agricultural materials, especially families with elderly relatives. Those elderly families with poor levels 1 and 2 relied on the assistance of their sons or daughters (Key Informant Interview, 2021; Group Discussion, 2021).

Farming activities were reported on research sites. Of the research sites, farming was noticed mostly in Chrob village. Approximately 80–90% of the families in Chrob are engaged in rice production farming. Families who had or did farming were reported in Tun Sorng and Svay Rieng. The families in Nhang Shum have started farming this year. Their farming also focused on cassava and cashew nuts in Nhang Shum (Key Informant Interview, 2021).

Fishing: The majority of the families in the research sites fished for food and income along rivers such as the Mekong, Sesan, Sekong, and Srepok. It was reported that 70–80% of the families fished. They caught around 2–8 kilograms of fish per day per family using a number of fishing gears, including gillnets, hook longlines, and others. Boats are needed for fishing. Families classified as poor level 1 and poor level 2 in the research sites had lower capacities to fish in comparison with those not in these categories because the poor fishers and families lacked fishing gear and boats for fishing. Most of their fishing occurred along canals or streams nearby their residences (Key Informant Interview, 2021). Of the fishers in the research study, between 15–20% of the families earned income from fish sales. They could sell 1–6 kilograms of fish per day per family. Their income from fish sales was 10,000–60,000 Riel per day (Key Informant Interview, 2021).

Laborers: The families interviewed in the research sites also described earning income from labor. This kind of job occurred after rice production, farming, and harvest in their communities. From this study in 2021, 20–30% of the families in Nhang Shum and Tun Sorng villages earned income from labor sales, while 3–4% of the families in Chrob villages and Svay Rieng villages sold their labor for income. Some people were employed to work on small-scale farms in villages, large-scale farms (commercial farms), and construction companies. Their income from labor sales varied. People who worked for commercial farms could earn around 30,000 Riel per day per person. The income from being employed in small-scale farms or family-scale farming varied from 25,000–30,000 for men and 20,000–25,000 Riel per day for women or widows. Those who worked at restaurants in Stung Treng town earned 300,000–400,000 Riel/month (Key Informant Interview, 2021; Group Discussion, 2021).

Non-Timber Forest Products (NTFPs) collection: NTFPs also provided food security and income generation for indigenous communities in the research sites.

included wild honey, mushrooms, wild flowers (orchids), resins, bamboo shoots, wild fruits, wild vegetables, and others. It was reported that 30–50% of the families in Chrob and Tun Sorng villages collected NTFP for food and income generation, while the majority of the families in Nhang Shum collected NTFP. The NTFPs collected by those families in research sites include honey, mushrooms, wild fruits, wildflowers, resin collection, and rattan collection. The amount of money earned varied. For example, they reported that they could earn 10,000–30,000 Riels per day for mushrooms but only about 10-15 days per season (Key Informant Interview, 2021; Group Discussion, 2021).

Sellers: Some families also earn income from selling products, such as selling fish, groceries, and local meals. Only a few families in each of the research sites (except in Chrob village and Krabei Chrum villages) had income from product sales. Among the research sites, most sellers were reported in Chrob village. Around 200 families in Chrob village were sellers, and they lived in the market area. This type of occupation was done by the people from other areas who moved to Chrob village. It was noticed that only a few local residents had operated their shops for income generation. Most of the sellers were not classified as poor (Interview, 2021; Group Discussion, 2021).

Government officials: Few families reported income from government official positions. For teachers, village heads, commune councilors, and police officials, incomes range from 300,000 to 1,000,000 Riels per month (Key Informant Interview, 2021).

3.1.2. Access to Health

The illnesses reported included headaches, fevers, stomach pain, muscle pain, or diarrhea (Group Discussion, 2021; Interview with Village Head, 2021). The data provided by Village Health Support (VHS) (2021) indicated that no maternal mortality, neonatal mortality, or under-five mortality was confirmed in Chrob and Svay Rieng villages.

Illnesses were treated in different ways. Most of the families in research sites usually drank water boiled with traditional medicine as they thought that it could help prevent diseases such as fever, stomach pain, and other common illnesses. Most of the families

also took medicine, which was bought from small shops in the villages, to treat some types of illnesses such as headaches, fevers, colds, muscle pain, and others. Some of the families have bought medicine from markets and reserved those medicines for disease treatment when they get sick. Some families who had difficulties moving or traveling, e.g., the elderly and PWDs, were treated at their homes by doctors who did home visits (Key Interview, 2021; Group Discussion, 2021).

Some families have also accessed health center services. Some families reported that when they could not treat illnesses with the medicine they bought from local shops or markets, they accessed health center services to consult with doctors and receive treatment at the health center. Apart from treatment for illnesses, the health centers' services accessed by people on the research site were mostly involved in birth delivery. There was a program that promoted and encouraged women to give birth at health centers (Key Interview, 2021; Group Discussion, 2021).

Interviewees noted facing challenges in accessing health centers because the health centers are located far from their residences, except for the Chrob Health Center. The people in Nhang Shum village accessed the Siem Pang Health Center, which is located in Siem Pang district about 10 kilometers from Nhang Shum. It takes about two hours to reach the health centers. The people in Tun Song village accessed the services of the Sre Krasang Health Center, which is located in Sre Kra Sang village. It required travel from the village to the health center by boat. The health center is located about 30 kilometers from Tun Sorng village. People in Chrob accessed the health center situated in Chrob village. The people in Krabei Chrum accessed the services of the Kon Mom Health Center that is located in Kon Mom district in Ratanakiri province, about 40 kilometers from the village, and some people in Krabei Chrum village also accessed the services of Chrob Health Center. The Talat Health Center just recently opened in March 2021 (Key Interview, 2021; Group Discussion, 2021).

A few families also accessed Stung Treng Referral Hospital. The people who accessed the services of Stung Treng Referral Hospital noted that they went to this hospital when their illness became serious. Secondly, people who needed regular treatment (such as for HIV/AIDS, blood pressure, etc.) went to the referral hospital regularly so that they could collect medicine. Those who accessed referral hospitals included the

elderly and poor level 1-families and poor level 2-families (Key Interview, 2021; Group Discussion, 2021).

Some families in the research sites sought treatment at private clinics in Stung Treng's district or province. Some of the reasons for seeking treatment at these clinics include children's illnesses, serious fevers, and others. The families using private clinics have better incomes than the poor-1 and poor-2, and some are better off than the average families in the villages. (Key Interview, 2021; Group Discussion, 2021).

3.1.3. Access to Education

The children in the research sites were studied at primary schools, secondary schools, high schools, and universities. In the research sites, there were five primary schools with 1,089 students (548 girls) in 2021 (Interview with Primary School Principles, 2021).

All of the secondary schools were located outside of the villages. There were 82 students (40 female students) in 2021 who continued their studies at secondary schools. It was reported that 60-80% of the students who completed primary school continued their studies in secondary schools. It was reported that 20-40% of the students dropped out of their studies due to reasons including, but not limited to, family economic challenges and geographic barriers. Some students dropped out of their schools to help care for children and to help their parents with crop plantations and rice production. It was also noted that a lack of money to support their students' studies at secondary schools was a factor. Some schools were located far from home. For example, students from Krabei Chrum were required to study at the secondary schools at Talat commune, about 12 kilometers from Krabei Chrum village, or the secondary school at Kamphun commune, about 80 kilometers away. To encourage students from low-income families to continue their secondary education, the Royal Government of Cambodia established a scholarship program that provided rice, school supplies, and small stipends to students from low-income families.

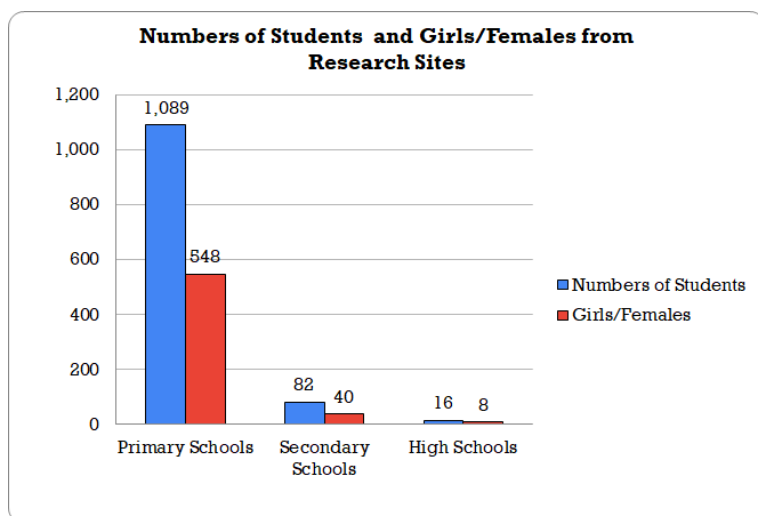
In total, 20 students from research sites were registered to study at high schools. Of those, only 16 students (eight females) from research sites were currently studying at high schools, and four students dropped out of high school. Of the current high school students, two were from Nhang Shum village, three were from Tun Sorng village,

three were from Savay Rieng village, and eight were from Chrob villages. The students from Nhang Shum continued their studies at Deicho Siem Pang High School in Siem Pang district town. The students from Krabei Chrum village were required to study at a high school known as Sesan Sowathipheap High School in the district town of Kamphun or Hun Sen Stung Treng High School in the provincial town of Stung Treng province. The students in Svay Rieng village were required to continue their studies in the provincial towns of Stung Treng, Sesan, or Banlung. The students in Tun Sorng village continued their studies at Toul Vichea High School in the Siem Bok district.

"Since I have taught for 20 years, only a few students from Nhang Shum village have completed high school," said the primary school principal in Nhang Shum village, Siem Pang district.

Due to high commitment and strong support from their families, only one student from Tun Sorng village has continued her studies at the university level in Stung Treng provincial town, while no other students from the research sites attended university.

Figure 4: Numbers of Students, Girls from Research Sites



Source: Author, 2021

3.1.4. Migration

Migration is defined as "the movement of a person or a group of people, either across an international border or within a state" (IOM, 2011). The people on the research sites have migrated to different areas within Cambodia for employment. About 20 families in Nhang Shum have migrated to work for T.B.Y.B ANGKOR BANANA CO., LTD. in Borei O'Svay Senchey district in Stung Treng, about 50 kilometers from Nhang

Shum village, and 18 out of 250 have migrated to Kompong Thom Province to work on rubber farms. Seven families in Chrob villages migrated to Kompong Som and Phnom Penh as construction workers and garment workers, while about 30 families migrated to work at a banana company called "Hoang Anh" in Kon Mom district, Ratanakiri province. 26 of 208 families in Krabei Chrum villages have migrated to work for large-scale farms known as Hoang Anh Romphat in Lomphat district in Ratanakiri province, and some indigenous people also went to Phnom Penh to work as construction workers or to work in shops or restaurants. Female youths were aged 17–20 were employed as restaurant or shop workers. It was reported that 20 of the 75 indigenous families in Tun Sorng village have sold labor in their village as rice cultivation workers, harvesting, or clearing farms. Ten families have migrated to Ratanakiri province, six families have migrated to Phnom Krahorm, Stung Treng, and Kratie to work as cashew nut harvesting workers, and one boy has migrated to Stung Treng town to work as an engine shop worker.

Some families also went to work at a banana plantation company, including some who brought their spouses and young children. They could earn around 30,000 Riel per day per person. This migration for employment occurred when they were free from rice production and harvests (Key Informant Interview, 2021). Some families from the research sites were employed in Phnom Penh as construction workers, while some families were employed as shop workers. Construction workers could earn around 40,000 Riels, while shop workers could earn around 20,000 Riels per person (Interview, 2021).

3.1.5. Domestic Violence

Domestic violence was identified in the research sites. Some of the participants in the group discussion reported that 2-4 cases of domestic violence were identified in each of the research sites. They noted that sometimes domestic violence was due to husbands consuming alcohol while their wives worked at home (Group Discussion, 2021) or to men gambling (Interview with Kbal Romeas Commune Chief, 2021). In Krabei Chrum village, the domestic violence reported to the commune council for intervention decreased in comparison with the previous few years, which the informant attributed to an increase in the community's understanding of the negative impacts of domestic violence (Key Informant Interview with Village Secretary, 2021).

3.1.6. Natural Resources

Natural resources were also an important source of both food and income for indigenous communities. The natural resources they depend on include forests and fisheries. It was reported that 50% of the indigenous people in Chrob gained benefits from forest areas in different ways, such as NTFPs. With MVi support, a community forest with 1073 hectares has been formed to preserve and manage forest resources in sustainable ways (MVi Report, 2021). It was reported that 40% of the forest-reliant families were from families that had better incomes than poor-1 and poor-2, and they earned from 30,000 Riel to 100,000 Riel/person. Around 10% of those forest-reliant families were from families that were classified as poor1 and poor2. They cited a lack of some materials and the far distance to the forest as obstacles. The income of the poor level 1 and poor level 2 families was noted to be 10,000 Riel to 20,000 Riel/person/day (Interview, 2021).

According to the interviewees, 10% of the families in Svay Rieng were middle-class or poor, with an income of around 12,000 riels/kg. At that time, Sla Prey (wild butternut) was sold at 12,000 Riel per kilogram and mushrooms were 10,000–30,000 Riel per kg (Interview, 2021).

The majority of people in Nhang Shum relied on NTFP. The income from NTPF sales ranged from 20,000–40,000 riels per day for resin, 10,000–20,000 riels per day for bamboo, 10,000–20,000 riels per day for mushroom, and 10,000–20,000 riels per day for wild fruit.

In Ton Sorng village, the majority of the indigenous communities also benefited from NTFPs. Of those, 25% were from the middle class. Their income varied: 20,000–50,000 Riels/day from the sales of wild fruits, logging, and mushrooms; and 25,000–50,000 Riels/day from rattan sales.

Fisheries also existed in many of the research sites. MVi has supported the formation of three community fisheries in three villages, except Chrob and Tun Sorng village (MVi report, 2021). With this protection, the fishery resources provide benefits for the majority of the indigenous communities and rural communities in these three areas (MVi report 2021).

3.2. Impacts of COVID-19 on Indigenous Communities' Livelihoods

This section analyzes the impacts of COVID-19 on the community members' occupations, incomes, education, health, migration, and levels of domestic violence. These impacts are described below.

3.2.1. Occupation and Income

The group discussion identified a number of negative impacts of COVID-19 on the occupation and income of the indigenous people, such as loss of employment, fish price decrease, increase in debts, and discrimination.

- a. **Loss of employment and income of migrants:** During COVID-19, most of the indigenous families who migrated for employment returned home, while few remained at their work sites. Those who returned home noted that they had concerns about COVID-19. It was reported that 44.2% of 43 indigenous families who worked in large scale farming had lost their jobs (Interview, 2021).
- b. **Increases in local employment in communities:** Some indigenous people who returned home have tried to look for jobs in their communities. The jobs in their communities included land preparation, cassava harvests, and rice growing, among others. Their earning potential in their home villages was less than what they could earn when they migrated to other parts of the country. In their home villages (heavy work), men earned an average of 25,000 Riel per day on average, while women could earn anywhere from 20,000 to 25,000 Riel per day. The high cost of labor for local employment has left many groups discriminated against in terms of gaining employment, including widows, women, the elderly, and PWDs. It was reported that 34.8% of 43 indigenous families had decreased income from selling labor in their own village (Interview, 2021).
- c. **Fish prices declined.** The declining price of fish was also identified during COVID-19. This has a negative impact on fishers who catch fish to sell for income. The price decline has affected 34% of the people who were interviewed (15 out of 43 people who were interviewed). The decrease in the price of fish was due to the restriction of middle sellers' ability to buy fish in

villages and also difficulties in fish transportation from research site villages to the fish market. This situation occurred during restrictions on movements and gatherings from March to May 2021. Before COVID-19, the price of fish was around 17,000 Riel to 20,000 Riel per kilogram. But during the COVID-19 pandemic, the fish price went down from 10,000 Riel to 12,000 Riel per kilogram. Additionally, some small fish and snails could not be sold during the time of restrictions. During this time, middle sellers bought smaller amounts of fish due to a decrease in fish demand at the market (Interview, 2021).

- d. **Negative impacts on agricultural production:** The loss of employment and income of migrant families has affected their ability to buy the agricultural inputs necessary for agricultural production. Before COVID-19, the income from labor sales was used to buy fertilizers, chemicals, and to hire tractors for plowing. To deal with their recent loss of income, they have adopted different approaches. Some families have borrowed petroleum to fill tractors for ploughing, while other families have borrowed money from their relatives to buy materials for agricultural production. Some families have also used their saved money from previous times to buy petroleum or materials for agricultural production (Interview, 2021).
- e. **Employment discrimination in local employment in communities:** Elderly people, women, and PWDs were discriminated against in terms of gaining employment in local communities during COVID-19 restrictions because they could produce lower volumes of products in comparison with other groups. During that period, there was a surplus of laborers available to do farming because migrant families returned to their homes/villages and were available to take on these jobs (Key Informant Interview, 2021).
- f. **There was an increase in debt of the indigenous people.** In total, 23 of the 43 key informants borrowed money from relatives or friends to buy agricultural materials such as fertilizers, and all of the 43 key informants also bought groceries on credit. These informants also reported that they paid back their debts late due to a loss of income from their employment. The majority of the people who borrowed money or bought things on credit were women.

A woman who is a widow and has five family members in Chrob village said, "I have bought groceries on credit from local shops in communities. Before COVID-19, I had paid it back within a few days. During COVID-19, the loss of my income caused me to delay paying back. It took around 15 days.

3.2.2. Impacts on Health

The COVID-19 pandemic had both positive and negative consequences for indigenous communities in the study areas. Since COVID-19, indigenous communities have changed some of their health-seeking and hygiene behaviors. All of the 125 respondents were aware of the negative impacts of COVID-19 and how to prevent it, but their practice of prevention of COVID-19 was still limited. Their prevention practices included wearing masks when they are out of the home, washing their hands, and social distancing. But they have also faced some challenges in adhering to prevention protocols. For example, not all of their children regularly washed their hands. They have increased knowledge of COVID-19 and prevention measures through social media, local authorities' actions, and civil society organization (CSO) activities. There were no reported cases of COVID-19 cases in the research sites (Key Informant Interview, 2021; Group Discussion, 2021).

COVID-19 has had a negative impact on the overall health of indigenous communities. These included difficulties in accessing health centers and private clinics. The indigenous groups faced difficulties in accessing health center services because of the restrictions on movement imposed by the government. The movement was permitted, but it required approval from the village security guard. The request for approval took some time to process. Access to health center services was limited to those who were seriously ill (Group Discussion, 2021).

Furthermore, the local communities in the research sites had difficulty accessing private clinics because private clinics were concerned about COVID-19 infections and about having to close their clinics if patients tested positive for COVID-19. The private clinics did not allow patients to stay in their clinics, but rather just provided advice to patients and sold medicine for treatment at home.

Respondents reported difficulties in collecting medicine from Stung Treng Referral Hospital. People living with illnesses such as HIV/AIDS or others requiring long-term

treatment were required to collect medicine from referral hospitals on a monthly basis. During COVID-19, these individuals delayed collecting medicine from the hospitals and thus did not continue with their treatment during the period of restrictions on movement. It was reported that their health had declined (Group Discussion, 2021; Key Informant Interview, 2021).

3.2.3. Impacts on Education

In total, 1,089 students from five primary schools, 548 students (50.32% of the total students) were girls (Interview, 2021). All the students are indigenous. From Siem Pang, Svay Reing and Krobie Chrum are "Khme Khe", and students from Chrob are "Prov." Students from Ton Sorng are "Kouy". Three main impacts of COVID-19 on the education of the indigenous communities were identified: the closing of schools; ineffectiveness of learning; and school-drop-out.

Schools were closed. On research sites, five primary schools in five research villages were closed from March 11th to November 2nd, 2020 (MoEYS, 2021) (Channel News Asia, 2020). In 2020, e-learning and student home visit approaches were adopted (Key Informant Interview, 2021). The lessons were live-streamed on the MoEYS Facebook page (MoEYS, 2020).

Ineffectiveness of e-learning for indigenous students and rural students: The e-learning approach through videos produced by MoEYS was ineffective for indigenous students because the majority of the indigenous students could not regularly access these lessons. Barriers included the inability to access the videos, internet connection issues, and lack of TV or phones/devices (Key Informant Interview, 2021).

The challenge of students' access to study through home visits is real. Home visits were adopted in 2020. This meant that teachers visited students' homes and taught students in small groups of around five to six students per group. Around 60% of the students could continue their studies, while 40% of the students, both boys and girls, could not utilize this approach (Interview, 2021). Some of the students who could not join were from poor-1 and poor-2 families because their parents had brought their kids to rice fields, which were far from schools. This has made it difficult for teachers to visit their homes (Interview, 2021).

In 2021, different learning approaches were adopted. Livestreaming on MoEYS' Facebook page continued and new approaches were introduced. For the students from grades 1 to 4, this new approach included lessons and assignments that were delivered to students. The student's parents or other students were able to pick up lessons or assignments from their teachers at schools. After completing the assignments, they submitted them to the teachers. It was reported that 40%–60% of students collected their assignments or lessons from teachers. The students who lacked the capacity to collect and bring assignments to school were students from poor families because many of them worked on the farms/rice fields with their parents and/or lacked transportation to travel to school (Group Discussion, 2021).

For secondary school and high school students, Telegram groups were formed. The lessons were shared and distributed through these Telegram groups and Google Meet for learning from home. If the students did not have the Telegram application (mobile app), they could only join the online class during the exam since they could borrow the phone from a relative only during the critical period. It was reported that about 40%–50% of the students from Nhang Sum, Svay Rieng, and Chrob could not access this education because they could not afford a device. Some of the families also forced their kids to help with farming activities away from their residences. Because they needed to care for siblings at home, girls became the most vulnerable group to dropping out of school (Group Discussion, 2021).

Some students dropped out of school. Some students have decided to drop out of school during COVID-19. The number of students who dropped out of primary schools increased during COVID-19. In the academic year 2018–2019, the drop-out rate of school students was 0.4%, compared to 1.65% reported in the academic year 2020–2021 in Svay Rieng and Nhang Sum villages. Moreover, the number of primary school students who failed their class completion also increased. The number of failed primary school students increased from five students to eight students between the academic years 2018–2019 and 2019–2020. Some reasons noted for these increases in issues around completion and retention include a lack of learning devices for learning online and children having to support their parents on their farms or rice fields. Longer school closures and a lack of learning materials have discouraged parents from supporting their kids to go back to school and discouraged students from

continuing with their studies. Due to a lack of motivation, some families who stayed in rice fields far from home have found it difficult to send their children to school (Interview, 2021).

A student who is LGBTQI and lives in Tung Sorng Village, near Sen Sok secondary school, said that "I have difficulties studying online as I don't have a device for e-learning and I have decided to drop out of school." Owing to the insecurity of food in my family, I have decided to look for a job to generate income. "

The school closure in Stung Treng had a negative impact on high school students from the research sites. In total, 16 students from Chrob, Tun Sorng, Nhang Shum, and Svay Rieng villages registered and continued their studies at high schools. Four high school students dropped out of school. One of the four school students from Chrob village dropped out of school during COVID-19 (Interview with students in Chrob village, 2021).

Schools were reopened on November 1, 2021 (Khmer Times, 2021). To ensure social distancing, classroom sizes were made smaller. Before COVID-19, there were around 55-65 students per class. After school re-opened, the number of students in each of the classes was about 19 to 25 (Group Discussion, 2021).

COVID-19 has a negative impact on the quality of student learning. COVID-19 has had a negative impact on the quality of education. The original pre-COVID schedule at the high schools was that classes started at 7 to 11 in the morning and from 1 to 5 in the afternoon, six days a week. However, during COVID-19, online studies were done with one subject a day for only 1-2 hours a day. The main subjects were prioritized for students in grade 12. Self-learning was suggested with exercises from the teachers (Key Interview with High School Students in Chrob, 2021). It was reported that 67 students were in grade 12 in the 2020–2021 academic year in Chrob village. But only 30 students were able to participate in e-learning due to a lack of internet connection or poor internet connection in their villages (interview with the student, 2021). Even though some students could not attend e-learning classes, they tried to attend exams to receive scores. The number of failed students in primary schools increased in 2021 (Interview, 2021; Group Discussion, 2021).

3.2.4. Impact on Migration

COVID-19 has caused many to lose income. Many migrants were employed in large-scale farming in Ratanakiri province. Some of the migrants were employed in Phnom Penh as construction workers and shop workers. Many indigenous migrant workers returned home because of the insecurity of COVID-19 and therefore lost their jobs. The lost income of migrant workers was around 150 to 250 USD per month per person (Group Discussion, 2021).

3.2.5. Impact on Domestic Violence

Domestic violence is defined as physical violence or any controlling behavior directed at a spouse, partner, girlfriend/boyfriend, or an intimate family member (ARIZONA COALITION, 2021). Domestic violence was identified in indigenous communities/villages during the COVID-19 pandemic (Group Discussion, 2021; Interview, 2021).

In Tun Sorng village, it was reported that 1 of 43 key informants (2.3% of key informants) had experienced physical violence during COVID-19. During COVID-19, men/husbands went to drink wine outside with their friends. However, their wives were not satisfied with such activities (drinking). Drinking wine has wasted time and cost money while their income was lost during COVID-19 (Key Informant Interview, 2021).

One of six members (16% of the respondents in the group discussion) in the group discussion in Tun Sorng village has confirmed that there was physical violence in their families because they got drunk. During COVID-19, physical violence between wives and husbands occurred more often in comparison to before the pandemic (Group Discussion, 2021).

Eight of 43 key informants had experienced altercations in their families during COVID-19. The informants noted that their perceived causes were that the husbands or men got drunk and spent money on alcohol despite having a loss of income. They also complained of not having adequate food due to a lack of funds. And they noted that women/wives tried to reduce expenses or payments during COVID-19, which led to altercations. (Interview, 2021).

3.2.5. Impacts on Natural Resources

COVID-19 has also had both positive and negative impacts on natural resources. The natural resources that the indigenous people of the research site relied on were fishery resources and forest resources (including NTFP) (Group Discussion, 2021; Interview, 2021).

During the COVID-19 pandemic, there was increased pressure on fishery resources. The number of fishers increased. Because of COVID-19, migrant workers returned home because they lost their jobs and income from employment in other locations. To support their families, these groups tried catching fish for food and income generation (Key Informant Interview, 2021).

A migrant worker who returned to Svay Rieng village, who had migrated to Ratanakiri province for work in a cashew nut farm, came back home when COVID-19 occurred and said "I have lost income from employment on the farm after coming back home." I, therefore, need to catch fish to earn some money and for food.

Illegal fishing increased during COVID-19. This increase in illegal fishing was recorded in community fisheries in Kbal Romeas, Nhang Sum, Krabei Chrum, and Tun Sorng due to fewer fishery protection and patrolling activities. The lower number of fishery protection activities was due to the restrictions on gatherings imposed by the government (Interview, 2021).

On the other hand, there were some positive impacts on forest resources identified during COVID-19. The number of illegal logging incidents in Nhang Shum village in Siem Pang district has been reduced. This was because of less demand from wood buyers due to restrictions on movement (Interview, 2021).

3.3. Coping Strategies

To address the negative impacts of COVID-19 on indigenous communities' socio-economics, a number of coping mechanisms have been adopted. These were reported to have been used in order to mitigate the negative impacts on occupation and income, education, health, migration, domestic violence, and natural resources.

3.3.1. Coping Strategies for Employment and Income

To deal with the loss of employment and income of migrant workers, a number of adaptive strategies have been adopted by these groups. First, local employment was one option for migrant workers who returned back home. Most migrant workers who returned to their homes and communities sought employment as laborers in their own communities for a source of income. The local employment options in their communities included farm preparation, crop plantation, cassava harvesting, cashew nut harvesting, and others.

Some people have resorted to selling their livestock for income generation. During COVID-19, some families sold fish or livestock to earn income and to support their household needs during the period. Moreover, some families planted vegetables for their own family consumption, which could reduce their food expenses. Vegetable sales could also be an additional source of income during COVID-19.

Local communities earned income from NTFP sales. Many of the families harvested bamboo shoots for food and income generation. This livelihood activity could reduce their expenses for their household food and provide additional income from NTFP sales.

Some migrant workers who returned home fished for food and income during COVID-19. With the loss of income from their employment, fishing became a good option to provide food for their families and also income, in particular for the people in indigenous communities and rural areas who lived along the rivers, including Nhang Shum, Tun Sorng, Svay Rieng, and Krabei Chrum villages. The income from fishing was also used to pay back as described below.

Due to the loss of their income during COVID-19, some indigenous and rural people resorted to buying materials and groceries on credit from the local shops. It was reported that 90% of the 43 families in the research sites bought on credit from the local shops, with plans to pay back the amount when they earned income. But repayments for the sellers took longer than before the pandemic because of a lack of capacity for these groups to earn income. The money earned from fish sales or livestock was used to pay back these local shops.

To address the impact of COVID-19, the government offered payments to poor families in the research sites in Stung Treng province. The donations for poor families and individuals ranged from 102,000 to 200,000 Riel per month. 456 out of 7492 poor people received this type of donation from the government (Key Informant Interview)³ [1]. This money could be used for basic household needs and was also used to pay back the sellers who allowed buyers to buy on credit.

To promote the community products and contribute to COVID-19 prevention, commune councils also prepare local places/markets to sell the products to the outside group and budget community products as well as help with safety protocols. This initiative was reported in Chrob village.

Marginalized people, including PWDs and widowers, have difficulties in finding employment. They sometimes sought employment through family members to work on farms such as cassava plantations, cassava harvests, and others. They need further support to be able to be gainfully employed (Interview, 2021).

In Stung Treng, the Department of Agriculture (DoA), in collaboration with local authorities, helped to improve the agricultural system and provided seeds, materials, and technical training for villagers to be able to operate their own small-scale vegetable farms. A program to help villagers raise chickens or fish was put into place before the COVID-19 pandemic and continues to operate (Interview with DoA, 2021).

3.3.2. Coping Strategies for Health

To mitigate the impact of COVID-19 on indigenous communities' health, indigenous communities adopted several coping strategies, some with support from local government. These are described below.

Many indigenous people report that they rely on traditional medicine to prevent disease and keep them healthy. They continued to use this type of medicine throughout the pandemic (Key Informant Interview, 2021).

³ Nhang Sum village: 41 families, Tonsorng village: 27 families, Chrob village: 63 families, Svay Rieng village: 351 families, Krobie Chrum village: 74 families.

The government and CSOs have undertaken awareness-raising activities around COVID-19 and how to prevent it. The majority of the indigenous communities on research sites reported that they received this information. They noted that they could access this information through authorities, community committees, and CSOs through word-of-mouth and on social media. Until now, the majority of the indigenous people on research sites have reported that they follow safety protocols. These include wearing masks when they go outside, washing their hands, and not gathering in large groups. By September 17, 2021, indigenous people aged six and up in the research sites will have all been vaccinated against COVID-19. As of November 10, 2021, 87.61% of the total population in Cambodia (16 million people) had been vaccinated (MoH, 2021). All people returning or moving to villages were also required to quarantine for 14 days at their homes.

To overcome the challenges of accessing healthcare services, indigenous people in the research sites have asked village security guards to accompany them when they travel to the healthcare facility. But it took time to send a request and grant its approval. Health center staff also went to the village to conduct checkups on pregnant women. Commune councils visited women and their families after giving birth and provided some small materials in Kbal Romeas commune.

Private clinics have not allowed patients to stay at their clinics for treatment (patient services). The clinic doctors continued with consultations and prescribed medicine to the patients for treatment at home. When serious diseases occur, the clinic doctors send the patients to provincial referral hospitals and health centers.

Patients with HIV/AIDS and other chronic conditions such as high blood pressure had difficulties collecting medicine from Stung Treng provincial referral hospitals due to the travel restrictions. This caused delays in their ability to collect medicine from hospitals. There were reports of HIV/AIDS patients becoming more ill during this time. Blood Pressure Patients attempted to use village medicine (Interview with HIV/AIDS patient, 2021).

3.3.3. Coping Strategies for Education

When the schools were closed, different strategies for education were adopted, including home visits and e-learning.

Student home visits: Teachers arranged for their students to collect work at school and also conducted home visits. 30-50% of the 1,089 students (548 girls) in the primary schools in the research sites were able to collect the papers/lessons from school (Key Interview with Primary School Principal, 2021). Those who could not collect papers or lessons from schools or teachers noted that it was because the students' or parents' residences were far from the school and/or the children and parents stayed at their rice fields that were located far from the schools. Traditionally, the indigenous people on research sites stayed near their rice fields during rice plantation and rice harvest seasons. In 2020, groups of five students were formed whose residences were located near each other. The teachers then conducted house visits to these student groups. The teachers prioritized the students who were located far from the schools (Interview with Primary School Principal, 2021).

MoEYS produced lesson videos for primary, secondary, and high school students (MoE, 2020) and live-streamed these lessons on MoEYS' Facebook pages. The videos produced by MoEYS were also shared by teachers on Telegram groups, in particular in Chrob, Tun Sorng, and Svay Rieng.

A teacher in Krabei Chrum village said, "During school closures, I have invited four students to join in learning via video at my house."

A parent who lives close to the teacher's residence in Krabei Chrum village said, "My children have studied via video at their teachers' home."

But most of the students could not access the videos, in particular the students in Nhang Shum village. This was due to several barriers, including a lack of materials such as phones or TVs or the means to purchase them, and a lack of internet connection.

In the upper grades, teachers formed student Telegram groups and provided lessons shared via this means. The teachers have encouraged parents to help their children with their studies and remind them how important education is for their future.

A parent far from school in Krabei Chrum village said that "I did not know about the learning via videos."

A school principal in Nhang Shum village in Siem Pang district said, "In Nhang Shum village, the phone internet is very poor and it is difficult to learn via video or apply an e-learning approach."

Students assisted some primary students. This approach was noticed in Nhang Shum village in Siem Pang district. When students could not understand the lessons or papers delivered by the teachers, they approached older students for help. Due to capacity constraints, parents in the research sites were unable to provide coaching for their children.

Many of the students who could access education through online resources came from less vulnerable households in the villages, but students from poor families were unable to do so due to a lack of materials, including phones and phone credit. Additionally, the students from the poor families stayed with their parents in their rice fields during the COVID-19 pandemic, and this made it difficult for them to travel to school to collect lessons.

An indigenous mother/widow, whose child studied in grade 1 in Chrob village and who was classified as a poor 2-family, said "I did not receive and collect papers for my kids from schools during the COVID-19 pandemic because my house is far from school. It is located about 4 kilometers from the school. "

A mother, who was classified as a poor family in Krabei Chrum village, with a child in grade 1, confirmed, "I did not receive and collect any paper from schools for my kids."

Some support was provided to poor households: before COVID-19, the school prepared breakfast for all students from grades 1-6. The primary school students in grades 3-6 from poor families received 80,000 Riel per student on a quarterly basis in order to encourage them to continue their studies. During COVID-19, the modality of the scholarship was changed. The rice was delivered to students from poor families and they continued to receive the cash incentive of 80,000 riels per student on a quarterly basis (Interview with Teacher, 2021).

The Royal Government of Cambodia (RGC) has agreed that all students who studied in grade 12 in the 2019-2020 academic year have passed (MoEYS, 2020). There were more than 120,000 students (60,000 girls) who passed grade 12 automatically (Radio Free Asia [RFA], 2021).

3.3.4. Coping Strategies for Migration

To address the impacts of COVID-19, a number of coping strategies were adopted, including local employment, fishing, NTFP collection, and government incentives.

Local employment: Migrant workers who returned to the village have tried to look for employment at home in order to generate income and increase their food security. This local employment includes farmland preparation, cassava harvesting, and cashew nut harvesting.

Some migrant indigenous people and rural people who returned to the village and who lived along rivers, such as in Svay Reang, Tung Sorng, Krabei Chrum, and Tun Sorng villages in the research sites, restarted fishing for food and income generation for their families. The income from fishing could also be used to pay back local shops, buy other food, and buy materials (Key Informant Interview, 2021).

Government incentives for migrant poor families who returned to live in villages: Some poor families who have come back to villages have received support from the government. This support was around 100,000–200,000 Riel per month/family (Key Informant Interview, 2021).

To prevent COVID-19 from spreading in villages, the commune councils have arranged for quarantine at home for 14 days for everyone returning to the village.

3.3.5. Coping Strategies for Domestic Violence

At the local level, commune councils and the Commune Committee for Women and Children (CCWC) were the main actors in facilitating and addressing domestic violence in their territories.

Domestic violence prevention was facilitated through restrictions on wine sales. The purpose of this action was to prevent COVID-19 infection through gatherings. Authorities believe that this action of "no sales of wine" contributed to a reduction in alcohol consumption and that this also contributed to less domestic violence in families as well.

3.3.6. Strategies for Coping Natural Resource Issues

To prevent illegal fishing during COVID-19, a number of measurements were taken by local communities, authorities, and CSOs.

Some migrant people moving to the villages tried to look for employment focused on farming. This can reduce the pressure on fisheries or forest resources in their communities.

A number of actions were carried out to prevent illegal fishing. MVi has issued a small grant to support the CFI Management Committee and the Community Forest Management Committee (CFMC) in order to help them protect the natural resources in their communities. The small groups of local communities were formed with social distancing and they were supported to participate in patrolling even during the COVID-19 period (Key Informant interview, 2021). CFi and CF members also played roles in reporting illegal logging or illegal fishing to CFiC and CFMC. To reduce the costs and time for conservation, a drone was supported by MVi for CFiMC in order to monitor illegal fishing activities in conservation areas with fewer costs (Key Informant Interview).

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

4.1. Conclusions

The COVID-19 pandemic has had a negative impact on indigenous people's livelihoods, including employment and income, education, the migration of people, health, and natural resources. As a result of COVID-19, the indigenous people have lost their employment and income. The price of fish has decreased, which has lowered their ability to make money from selling fish. Migrant workers returned home because they were concerned about their health security and many lost their jobs. Schools were closed because of COVID-19 and this increased education inequality. Health was impacted because it was difficult to access health services due to restrictions on travel. Returning migrants have pressured forest and fishery resources through increases in the number of fishers, which include the migrants who have returned to their own village.

The RGC, rural communities, and indigenous communities have taken a number of measures to cope with the issues stemming from COVID-19. Migrant workers tried to look for local employment, used fishing to supplement household consumption and income needs, and often borrowed money from neighbors. Students attempted to use e-learning that was facilitated by the government; teachers visited some students' homes, and older students supported younger students in their school lessons. In terms of health, home visits were facilitated for pregnant women, and people sought permission to travel to health centers. After giving birth, families were visited and offered a small amount of money to support their basic needs. To deal with natural resources, some coping strategies included smaller groups of patrolling teams, support grants from CSOs for forest and fishery resource patrolling, drone delivery to community fishery committees, and requesting community members to report illegal fishing or logging. And to minimize the spread of COVID-19, a mandatory 14-day quarantine at home was imposed on all people returning to the village.

4.2. Recommendations

The research team has several recommendations to support indigenous communities to improve their socioeconomic status, as listed below:

- Poor families should be provided with agricultural techniques for animal raising and farming (vegetables) in order to support them to supplement their household consumption needs and generate additional income.
- Saving groups should be formed in order for communities or indigenous people to access credit with low interest and without collateral.
- Training on financial management and savings should be facilitated for local and indigenous communities in order for them to better support their families and businesses.
- Commune councils should allocate a specific budget to support indigenous communities with their investment initiatives and capital.
- Parents should support their children in learning, such as by collecting papers or lessons from school.
- Incentive support from the government should be offered to poor families, specifically gasoline, to enable them to transport their children from the rice fields to the schools so that they can collect their school assignments.
- Teacher home visits should continue because they were found to be effective in some areas where the internet connection was poor.
- Local authorities, including commune councils, should raise awareness of e-learning among parents.
- With some incentives from the government, community volunteers should be selected to support students regularly with educational visits and aid in their learning.
- Teachers/schools should continue to announce the class schedule to parents, as some students did not have access to this information.
- The videos should be conducted in local languages, including IP languages, in order to support student learning.
- Older students should be supported to offer educational support to younger students.

- Equipment and materials should be provided to groups of students from poor families to facilitate education, such as phones, etc., so that they are able to access online videos.
- The local government, CSOs, and the Commune Council should continue to disseminate information about the impact of COVID-19 and prevention measures for community members.
- Dissemination of information about domestic violence should be regularly discussed during meetings, and support service providers for domestic violence should be invited to attend local community meetings.

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Annex

Annex 1: List of Respondent

N	Respondents	Number	Women
1	Provincial Department of Education, Youth and Sport Officer	1	0
2	Provincial Department of Agriculture Officer	1	0
3	Provincial Department of Health	1	1
4	Provincial Administrative Officer	1	1
5	Commune Council	3	0
6	Community Fishery Management Committee	4	1
7	Community Forestry Management Committee	3	1
8	Village head	4	1
9	School principal	4	1
10	Students	2	1
11	Village Health Support	2	1
12	Sample from target villages	99	80

Annex 2: Questionnaire

Investigation of Impacts of COVID19 Pandemics on Local Indigenous Communities' Socioeconomics.

Group Discussion Questions:

1. When Covid 19 outbreak appeared, what is the impact on the local community?

Socio-economic factors	Impact description
Education	
Health	
Violence	
Revenue	
Migration and employment	
Natural resources	

2. How does Covid 19 affect widows, poor 1, poor 2, LGBTIQ+, people with HIV, people with disability, elders, men, women, and youths?

Affected people group	Impacts (Both positive and negative)
Single mother	
Poor 1	
Poor 2	
LGBTIQ+	
People with HIV	
People with disabilities	
Elders	
Men	
Women	
Youths	

3. What has your local community done to address the issue?

Intervention	Who support	Beneficiaries	Current progress/results	Challenges	Suggest intervention

4. Did you know that the government has issued Covid 19 guidelines/declaration? And what percentage of those guidelines/declaration have been applied? And what are the risks?
5. What opportunities do local communities see and use and how to address the impact of Covid 19 (health, tourism, agriculture and food security, garment factories, education, return of migrant workers, social protection)?

Questions to KII

1. When Covid 19 outbreak appeared, what is the impact on your family?

Socio-economic factors	Impact description
Education	
Health	
Violence	
Revenue	
Migration and employment	
Natural resources	

2. How did you solve that problem?

Affected people group	Impacts (Both positive and negative)
Single mother	
Poor 1	
Poor 2	
LGBTIQ+	
People with HIV	
People with disabilities	
Elders	
Men	
Women	
Youths	

3. How does you get the supporting from CSOs and local authorities?

Intervention	Supporter	Beneficiary	Progressing/outcomes	Challenges	Suggestion for intervention

4. Did you know that the government has issued Covid 19 guidelines/declaration? And what percentage of those guidelines/declaration have been applied? And what are the risks?
5. What opportunities do local communities see and use and how to address the impact of Covid 19 (health, tourism, agriculture and food security, garment factories, education, return of migrant workers, social protection)?

Questions to local authorities (communes and provincial governor)

1. When Covid 19 outbreak appeared, what is the impact on the local community?

Socio-economic factors	Impact description
Education	
Health	
Violence	

Revenue	
Migration and employment	
Natural resources	

2. How does Covid 19 affect widows, poor 1, poor 2, LGBTIQ+, people with HIV, people with disability, elders, men, women, and youths?

Affected people group	Impacts (Both positive and negative)
Single mother	
Poor 1	
Poor 2	
LGBTIQ+	
People with HIV	
People with disabilities	
Elders	
Men	
Women	
Youths	

3. How does the commune plan / take action to address the impact of Covid 19 on widows, poor 1, poor 2, LGBTIQ+, people with HIV, people with disability, elders, men, women, and youths?

Intervention	Who support	Beneficiaries	Current progress/results	Challenges	Suggest intervention

Questions to Department of Education:

1. When Covid 19 outbreak appeared, what is the impact on the local community?

Socio-economic factors	Impact description
Education	
Health	
Violence	
Revenue	
Migration and employment	
Natural resources	

2. How do poor 1 and poor 2 students, boys and girls, be affected by Covid 19?

3. How does the Department of Education have a plan / action to address the issues of Covid 19? Especially male, female, students of poor 1 and poor 2?

Questions to the Department of Agriculture:

1. When Covid 19 outbreak appeared, what is the impact on the local community?

Socio-economic factors	Impact description
Education	
Health	
Violence	
Revenue	
Migration and employment	
Natural resources	

2. How are the widows, poor 1, poor 2, LGBTIQ+, people with HIV, people with disability, elders, men, women, and youths affected by agriculture? (Receipt of technical training, equipment and agricultural marketing)
3. How is the Department of Agriculture active and contributing to solving the problems of Covid 19?

Questions to the Department of Health:

1. When Covid 19 outbreak appeared, what is the impact on the local community?

Socio-economic factors	Impact description
Education	
Health	
Violence	
Revenue	
Migration and employment	
Natural resources	

2. How are the widows, poor 1, poor 2, LGBTIQ+, people with HIV, people with disability, elders, men, women, and youths affected by community health?
3. How is the Department of Health active and contributing to solving the problems of Covid 19?