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COVID-19 migrant returnees, access to land, and subsistence under uncertain times in Karen State, Myanmar

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ABSTRACT

In addition to its impacts in terms of illness and death, the COVID-19 pandemic caused significant socioeconomic hardship in Myanmar as it did around the world. How land was implicated in how people coped with this hardship remains poorly understood. Other pre-pandemic studies in the region have found that rural communities and land provide a safety net for migrants engaged in precarious work, to which they can return in times of crises; it is partly for this reason that people do not sell land despite it becoming less important for livelihoods. Research conducted between June and October 2020 in ten rural villages severely impacted by the loss of remittances accompanying the pandemic, and in which many returned migrants were now living, found that land did indeed provide a significant safety net but in unexpected and specific ways. Land replaced remittances as the main source of livelihood and security. It allowed returned migrants to survive as they waited to go back to Thailand, reinforcing the co-dependency between farmers and their migrant relatives. Yet many returned migrants only reluctantly turned to farming when they had no other options, and some households had land that was only partially used while others remained landless. Ultimately, land's role as a safety net was limited due to the unviability of smallholder farming and the unequal distribution of land.

1. Introduction

Globally, as efforts to strengthen land tenure and access to land for smallholder farmers continue, many of them are becoming migrant workers. Migrant labor is a massive phenomenon in East and Southeast Asia. It generally involves movement from countries or regions with less economic opportunities to others with greater opportunities; migration is often to urban areas, associated with rapid industrialization, though there is also migration to rural areas for work on plantations or in logging (Kelley et al., 2020; Rigg et al., 2016). Migrants frequently form a new underprivileged social stratum in the society into which they move (Aung et al., 2024; Borras et al., 2022; Loong, 2019).

While many of those migrating from rural areas are landless, many others are members of smallholder households. Push factors for smallholder farmers into migrant labor include rural poverty, the non-viability of smallholder farming, and increased expenditures (for housing, children's education, farming inputs, and other needs) (Borras et al., 2022; Rigg et al., 2016). Pull factors include the opportunity to earn

greater income in what may be perceived to be higher status jobs and possibilities for a better life (Rigg et al., 2016).

The lack of viability of smallholder farming in Asia has been attributed to a variety of factors. One is insufficient land. Holdings become smaller from generation to generation as land is divided up among offspring (Rigg et al., 2018, 2016), and access to land may also be limited by land grabs or legal restrictions on land use (Borras et al., 2022). Costs of farming have increased, in part because of higher labor costs. Higher labor costs, in turn, are attributed to out-migration and children staying in school longer, among other causes. By making manual processes (land preparation, harvesting, weeding, etc.) unaffordable, higher labor costs have - among other factors - driven increased use of machinery and chemical inputs. Expenditures on these and other farming inputs have, like labor costs, continued to rise (Jakobsen, 2018; Rigg et al., 2016). Unequal terms of exchange between agriculture and industry keep prices for agricultural products low and price fluctuations increase hardship for farmers further. In many countries there is a lack of government investment in smallholder farming,

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with the opposite being true in the case of industrial agriculture (Borras et al., 2020). Increasingly, small-scale farmers in many countries are promoting a third path which is often referred to as "agroecology": investment in local farming systems, making them more productive as well as resilient, drawing on traditional knowledge as well as farmers' own innovation, sharing seeds, and protecting ecosystems (La Via Campesina, 2016). Beyond the low economic returns, farming is also seen as low-status work, in part because of shifting norms driven by migrant labor (Rigg et al., 2016).

In East and Southeast Asia, when members of smallholder households become migrant workers there is generally not a clean break with farming, with smallholder farming continuing to be part of a mix of livelihood strategies at the individual or household level (Borras et al., 2022; Jakobsen, 2018; Rigg et al., 2018, 2016). Migrants themselves may move back and forth seasonally or over a longer period of time between migrant labor and farming, and even full-time migrants often do not become full proletarians (Borras et al., 2022; Jakobsen, 2018; Kelley et al., 2020; Rigg et al., 2018; Zhan and Scully, 2018). Other members of the household or extended family (frequently an older generation) may also continue to farm, often in a co-dependent and risk-sharing relationship with migrants. Remittances from migrants provide capital for farming or allow farmers to farm less.

Co-dependency between migrants and those who stay behind in the village extends beyond just migrant labor and farming. Migrants may leave their children behind for their parents to care for and may return to the village during times of illness or injury or when they lose their jobs (Borras et al., 2022; Jakobsen, 2018; Rigg et al., 2018, 2016; Zhan and Scully, 2018).

Smallholder farming is described as subsidizing migrant labor, and rural villages as being important sites for the social reproduction of migrant labor. Farming and other paid and unpaid work in the village allow employers to pay migrants depressed wages (Borras et al., 2022; Jakobsen, 2018; Zhan and Scully, 2018).

In East and Southeast Asia, migrants are often from younger generations, while those from older generations are more likely to live in the village. In some countries this older generation includes many former migrants. Older generations often still self-identify as farmers while younger generations, who have less connection to the land and little interest in farming, often do not. Children growing up in the village while their parents worked as migrant workers are likely to have even less connection to farming, and may have no experience with it at all (Rigg et al., 2018).

Though smallholder farming often continues within the households of migrant workers, it may contribute relatively little to the household economy. Yet scholars have shown that in South and Southeast Asia there is a strong tendency to hold onto farmland in such cases (Jakobsen, 2018; Rigg et al., 2018, 2016; Zhan and Scully, 2018). An important reason is that land serves a function as a safety net in times of crisis. This is particularly important because of the precarity of most migrant labor. Migrants may return to farm their land if they lose their employment and land may also be sold as a last resort.

Research described here, carried out in Myanmar's Karen State¹ in 2020, makes a contribution to this understanding of land within the context of migrant labor, and especially as a safety net for migrants. The research was aimed at understanding land in the context of the COVID-19 pandemic. It was guided by two main questions: (1) How does access to land relate to people's ability to cope with impacts of the pandemic? (2) How is access to land changing as a result of the pandemic? It ended up focusing on the relationship between land-based livelihoods and migrant labor and its implications for land tenure and exposed how this relationship was disrupted by the pandemic.

We found that land provided a significant safety net but in unexpected and specific ways, which we describe here. The crisis created by COVID-19 differed in important ways from other crises with regard to migrant labor and smallholder farming. Unlike during other crises, many migrants in this crisis were trapped at home because of the closing of the Myanmar-Thai border, after they had returned home for a variety of reasons (some unrelated to the pandemic).

In the next section, we introduce the methodology used in this study. In the section that follows, we describe the relationship between smallholder farming and migrant labor pre-pandemic and during the pandemic. We then discuss the implications of these findings for understanding land as a safety net. We conclude with reflections on the broader relevance of the research.

2. Methods

In order to unravel the role of land for returned migrants as well as non-migrants in the context of the pandemic, the field research team carried out fieldwork in five villages in Hlaingbwe Township and five in Kawkareik Township, relatively near the Thai border. The villages are listed in Table 1 and the study area is shown in the map in Fig. 1. By focusing on ten specific migrant-sending villages, we have been able to delve relatively deeply into land relations pre-pandemic and during the pandemic in those villages. The team consisted of two of the authors and three field assistants from the townships (all of Karen ethnicity); a sixth member (of Pa-O ethnicity) assisted with some phone interviews.

We selected the villages based primarily on existing contacts. Seven are near township centers and all but two are near roads, and in that respect, they are not typical. While much of Karen State is hilly, nine of the ten villages are in flat areas (near mountains) where wet rice cultivation has predominated. The tenth village is in a hilly part of Kawkareik and cash crops (durian, mangos, areca nut, coconut, rubber, and others) predominate. Populations of all of the villages are predominately Karen.

The villages experienced fighting between Tatmadaw forces (armed forces of the Government of Myanmar (GoM)) and Karen armed groups over the course of decades-long civil war; according to interviewees, a 1995 ceasefire brought an end to most fighting, though there was fighting again between 2010 and 2012 in some of the villages and in 2015 in one of the study villages in Kawkareik. At the time of research, as indicated in Table 1, the villages were under the control of different groups, including the Karen National Union (KNU), Democratic Karen Benevolent Army (DKBA), Government of Myanmar, Border Guard Force (BGF), and KNU/Karen National Liberation Army-Peace Council (KNLA-PC) – in most cases under mixed control of three or more of them. (The table does not reflect any changes in control that may have happened after the February 1, 2021 military coup in Myanmar.)

The research methodology was qualitative. Main methods used were semi-structured key informant interviews (KIIs), semi-structured household interviews (HHIs), and focus group discussions (FGDs). (See Table 1 for a summary.) The team spent a total of 12 days in each of the two townships in June and August 2020. At the time, the pandemic was spreading in Myanmar and restrictions had been imposed to contain it. Yet there were no confirmed cases of COVID-19 in either of the townships and it was possible to travel to the villages. The team conducted a series of follow-up interviews in October 2020; by that time, positive cases had been reported, COVID-19-related restrictions did not allow travel, and interviews were conducted by phone. The follow-up interviews allowed us to deepen our understanding of key points. Additional calls were made following the military coup. Unless otherwise stated, findings described below are all based on these interviews and FGDs.

The team conducted a total of 54 HHIs in-person and by phone with returned migrants (including migrants with and without land), farmers who own their own land, tenant farmers, daily wage workers (including farm workers), and other landless people. 22 interviews were with women. Initial interviews covered migrant labor, farming, other

¹ While "Kayin State" is the official English name of the state used by the Myanmar Government, we use the name "Karen State" instead because it is preferred by Karen people themselves.

Table 1

Distribution of informants and data collection methods. Villages have been numbered to maintain anonymity, given significant insecurity at the time of writing this manuscript following the coup on 1 February, 2021.²

Village No.	Township	Ethnic groups	Type of control/ administration	Geography	Key informant interviews (male)	Key informant interviews (female)	Household interviews (male)	Household interviews (female)	Focus group discussions (male)	Focus group discussions (female)
1	Hlaingbwe	Karen, Black Karen ² , Bamar	BGF, KNU, GoM	Plains	1	2	5	1	3	0
2	Hlaingbwe	Karen, Bamar	BGF, KNU, GoM	Plains	3	1	5	1	2	1
3	Hlaingbwe	Karen	BGF, KNU, GoM	Plains	3	1	3	4	2	1
4	Hlaingbwe	Karen, Pa-o	KNU, GoM	Plains; near reserve forest	1	2	2	4	2	1
5	Hlaingbwe	Karen	BGF	Plains	3	2	4	2	2	2
6	Kawkareik (northern)	Karen	DKBA, BGF, KNU	Plains	2	2	3	1	2	3
7	Kawkareik (northern)	Karen	DKBA, BGF, KNU, GoM	Plains; far from roads; near Reserved Forest	2	2	3	1	2	2
8	Kawkareik (northern)	Karen	KNU, KNU/ KNLA-PC, GoM, DKBA	Plains; far from roads; near Reserve Forest	2	2	2	4	1	2
9	Kawkareik (northern)	Karen	KNU, GoM, KNU/KNLA-PC	Plains, forests; along the Asia Highway; near Reserved Forest	2	1	3	2	2	3
10	Kawkareik (southern)	Karen	KNU, GoM, DKBA, BGF	Mountainous, forests; near Reserved Forest	2	1	2	2	2	2
				Total Male/ Female	21	16	32	22	20	17
				Total	37		54		37	

² Black Karen are of South Asian decent and are predominantly Muslim.

livelihoods, land tenure, use of commons, buying and selling of land, land grabbing, and coping with the impacts of COVID-19, while followup interviews covered wage labor, forest use, tenant farming, the land governance system, land left unused, changes in land use, borrowing from the Myanmar Agricultural Development Bank, and livelihood hardships. The team also conducted KIIs with 37 community leaders and people who are active in the communities (including 16 women), as well as 5 people from civil society organizations and other people outside of these villages (people knowledgeable about livelihoods in the villages and migrant labor from the area). KIIs covered the same topics as HHIs, but examined the situation in the village in general while HHIs focused on the interviewees' households' own situations and experiences. Altogether, 49 of the HHIs and KIIs were with migrants who had returned to the village for some reason, some recently and others years earlier.

Interviews were conducted in the Karen language except for those with Black Karen, which were conducted in Burmese. Selection of interviewees for HHIs was not randomized. In each village, team members had community leaders lead them to people to interview for both KIIs and HHIs. HHIs were conducted by individual team members; written notes were taken and no audio recordings were made. To conduct follow-up interviews by phone in October, team members called key informants who provided the names of people for HHIs, and then called those informants. If informants did not have a phone, they used someone else's phone. HHIs were used for qualitative analysis only.

The team conducted one focus group discussion (FGD) in each village, with 3–5 people in each. These also were not randomized. The team asked the village leader or active community members to organize the FGDs; no strict criteria were used for selection of participants. For each FGD, one team member led the questioning and another took notes. Following FGDs, the team conducted informal interviews with FGD

participants, especially with those who did not speak much during the FGD. Observation was a final method which was used.

The lack of random sampling was unavoidable due to time constraints, and inevitably introduced some bias into the findings. We were able to limit bias in the selection of interviewees to some degree in two main ways. The first was by asking informal community leaders to identify interviewees for us, rather than asking village authorities, who might have had stronger interests with regard to the selection of interviewees. The second was by requesting to meet various different kinds of people (including landless people, people facing land and other issues, etc.) – groups who might be less likely to be closely aligned with community leaders.

The project ended before the military coup. We were not able to collect in-depth information on the situation following the coup, but made some follow-up calls to get a general picture of how things had changed.

3. Results

We sought to understand land-based livelihoods and migrant labor pre-pandemic as well as how they changed with the pandemic. Here, we present findings on each in turn.

3.1. Land-based livelihoods and migrant labor pre-pandemic

Pre-pandemic, migrant labor and land-based livelihoods existed in a dynamic relationship with each other. International migrant labor was central to the pre-pandemic economy in all ten villages, with most families having members working in Thailand and relying on remittances from them. Land-based livelihoods were also important to the pre-pandemic economy, though less so than they had been in the past. In

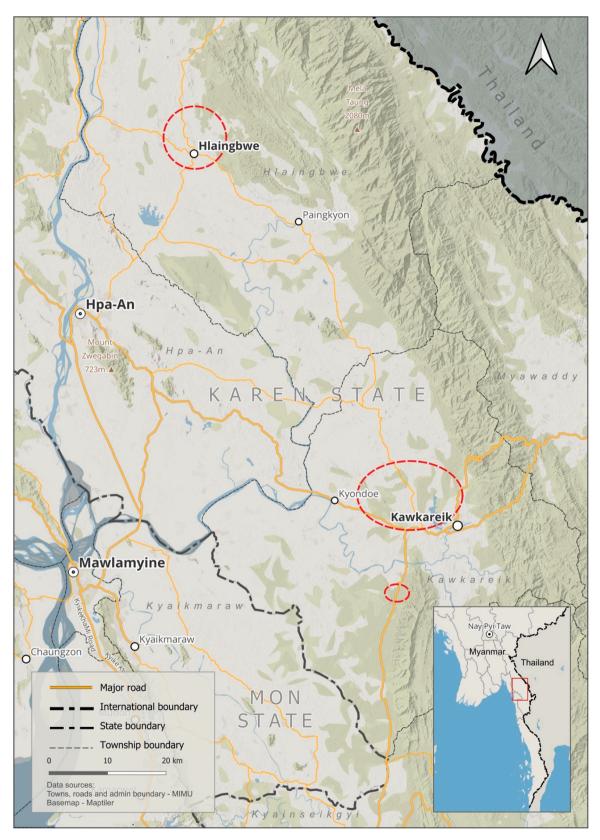


Fig. 1. The study sites in Hlaingbwe and Kawkareik Townships, Karen State.

particular, the families of many migrants engaged in smallholder farming. Livelihood strategies of the landless included migrant labor, tenant farming, daily wage labor (including as rubber tappers and other forms of farm labor), small business, fishing, and (until recently) collection of forest products, among others. Some migrants left children with their parents in the village while they worked in Thailand. A woman with two children in Thailand, for example, said: "I never owned land ... My children can't buy land. My children send remittances from Thailand and I look after my grandchildren, and also sell *mohinga* [Myanmar noodles] and homemade snacks in the village." To some extent, farming and non-wage livelihoods on the farm subsidized migrant labor and household members in the village bore the costs of social reproduction. This is consistent with recent literature on semiproletarian societies (Jakobsen, 2018; Rigg et al., 2018, 2016; Zhan and Scully, 2018).

Logging, hunting, and collection of wildlife, production of charcoal, and collection of firewood and non-timber forest products (bamboo, bamboo shoots, mushrooms, leaves for roofing) were all significant livelihood activities in the past. Some villagers in Kawkareik continued to engage in them, sometimes on private land, but they had all declined considerably by the time the pandemic arrived.

Land tenure and ownership

A key feature of the land context in the study area is that, since before the pandemic, essentially all land in the villages has been individually held. There has been no shifting cultivation, and land has been held individually, for as long as anyone can remember. What land had not yet been individualized remained in the form of Reserved Forests, but in the 2000s much of that land was allocated by one of the Karen armed groups (DKBA) to households to clear and plant rubber. The land frontier has essentially been closed; it is no longer possible to make new private claims on land, and the only way to acquire land is from someone else, such as through purchase or inheritance. This individualized land ownership is not necessarily recognized through the formal (GoM and EAO) systems³ but is firmly implemented on the ground, including through mutual recognition by the communities.

Ownership of land in the villages has long been unequal. There are many households who have no agricultural land, and landlessness has been a factor driving migrant labor. According to key informants, more than half the households in most of the villages have no agricultural land. Others have up to about 10-15 acres, and some have much more than that. Some who are now landless did not inherit land, perhaps because their forebears pursued livelihoods that did not require land ownership, such as hunting, logging, or carpentry and never tried to acquire land, or had land but sold it. Among later generations, those siblings most serious about farming may have inherited land, while those working in Thailand or involved in off-farm work may not have inherited any. Some had land but gave it to their siblings or other family members because they were not interested in farming. People moving in from other parts of the country to take advantage of the labor shortage resulting from migration to Thailand were often able to acquire housing land but not agricultural land. Over the years some have also lost their land to land grabs.

Migrant labor pre-pandemic

International migrant labor is extremely important in Myanmar. Citing data from the Ministry of Labor, Employment, and Social Security, the World Bank reported that remittances to Myanmar in 2015 totaled \$3.1 billion when accounting only for official migrants, but were probably close to \$8 billion when including unofficial migrants (Ratha et al., 2015). As in many countries in Asia, most international migration from Myanmar has been from rural areas (Borras et al., 2022).

Considering Myanmar as a whole, there has been migration to Thailand for decades. It increased significantly after 1988, and in 1992, it became legal for unskilled migrants to work in Thailand for the first time. Since then, irregular migrants have been evicted, granted amnesty, and legalized but irregular migration has continued (Chanthavanich and Vungsiriphisal, 2012).

We were not able to pin down the history of migration in the study villages with any certainty. However, according to interviewees, the number of migrant workers from the study villages increased significantly in 2001 or 2002^4 – by which time there was no more fighting in these areas – and continued to increase thereafter. While there have been migrants from the study villages to other countries (including Malaysia and Singapore), most who have gone to other countries have gone to Thailand. A few migrants have also gone to work in other parts of Karen State.

Both push and pull factors have driven migrant labor. According to interviews, push factors have included landlessness, the inability of farmers to make a decent living from farming, and the lack of other employment opportunities in Myanmar, while pull factors have included the demand for labor in Thailand and reports of migrants prospering in Thailand. Livelihood opportunities in Myanmar have been limited. We heard of university graduates who would have preferred to stay in Myanmar but could not find jobs commensurate with their education, and found better paying jobs in Thailand. Those who worked in Thailand developed skills that they could not use in Myanmar. A man in Hlaingbwe explained, "My friend worked in a car factory in Thailand. He studied to eighth grade in Myanmar, and did not know anything about mechanics. But he learned quickly. In ten years, he learned to operate all the machines in Thailand. He came back to Myanmar one time and looked for a job, but car workshops in Myanmar don't use that kind of machine. He had no choice, and went back to Thailand." In recent years, people saw others return from Thailand with changed lifestyles, or send money back for their families to build houses or buy land, and expected to be able to earn much more in Thailand than they could in Myanmar. More recent migrants have had siblings, parents, or other relatives in Thailand who paved the way for them.

Some migrants, especially those already in a sound financial position (including those with land in Myanmar) were able to prosper through migrant labor. Others, however, struggled to repay prior debts and debts incurred in paying the high initial costs of getting employment in Thailand. (Most migrants borrowed to go to Thailand.) Some employers in Thailand provided food and shelter, reducing migrants' costs significantly, but many did not. While initially it was primarily those with land and other resources who became migrant workers, after migrant labor became legal more landless people became migrants – borrowing to pay the initial costs or using an agent who would deduct the costs from their wages in Thailand.

Going to Thailand was often not easy. A returned migrant from Hlaingbwe said: "Before 2010, especially in 2001 to 2002, there was a small path where people could avoid the Thai police. People used that path to get to Bangkok. Along the way, there were 2 or 3 checkpoints. If people passed through, they were safe, and didn't need to worry. To pass all these police checkpoints, sometimes they had to wait for 2 or 3 days, because police were patrolling. Sometimes they needed to run, or sleep in the jungle."

Key informant and household interviews made it clear that migrant labor shaped all aspects of the local economy. Based on KIIs and HHIs,

³ Today, both GoM and KNU land administrations are operational in most of the villages. After 2012, much of the farmland people had been cultivating was registered under the GoM's new Farmland Law through land use certificates ("Form 7"). Many households also have KNU land certificates based on the 2015 KNU Land Policy. Some have both types of certificates for the same parcels of land, while some land remains unrecognized through either system. Asked about communal Karen land tenure (known as the "Kaw" system), people said that it has not been in existence in these areas for generations.

⁴ This presumably related to the announcement in 2001 by the Thai government of an "amnesty policy" for migrant workers (Chanthavanich and Vungsiriphisal, 2012).

we estimate that pre-pandemic there was typically at least one migrant worker per household in each of the study villages, and in some households there were many more. Most were relatively young. From estimates given by interviewees, it appears that about 75 % of families in each village relied on remittances for their daily needs and other expenses pre-pandemic. The field research team could observe the impact of remittances clearly in the form of larger houses, cars, farming equipment, community buildings, and other assets. A woman in Hlaingbwe told us, "We have big houses and good roads. These are impacts from Thailand. If we didn't have migrant workers, we couldn't build houses, buy cars, or send children to university."

Feelings about going to Thailand were ambivalent. Though people were attracted to the work there, some interviewees also expressed sentiments that suggested that migrants pre-COVID did not all really want to work in Thailand. For example, some who had worked there for many years said they did not want their children to work in Thailand, and some returned migrants said that they felt free and safe in Myanmar.⁵ A migrant from Kawkareik who returned in 2017 said: "I don't want to go to Thailand. It is not easy in Thailand. In Myanmar it is not easy but I have my family and can stay with them. I farm four acres of rice paddies and it is enough for my family for each year. Aside from my rice paddies, I also work as a daily wage worker and have cattle." Another returned migrant, from Hlaingbwe, said: "I started to go to Thailand in 2000. I stayed in Thailand 20 years. I don't want to go back. I don't have any land to farm in Myanmar, but I don't want to go back." Myanmar migrants in Thailand have often accepted low rewarding jobs, are looked down on by Thai nationals, and fall in the lower social strata of Thai society (Doungphummes et al., 2023; Kusakabe and Pearson, 2016; Mon, 2010).

Land-based livelihoods pre-pandemic

Of land-based livelihoods, farming was most significant. In general, it was characterized by either low investment and low yields (in the case of wet rice farming) or high risk (especially in the case of rubber cultivation).

Wet rice was the main crop in most of the villages for as long as people can remember and continues to be cultivated in all. However, interviewees reported that productivity of wet rice was low, though communities were more-or-less self-sufficient in rice. We heard again and again that rice farming was not good business. Yields had been low in the past, but now farmers relied on expensive inputs that cut into profits. Tractors replaced cattle for traction in many cases, in large part because of the labor shortage created by migration. Small holding sizes were a constraint for some farmers and the lack of investment in smallholder rice farming was apparently also an important contributor. Aside from people being able to borrow from the Myanmar Agricultural Development Bank in some villages, there is little evidence of any support over the years for rice farming in the study villages by the GoM, DKBA, or KNU.

In the mid-2000s, rubber production became widespread as Reserved Forests were converted to rubber plantations, but it was not necessarily good business either. A crash in the price of latex led many to stop tapping their trees and some even harvested them for timber. A woman in Hlaingbwe described her own experience with rubber cultivation: "I invested in 30 acres of rubber plantations. Over eight years, the investment was about 50,000,000 kyats, including labor and everything. I still haven't been able to make any money from the rubber and my investment is gone. I want to sell the plantation. But no one wants to buy it because it is too expensive." Farmers also kept household gardens, mainly for household consumption, and in some villages planted cash crops such as areca palm, durian, and groundnuts. Experiences cultivating cash crops, which began in the last decade in some villages and much longer ago in others, were more positive than those with rubber. As transportation improved, and villagers became able to buy vehicles with remittances from Thailand, dependence on outside buyers coming to the villages decreased and the price of some of these crops rose – some becoming quite profitable to cultivate. But the number of people cultivating them did not increase significantly. Cultivation of cash crops was limited by soil conditions and topography, and (until recently) greater interest among farmers in planting rubber.

While some migrant workers were landless, others were not or had access to their parents' land. Some leased their land to tenants when they went to Thailand or let them use it for free. In years past, when land was more affordable, some migrants bought land themselves with money earned in Thailand, thinking that one day they would settle down in Myanmar. Others funded their families' purchases of land through remittances. This was primarily residential land, but in some cases also agricultural land – especially rubber plantations or durian or mango orchards. A migrant from Hlaingbwe, for example, told us: "My family has a small plot that my parents till. When I was in Thailand, my parents said their relatives wanted to sell their land and asked me to send money so they could buy it. I did, and they were able to buy it in installments. It was long ago, 2004 to 2005." When migrants themselves were able to buy farmland, they typically asked family members or other villagers to work the land, or just left the land fallow.

More common than buying land was parents investing remittances in their farms while their children worked in Thailand; cultivating rubber was a particularly significant use of remittances by family members in Myanmar. Pre-pandemic, parents with land sometimes did not farm it, and relied on remittances to support themselves. Mothers of migrants, especially, sometimes spent time taking care of grandchildren while their children worked in Thailand and did not farm.

Some landless households leased land through tenancy relationships, typically paying 30 % of the crop to the land owner. Some were able to farm relatives' land for free, when those relatives supported themselves through migrant labor and remittances.

Pre-COVID-19, young people, in particular, were generally not interested in farming. Many viewed farming as a dead-end enterprise, especially in comparison to migrant labor. "We have this house not because of agriculture", one man said, "but because our family members went to Thailand and sent remittances, and we saved remittances to build the house". Another interviewee said, "People cannot see the importance of farming and are not interested in farming, because the income is not enough for their livelihoods. They rely on work as migrant laborers."

Unused land and the rarity of land sales

Pre-pandemic, there was a considerable amount of unused, or underused, land in the villages, except for two villages in Kawkareik where there was a land shortage. Some households with land deemed farming not profitable enough to engage in (given labor shortages and poor yields) or lacked the capital needed to farm. Some had other livelihood strategies, such as migrant labor or small businesses. Some farmed just part of their land, sometimes rotating the part of the land that was fallowed. Some grew sesame and groundnuts in their rice paddies during the cold season and did not plant rice in them at all during the rainy season. Tenants did not rent all of the land that was available, in part because the returns did not make it worthwhile or because they lacked sufficient resources.

Despite the inequality in landholdings, and the abundance of unused land, in the years leading up to the pandemic there was not much buying and selling of agricultural land in these villages except for land far from villages – though there was buying and selling of residential land. Previously, there was more buying and selling of agricultural land, but the price of land increased significantly (especially after the 2012 KNU-GoM

⁵ This finding should not be interpreted as meaning that Myanmar refugees living in Thailand at the time of research did not have legitimate security concerns about returning to Myanmar. In particular, refugees could fear that as a refugee they would be subject to persecution by the military. It should also not be interpreted as implying anything about how safe people feel in Myanmar after the coup.

ceasefire), apparently driven by outside buyers purchasing farmland near roads to convert to residential land and resell. The high price resulted in few villagers being able to afford to buy farmland. But people also did not sell much land to outsiders, for various reasons. One man in Hlaingbwe expressed reluctance to sell land that had belonged to his grandparents, while one woman said, "We need to keep land for our children and grandchildren". A farmer in Kawkareik said, "When we were young, we relied on farming. Now we are familiar with farming, our work is farming, and land is important to us, to our family life, and it is important for our livelihood." Customary norms may also have played a role in limiting sales to outsiders. For some, this would change with the pandemic.

3.2. Land-based livelihoods and migrant labor during the pandemic

The first case of COVID-19 was detected in Myanmar on March 23, 2020. The border was closed that day, a ban was imposed on incoming commercial flights on March 29, and the first restrictions were placed on people's movements in certain parts of the country on April 6–7 (Lwin, 2020). In the coming months, internal restrictions increased, as did socioeconomic impacts resulting from the pandemic and responses to it in other countries, while the number of infections remained relatively low (Franco, 2020).

As noted above, at the time of our field visits to the study sites in June and August, there were still no confirmed cases of COVID-19 in the two townships. Yet even in the absence of COVID-19 infections, communities in both townships experienced significant disruptions. Livelihoods impacts were severe, due to loss of remittances from migrant workers and restrictions inside Myanmar aimed at preventing the spread of COVID-19, especially restrictions on travel (Karen Human Rights Group, 2020). The lives of migrants were brutally disrupted.

The coup further compounded the crisis but also resulted in some changed dynamics. We were not able to study these in detail but gained some insights through calls following the coup, which we will note below.

Migrant labor and the pandemic

Tens of thousands of migrant workers from Myanmar returned from China in February at the time of a COVID-19 outbreak in Wuhan (Borras et al., 2020). In March, many Myanmar workers returned from Thailand, including in the days just before the border closure (Nyein, 2020). But many others stayed in Thailand to avoid losing their jobs (Borras et al., 2022). Neither the Thai nor Myanmar government encouraged migrants to return from Thailand, and both, in fact, tried to keep them from returning, to prevent the spread of COVID-19.

As of early April 2020, a large number of people who had been migrant workers were back in the study villages, though many more migrants remained in Thailand - often though not always jobless. A 63 year-old farmer with three daughters in Bangkok told us, "I have to rely on remittances from my children in Bangkok. None of them came back when COVID arrived, because if they came back, their income would stop." Many came back before or after the border closure because they had lost their jobs in Thailand, as COVID-19 and associated restrictions affected employment there, or because their families became concerned about them and asked them to return. But many also had come back before the pandemic for unrelated reasons - to renew documents, for a regular visit home, for a funeral, for the birth of a child – and were then unable to go back to Thailand because of the border closure. While it was still possible for migrants to return to Myanmar, it was not possible to reenter Thailand. The few migrants from the study villages working in other parts of Karen State had not returned at the time of fieldwork.

Returned migrants lost their main means of supporting themselves – employment in Thailand. Along with this, remittances from migrants stopped, and with them a major infusion of cash into household and community economies. In addition to the obvious loss of income, there were other important effects as farmers lost the source of capital they relied on in the past to invest in their farming, as was predicted for Myanmar by Boughton and his colleagues (2020). A farmer who was unable to pay for farm inputs during the pandemic said, for example: "I cannot get a loan from the government to till my land, so I need money from my children to pay for it. This year, they cannot send money because of the business shut-down in Bangkok."

Interviewees estimated that 80–90 % of those who had been migrants before the pandemic remained in Thailand at the time of fieldwork. Most would stay there. Reasons we were given were that they knew they would not be able to return to Thailand and they did not want to have to quarantine when they returned, as was required. Others did come back to Myanmar in the months after the main research ended, reportedly because of concerns about the pandemic.

During fieldwork, interviewees told us that some migrants were going back to Thailand secretly and without proper documentation, but we could not confirm this. A key informant in Hlaingbwe said: "Migrants can go back to Thailand, illegally. People from Karen State going to Thailand is not the same as people from other states. Because when Karen State people go to Thailand, they have great contacts, and know everything. They have relatives, friends, and employers. They know everything and can go easily."

Following the February 2021 military coup, the economic situation in Myanmar worsened considerably. At the same time, the pandemic subsided in Thailand. The border remained closed, but the number of migrants from the study villages working in Thailand – illegally – grew substantially, to the point where it was much more than it had been before the pandemic.

It was not until January 2023 that a border crossing between Thailand and Myanmar (at Mae Sot and Myawaddy) re-opened, after the border had been closed for almost three years. The reopening had been planned for May 2022 but was postponed following the coup. Migrants registered under a new memorandum of understanding (MOU) between the two countries could now enter Thailand legally.

Domestic travel restrictions

While the border closing affected migrants and the migrant economy, travel restrictions had other effects on those living in the villages. Restrictions on people going village to village, whether by foot or vehicle, resulted in villagers no longer being able to engage in various small businesses (see Karen Human Rights Group, 2020). These included some people who were relatively well-off, like taxi drivers. But they also included some of the poorest, especially women, such as those who had made a living selling prepared food from village to village. In October a lockdown was imposed in Hlaingbwe, and traders could no longer transport vegetables to sell in Hlaingbwe town – though they were later able to get exemptions from the restrictions and (because of the high demand) could sell vegetables in Hlaingbwe at an even higher price than they could previously, until others got similar exemptions.

These restrictions prevented daily wage workers from traveling to other villages for work. One returned migrant we interviewed worked as a carpenter's assistant, requiring him to travel to another village, after farm labor jobs were no longer available. He reported that after the lockdown in October, he lost this job because of the restrictions, and had to borrow money to get by.

Travel restrictions had secondary effects. Restrictions on vegetable traders impacted vegetable growers and vegetable farm workers. Prices for cash crops like durian and areca nuts dropped, as people could only sell them locally or to local traders. Those (including landless people) who bought areca nuts to resell later found that the price did not increase seasonally as it normally did. With motorbikes no longer in much use, motorbike mechanics did not have work.

Land-based livelihoods during the pandemic

KIIs and HHIs indicated that the number of people farming and the amount of land being cultivated both increased, as returned migrants farmed their own land, helped their families farm, or worked as tenant farmers.

Not having land was reportedly one reason some migrants decided not to return. A woman whose husband was a migrant in Thailand said: "My husband and sister and my sister's husband are in Bangkok ... But now the work is shut down in Bangkok. We don't have land, and that is why my husband and sister's family did not come back. If they came back, they wouldn't have anything to do in the village."

Some returned migrants took up farming soon after returning to their villages. For example, a man we interviewed in Hlaingbwe in June, who had come back from Thailand a few weeks previously, told us, "I have been to Thailand seven times, starting in 2011. I go back and forth. I came back before the border closed. I don't plan to go back, because I have paddy fields. I want to improve my rice farming. I just farm for subsistence, but I can work here until everything is OK. I don't plan to go back for the time being. I don't need to worry for my living."

More commonly, however, and despite the brutality of the crisis, migrants who now had no employment but had access to farmland (land of their own, their parents' land, or relatives' land they could use for free) did not turn to farming. Most returned migrants continued to have their eyes set on returning to Thailand as soon as it is possible. A key informant said: "Some migrants bought land and asked their family to farm it. For most young people, even though they buy land, they do not work on it. And they have plans to go back to Thailand if the situation is OK." We were told that people were listening to news about when the border would open, planning to go immediately when it did. At the time of our first trip, many returned migrants were living off of their savings, waiting to be able to return to Thailand. Probably the medium-term nature of farming combined with the uncertainty of how long the crisis would last were the main reasons for returned migrants not engaging in farming. There was also an aversion to farming, and many had been doing other kinds of work in Thailand and hoped to find work that better fit their skills. One returned migrant said: "If I cannot go back, I will open a restaurant in Myanmar. I know how to cook because I have worked as a chef. I don't plan to farm. I want to open a restaurant."

Farm labor became more important than other forms of wage labor, though there was still not enough farm work available for people to be able to support themselves from it. A man in Hlaingbwe who had worked in Thailand years ago explained: "I am a daily laborer and my income depends on people giving me jobs. I am the only one with income. Now, with COVID, most people have to stop their jobs. Like building houses, now no one is building houses, so I can't get those jobs. Now, people have started farming and I can get 5000 to 7000 kyats per day doing farm labor. But I only get about 10 to15 days of work in a month. I can't earn enough money."

Not all recently returned migrants could afford not to work, and some turned to wage labor, including farm labor. Some whose families had land provided labor to help their families farm. Over time, as more people worked as farm labor outside of their families, the availability of labor for hire increased slightly, as has been written about in the case of India (Choudhury et al., 2020).

By the time of our second trip, most of those who had land themselves were farming, as were many who had access to family members' land. A returned migrant said, "I was able to buy 3 acres of land two years ago. My wife and I came back to Myanmar in March 2020 and we got stuck. We don't have much money. We are farming, but we face many difficulties. For example, there isn't enough water. We are trying to plant vegetables for food." A man in Kawkareik told us: "I planned to go back to Thailand, but now I think I will stay. The situation is almost the same in Myanmar and Thailand, because of job opportunities and the political situation. I have some rubber plantation land and will work as a farmer. But I am worried about the low price of rubber." Migrants were also working as tenant farmers. When we made follow-up calls in October, people had started tapping rubber trees again. Because farming does not provide returns in the short-term, some migrants who farmed had to rely on wage labor to support themselves until harvest time. With more people farming, the demand for farm labor increased temporarily, but after crops were planted and again after the harvest, opportunities for paid farm labor decreased considerably.

While prices of some crops dropped due to travel restrictions, as

noted above, market demand for other agricultural products remained high. We did not find disruptions in supplies of inputs and increases in prices of inputs at the time of the research, though costs of inputs such as fuel, fertilizer, herbicide, and pesticide did increase considerably after the coup.

Most returned migrants who were farming saw it as a temporary measure to get them by for a few months. If the situation changed, they would return to Thailand. But some with land of their own were contemplating staying in Myanmar longer – they were not in as much of a rush to return to Thailand. One returned migrant worker with rice paddies, for example, said, "I do not need to worry about my living, and do not plan to go back to Thailand." Over time, some who had land of their own began to think about planting long-term crops.

Still, many returned migrants with access to land did not farm. Some had let relatives cultivate their land while they were in Thailand, and continued to let them do so rather than farming it themselves. Some had no skills or interest in farming. The father of a returned migrant said, "I have land but my son doesn't help me because he isn't interested in farming. Instead he is looking for a job in other places." Some found other ways of earning income. One young man, for example, went to Thailand when he was sixteen and worked there for seven or eight years. Though his parents were farming, he now survived by cutting bamboo to sell rather than helping with the farm work. One man with land, whose children stayed in Thailand, still placed his hopes in remittances from them rather than farm the land.

Farming was not the only land-based livelihood returned migrants considered. One returned migrant talked about using his farmland to get a loan from the Myanmar Agricultural Development Bank to raise goats. Others took up fishing. Forests could have played a role in sustaining communities in the absence of migrant labor, but over-exploitation in past years made that impossible.

Land use and sales

As noted above, KIIs and HHIs indicated that the amount of land under cultivation expanded during the pandemic. More land was also being leased through tenancy arrangements, especially to returned migrants. One couple we interviewed, for example, with four children and returned from working in Thailand, was now leasing three acres of land in addition to their own seven acres which they cultivated every year.

However, despite the increased importance of land during the pandemic, and despite the increase in the number of people farming and amount of land under cultivation, there continued to be plenty of farmland that was not fully used – for the same reasons as before the pandemic. A tenant farmer from Hlaingbwe said: "I am not worried about finding land to rent. There are many land owners who don't farm themselves because they don't have money or labor or are not interested in farming rice." Terms for tenants might not be favorable enough for them to invest in cultivating larger areas.

Initially, as in the past, farmers were still reluctant to sell their farmland. One informant said, "My family is keeping our land for the future when our children come back from Thailand." Another said, "This is our inheritance. We won't sell it unless we have to." By October, some families in Kawkareik who had relied on remittances had sold land, but others said they wanted to sell land but there were no buyers. On a follow-up call in October, one woman told us, "Many other people and I are trying to sell our land, but no one wants to buy it." Unable to sell her land, she had to borrow money instead. In October, also, a key informant told us: "Even though people want to sell part of their land, no one buys it. No one has money now. But the plan to sell land is not that popular." Interest in selling land increased even more after the coup, and some more people sold their land. But still there were few buyers.

Land and feelings of (in)security

Farmland provides long-term security, and some interviewees described feeling secure because their families had land. Farmers knew that they would be able to feed themselves after the harvest. Land also provides psychological security, and we heard many statements to this effect. Some migrants explained that people who have land are much better off than those who do not. Returned migrants whose families have rice paddies told us they did not have to worry about food: because their families farm, they have rice. One woman in Hlaingbwe with land, whose children had worked in Thailand, said, "We have rice and vegetable gardens for household consumption. We don't have to worry about COVID-19 unless we have health problems. We don't need to worry about food." Another farmer in Hlaingbwe said, "Farmers can store their rice for one year, plant vegetables in their farm, and raise livestock, so they don't need to worry for food. But they worry about getting sick." A father of migrants told us, "If something happens to my children's jobs in Thailand, they will have their land as a backup."

Those without land were particularly vulnerable. They could work as farm labor and till land as tenant farmers, but worried about their future because they did not have the security that possession of land brings. A returned migrant in Hlaingbwe explained: "If we had land, if we cannot go to Thailand or go somewhere else, we could farm, and find fish paste, and grow vegetables." Another said, "If I had land, I could plant crops to sell or to eat, and would not have to worry about my family's livelihood." Some landless people were very worried that if the pandemic was drawn out, they would really suffer. A recently returned landless migrant in Hlaingbwe said, "The problem is, we don't have land. If COVID-19 lasts a long time, what will we do?" One young landless couple we interviewed had a new baby and the wife could not work. The husband was from the capital, Nay Pyi Taw, was not familiar with farming, and could not work in farm labor, so they moved back to Nay Pyi Taw where he looked for a job. He was unable to find a job there, however, and when we interviewed them they had returned to the village and were living with the woman's parents, still jobless.

Other coping mechanisms

More people engaged in off-farm wage labor than in the past, and they included returned migrants. One person who wanted to go to Thailand said: "Our children are very small and we don't have enough money to go to Thailand. We have to work in our village as hired labor." Daily wage workers would seemingly take any jobs that were available. By the end of the study, demand for such jobs became quite high as onfarm jobs were no longer available, migrants had used up their savings, and, overall, people were having trouble making ends meet. Still, the price of labor had not changed (women's wages being lower than men's).

Another way that people were coping was by borrowing. Borrowing was helping to fill in the gap left by a loss of remittances – not just for farming or business, but for daily survival. Many interviewees talked about being able to borrow food or cash from relatives, food being easier to borrow than cash. One landless couple we interviewed used to receive remittances from their children in Thailand but no longer did, and the wife used to sell noodles and other foods village to village, but could also no longer do so because of the travel restrictions. They said that the only work they could find was farm work, and that they were looking for other daily wage work. Sometimes they did not have enough food. People in the community sometimes gave them food, but it was not enough. They resorted to borrowing money which they expected to repay when they were able to find work.

Knowing that their community had land gave returned migrants confidence they would be able to borrow from others, and thus a sense of security even if they did not own land themselves. People were able to borrow food from others in the community because land was used to produce food. One returned migrant said, If it is going to be like that [if we are unable to return to Thailand], we need to worry about starvation. But it cannot happen easily, as we are farmers, and in our village at least we can borrow from relatives to eat."

Interviewees also talked about taking measures to save money, sometimes setting aside money every day. Some households changed their diet, for example to eggs, fish paste, or vegetables instead of meat. Their efforts were aided by the fact that household expenditures were also reduced in general by the banning of public festivals and the shortening of weddings.

4. Discussion

The 1997-1998 Asian Financial Crisis and 2007-2008 Global Financial Crisis had particularly severe effects on migrant workers in Asia and their families back in their home villages (Jakobsen, 2018; Rigg et al., 2018; Zhan and Scully, 2018). However, the COVID-19 pandemic created a far more impactful shock for migrant worker/smallholder farmer families in Asia. Across Asia, COVID had massive impacts on migrant labor as sites of employment shut down and lockdowns were imposed. In India, a sudden lockdown and closing of transportation, without a safety net, resulted in thousands of migrants losing their livelihoods and many moving back to the rural areas from which they came (Bhagat et al., 2020; Choudhury et al., 2020; Kesar et al., 2021). That lockdown has been described as "catastrophic" for migrants because they were left in cities far from their homes without any means of livelihood or safety net (Bhagat et al., 2020) and migrants as the "worst affected" by it (Kesar et al., 2021). The loss of remittances also had severe impacts on rural economies (Kujur, 2020). At the same time, while labor shortages had been found to impact agricultural production pre-pandemic (Khan et al., 2020; Otache, 2020), with the pandemic, rural labor surpluses occurred because of returning migrants (Choudhury et al., 2020).

In the case of Myanmar, many international migrant workers returned home or lost work and were no longer able to send remittance due to the pandemic crisis (Borras et al., 2022; Diao et al., 2020; Diao and Mahrt, 2020). The loss of remittances resulted in farmers facing challenges in paying for agricultural inputs (Boughton et al., 2020). Others have documented impacts on farmers from uncertainty linked to the pandemic, loss of income from farming and remittances, restricted mobility, crop trading restrictions, lower production, and the impossibility to foresee an exit to the crisis (Hammond et al., 2022; Kaya Tilbe, 2023; Löhr et al., 2022). Migrant workers lost their livelihoods and many became homeless. Many returned to their villages while others were stranded far from home without any means of support. When they returned home, many were mistreated because of fears that they would lead to further spread of the virus (Bhagat et al., 2020; Kesar et al., 2021).

In the research presented here, we have focused on how land was implicated in the brutal disruptions due to the pandemic in Myanmar. We have been able to document the particular role that land played as a safety net for migrants and their families, but also limitations in that role due to the unviability of smallholder farming and the unequal distribution of land.

4.1. Land and migrant labor during normal times

The relationship between land and migrant labor pre-pandemic was broadly consistent with what others have written about semi-proletarian societies in Asia (Jakobsen, 2018; Rigg et al., 2018, 2016; Zhan and Scully, 2018). Three main dimensions of this relationship were particularly salient: the undesirability of land-based livelihoods as a push factor in the decision to migrate to Thailand, migrants not making a clean break from farming, and mutual dependency between migrants and family members engaged in smallholder farming back in the village.

Many migrants from the study villages were not landless. But smallholder farming was seen as an unviable and low-status livelihood, especially in comparison to migrant labor, and this was an important factor driving migration (Borras et al., 2022; Rigg et al., 2016). Many young people, in particular, were not interested in farming (Rigg et al., 2018).

We did not find migrants going to Thailand seasonally and continuing to farm as Borras et al. (2022) describe. However, migrants did not make a clean break with farming themselves. We found older former migrants who had returned to the village and had been farming pre-pandemic. Rigg et al. (2018) similarly find that older generations of migrants have returned to live in their home villages while younger generations often have not. In the past, some migrants from the study villages bought land with their income from Thailand, but this was no longer possible in recent years.

Migrant workers in the study villages existed in co-dependent relationships with family members back in their villages. This included migrants' taking care of their children and receiving remittances from them, much as Rigg et al. (2018) and Jakobsen (2018) describe. Remittances from migrants also provided capital for family members in the village to invest in farming, and allowed them to farm less (Kelley et al., 2020).

4.2. Land as safety net during the pandemic

Rural homes are described as providing a safety net for migrant workers. Migrants may return home at times of illness or when they are no longer able to work (Borras et al., 2022). Farmland has also been shown to provide a safety net. For example, migrants can return to farm if they are unemployed, as was the case during the 1997–1998 Asian Financial Crisis and 2007–2008 Global Financial Crisis (Jakobsen, 2018; Rigg et al., 2018; Zhan and Scully, 2018). Migrant labor is often precarious and migrants are susceptible to losing their jobs even during normal times (Borras et al., 2022; Kelley et al., 2020; Rigg et al., 2018, 2016).

Land did indeed play the role of safety net in Myanmar at the time of the pandemic, but with differences from what has been described for these earlier crises. Returned migrants did not initially turn to farming and many tried as hard as possible to avoid farming. At the beginning of the pandemic, most lived off their savings or were supported by their families as they waited to return to Thailand. Only a few helped their families with farming or took farm labor jobs. It was only as the pandemic drew on that more started to engage in farm labor or take up farming themselves.

There are various explanations for this finding. For one, many migrants did not return to Myanmar in order to access a safety net or to return to farming. Rather, they were stranded in Myanmar (many having returned for reasons unrelated to the pandemic) as they were unable to cross the border back into Thailand – though they would have ended up unemployed in Thailand due to the pandemic lockdown, had they been able to cross. Many hoped and expected to be able to return to Thailand soon. Many had savings they were able to live off of or could borrow from others in the village. Some also found limited wage labor employment in the villages. In addition, farming was not an attractive option and many returned migrants were averse to it.

Farming is a medium-term venture anyway (though farm labor is not), and farming would not be able to address immediate livelihood needs. This was probably another factor limiting migrants' interest in taking up farming. It also meant that to the extent migrants did shift to farming they would still need to rely on borrowing, saving, and other short-term measures to get through the harvest.

Land provided a safety net for many migrants in an indirect way. Borrowing rice from others in the community was possible in part because they produced rice on their land in the village. At the time of fieldwork, land was now the main ultimate source of support for returned migrants and was enabling them to survive until they could return to Thailand.

Though land is often described as providing a safety net for migrants, during the pandemic its role as safety net for non-migrant family members could also be seen. Most migrants did not return and land did not underpin unreturned migrants' means of coping with lost employment. But most households in the village were impacted by the loss of remittances. Farming became more important for those who had relied on remittances, and the area they cultivated expanded. The formerly migrant-centered economy was now land-centered, with land now constituting the main basis of resilience.

Having land made people feel secure. Community members associate land with security and a sense of belonging; they know they can produce food if they have land and that they can sell land in the future if necessary. People described feeling secure knowing that others have land, in part at least because they are confident that they would be able to borrow in times of need.

The experiences documented here of returned migrants and of migrants' families demonstrate the continued importance of land despite the entry of people from rural areas into the off-farm workforce. The protection of access to land and tenure security in migrant-sending villages continues to be important. Future policy cannot be based on the assumption that farmland will not be of importance to migrants, and those working either to improve farming or improve conditions for migrant workers need to see farming and migrant labor as parts of an integrated system. There is also a need to protect the tenure security of migrants and farmers so that farmland can continue to play the role of safety net.

4.3. Unviability of smallholder agriculture

As noted already, the unviability of farming was a main reason for returned migrants not to take up farming. It also limited the potential for land to provide a safety net.

The lack of viability of smallholder farming in Asia has received considerable attention and has been attributed to a variety of factors, also noted above. These include small land holding sizes (Rigg et al., 2018, 2016), limited access to land due to land grabs or legal restrictions on land use (Borras et al., 2022), increased costs of farming (Jakobsen, 2018; Rigg et al., 2016), unequal terms of exchange between agriculture and industry (Borras et al., 2020), and lack of government investment in smallholder farming (Borras et al., 2020).

Interviewees described rice cultivation, in particular, as not being "good business", regardless of the size of holdings. This assessment was made with awareness of the potential for migrant labor to be much more lucrative, but interviews and observation in the villages made it clear that in absolute terms rice farming did not generate much surplus for farming households. Many households who have holdings that should be sufficient to make a living do not cultivate all of their land. Interviewees described yields as being low, though we could not confirm this. They reported that soil quality has declined and that labor shortages constrain farming. Overall, there has been no external investment in making rice farming more viable or to develop viable farming systems that incorporate rice farming.

Like other forms of industrial agriculture, rubber has been described as a high-risk venture (Chiarelli et al., 2018; Dwyer and Vongvisouk, 2019; Häuser et al., 2015). Rubber plantations were widespread in many of the villages and had been profitable, but that ended when the rubber price crashed. People stopped harvesting the latex and some cut down the rubber trees. In contrast, fruit orchards in some of the villages in Kawkareik were described as relatively profitable.

The two main extremes we observed in farming, the neglect of local farming systems and the adoption of industrial agriculture, are common around the world. Above, we noted that agroecology has been promoted by small-scale farmers in many countries as a viable third path. A transition to agroecology could go a long way to increasing the viability of smallholder farming (and enhancing its potential to serve as a safety net). It is unlikely to come about without external support or considerable mobilization among farmers, and there is a need for policy support for it. There is also a need for future government investment in smallholder farming. Still, however, small-scale farmers will feel the squeeze of a macro-level economic system that undervalues what they produce. There is thus a need for structural changes in the global food and agricultural systems. There need to be protections for smallholder farmers and limits on the ability of corporations to control food and agriculture.

4.4. Distribution of land

Existing inequality in land holdings became more problematic

during the pandemic. Land could have played a more important role as a safety net for the poorest households if they had access to it. Though farming is not very viable, those with little or no land did not have other good options. Inequality in land holdings has been made particularly glaring by the existence of unused farmland, even during the pandemic. It has sometimes been possible for the landless to access land without buying it, including during the pandemic – some people with unused land allow family members to use it for free. But for many this is not possible, and leasing land is not a particularly good arrangement given the nonviability of farming.

In recent years, the price of farmland has been extremely high, despite there being large amounts of unused land. Some interviewees attributed the high price to businesspeople from outside the villages buying up nearby farmland, and to the construction of roads and people converting farmland along roads to residential land. Buying land was out of the question for the landless because of the high price.

Rigg et al. (2016, 2018) write that it is common in Asia for households to hold on to land even if farming is not economically viable, they have high reliance on off-farm income, and they do not cultivate it. They attribute this to the safety net function of land, the persistence of identities as farmers, the existence of other sources of income allowing people to get by without selling their land, non-economic values of land, people wanting to pass it on to future generations, people keeping land as an asset that will rise in price, the use of land as collateral in borrowing, and other factors. These authors are concerned about explaining why more land concentration has not happened. As smallholders do not sell their land, those who might want to acquire large concentrated landholdings are unable to do so. The flip side, important in our case, is that landless households are also unable to buy land.

People gave various explanations for not selling their land despite not using all of their land and land prices being hight. They talked about land being inheritance from grandparents, of wanting to keep land for their children and grandchildren, and of land being important to their livelihood. As the pandemic continued, many people became interested in selling their land, though there were few buyers. This may reflect the importance of land as source of income of last resort. It is important to understand the persistence of unused land better as it serves to perpetuate landlessness. Further research is needed in this area.

The existence of unused land and high levels of landlessness reflect the need for land redistribution. Land redistribution is never easy or straightforward, and we do not propose a mechanism for it. But mechanisms should be studied.

5. Conclusion

The research described here was aimed at understanding land in the context of the COVID-19 pandemic. The two questions guiding the research were: (1) How does access to land relate to people's ability to cope with impacts of the pandemic? (2) How is access to land changing as a result of the pandemic? We make a contribution to understanding the relationship between land-based livelihoods and migrant labor and its implications for land tenure, showing how this relationship was disrupted by the pandemic.

Ultimately, land provided an indirect safety net during the pandemic, while its ability to do so was limited. Structural conditions depressing agricultural incomes and past lack of investment in smallholder farmer continued to limit the viability of farming. Many of those who might have used land the most were landless. And farming does not produce immediate yields and thus does not address immediate needs.

There is a need for policy and practice that treats smallholder farming and migrant labor as an integrated system, protection of the tenure secure of migrants and farmers, structural changes in the global food and agricultural systems, greater investments in smallholder farming and policy and practical support for agroecology, and land redistribution.

Land can only go so far in providing a safety net, even if it were more

equally distributed and if agriculture were more viable. There is also a need for a formal safety net for migrants who make an important contribution to the economies of their families, communities, and country. The pandemic exposed the lack of such a safety net.

In memoriam: co-author Saw Eh Htoo

This paper is dedicated to the memory of co-author Saw Eh Htoo, who devoted his life to the Karen people and to achieving peace in Myanmar. He helped to design the research and analyze the data, and led field data collection. He passed away on May 31, 2022, before this article could be published.

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Peter Swift: Writing – review & editing, Writing – original draft, Supervision, Formal analysis, Conceptualization. **Saw Eh Htoo:** Writing – original draft, Project administration, Methodology, Conceptualization. **Saw Min Klay:** Investigation. **Henri Rueff:** Writing – review & editing, Supervision, Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data Availability

The authors do not have permission to share data.

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