



Synthesis Report

# Contributions of community forestry to COVID-19 response and recovery in seven Asian countries

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June 2021

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# Foreword

Since the World Health Organization declared the COVID-19 pandemic on 11 March 2020, close to 3 million people have lost their lives and economies around the world have buckled. The World Bank and the World Food Programme have released startling estimates of food scarcity, supply chain disruptions and extreme poverty. There have been far-reaching social consequences from the restrictions that governments have imposed to limit the spread of the virus.

To date, marginalized people have suffered most. But amid the chaos, there are optimistic signs that communities with the rights to use and manage a nearby forest have better weathered the storm of COVID-19. RECOFTC and the Food and Agriculture Organization of the United Nations teamed up to conduct this study to look beyond those signs for evidence that will inform policy-makers and others on the value of community forestry, especially in times of crisis. To do this, we spoke with hundreds of people across seven Asian countries with different community forestry regimes: Cambodia, Indonesia, Lao PDR, Myanmar, Nepal, Thailand and Viet Nam.

The results show that community forestry can build and strengthen various classes of livelihood assets

that increase people's resilience to shocks like the pandemic—but only if certain enabling conditions are present. Ensuring that these factors are present will be crucial to unlocking the potential of community forestry.

The pandemic is far from over, and the study shows that strengthening community forests now will help build the resilience of marginalized people to endure the ongoing social and economic disruption. The study also makes a strong case for putting support for community forestry into post-pandemic recovery plans.

The information presented here can help countries as they continue through or, hopefully soon, emerge from the pandemic and to strengthen resilience to future shocks, whether in the form of future pandemics or the continuing impacts of climate change. Science tells us that both kinds of shocks will become more frequent unless urgent action is taken to reduce forest loss. Community forestry offers a route to both addressing the causes and limiting the consequences of these global challenges.

David Ganz  
Executive Director, RECOFTC

# Acknowledgements

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RECOFTC is grateful for the contributions of the 435 survey respondents who participated in Phase 1 of the study and the 212 people who participated in Phase 2.

RECOFTC’s staff members and consultants in seven Asian countries carried out the survey, conducted

the preliminary data analysis and prepared country-specific recommendations. They include Tol Sokchea (RECOFTC Cambodia); Reny Juita (RECOFTC Indonesia); Chinda Milayvong, Chay Senkhammoungkhoun and Manilay Thiphalansy (RECOFTC Lao PDR); Aung Kyaw Thu and Maung Maung Than (RECOFTC Myanmar); Neeraj Katwal and Apsana Kafle (RECOFTC Nepal); Nikhom Ruamsit (RECOFTC Thailand); and Tran Van Chau (RECOFTC Viet Nam).

Mike Shanahan wrote the report with contributions and recommendations from RECOFTC. Julian Atkinson, Jenna Jadin, Lok Mani Sapkota and Ronnakorn Triraganon from RECOFTC designed the study and contributed to writing the report. They also provided technical support and guidance together with Robin Aus Der Beek from RECOFTC and Rosa Abruzzese, Bruno Cammaert and Erica Pohnan from FAO.

# Abbreviations

COVID-19	coronavirus disease 2019
Lao PDR	Lao People's Democratic Republic
NGO	non-governmental organization
WAVES	Weaving Leadership for Gender Equality





# Executive summary

The COVID-19 pandemic that began in 2020 poses particular challenges to the world's poorest and most marginalized people, many of whom depend heavily on forests for subsistence, livelihoods and incomes. The ways that such people can use forests vary greatly among and within countries. But there is evidence that when communities have rights to use forests, both people and their forest fare better.

Community forestry is a broad term for approaches that empower people to manage, protect and benefit from local forests.<sup>1</sup> Several studies have shown the benefits of community forestry for improving local livelihoods, building community resilience and enabling sustainable forest management. However, there has been little research into whether community forestry can act as a social and economic safety net during and after disasters or crises. The COVID-19 pandemic has created an opportunity to research that question.

The Food and Agriculture Organization of the United Nations (FAO) wanted to understand if and how community forestry contributed to the resilience of communities (who depend on forests) during the ongoing COVID-19 pandemic and how this possible contribution and the community forestry approach could be strengthened. FAO partnered with RECOFTC to conduct this study in seven Asian countries: Cambodia, Indonesia, Lao People's Democratic Republic, Myanmar, Nepal, Thailand and Viet Nam.

The study aimed to learn how forest communities are dealing with COVID-19 and the related lockdowns and restrictions. In particular, it examined how important community forestry management schemes have been in helping people cope during the crisis and what kinds of support community forest members need to recover.

Phase 1 of the study involved a survey of 435 people (around 60 in each country). Roughly three-quarters were formal community forest members and one-quarter were not. RECOFTC conducted this initial survey early in the pandemic, between July and August 2020. It thus focused on the immediate impacts of the pandemic and its restrictions on ordinary life and economic activity. Phase 2 of the study involved discussions with members of two community forests in each of the seven countries. RECOFTC chose these as examples of community forests that appeared (from the Phase 1 findings) to be responding well to the pandemic and communities that appeared to be faring less well (one each per country for comparison).

The surveys confirmed that forests provide a variety of uses and products to local people across all seven

countries, including fuel, materials, food, medicine, income, recreation and spiritual value. While many people collected forest products for both home use and sale, most (74 percent) of the Phase 1 survey respondents said that selling agricultural products was their main source of income.

Negative impacts of the pandemic-related lockdown on livelihoods and food security were widespread across all groups. Eighty percent of respondents in the Phase 1 survey said they suffered such impacts. Travel restrictions, export bans and market closures reduced incomes while the cost of imported food increased, all of which put pressure on household budgets.

As large numbers of migrants to urban areas lost their jobs and returned to their native village, they added to the economic burdens facing forest communities. In Cambodia and Myanmar, one in five respondents in the Phase 1 survey reported an increase in illegal activities as a major concern, with community members often the perpetrators.

The pandemic-related lockdowns have affected women and men differently. In Thailand and Indonesia, the women survey respondents were more likely than men to say they had experienced negative impacts of the lockdown on their livelihood and food security. Across all countries, many more women than men reported having greater workloads because of home schooling and family health care. Respondents reported perceiving increased incidents of domestic violence, particularly in Viet Nam (at 13 percent of respondents).

The study showed that community forests have boosted people's resilience in several ways. Although travel restrictions prevented people from accessing markets and selling forest products, they did not prevent most people from accessing and harvesting forests for subsistence use. In all seven countries, respondents reported that their community forest committee helped to protect their forest from illegal harvesting, poaching or encroachment during the lockdown.

The Phase 2 discussions revealed the different ways in which community forestry can strengthen livelihood assets and the ways in which these assets contributed to people's resilience after onset of the pandemic:

- Human assets:** Community forest committees applied communication, coordination and leadership skills to access and distribute information and supplies of masks and hand sanitizer and to mobilize personnel to enforce health and travel restrictions and protect forests. Community members have applied knowledge

gained through experience or training to provide food and income for their families.

- **Social assets:** Community cohesion translated into high levels of compliance with public health advice. Good external relations generated financial and material support from non-governmental organizations and government agencies. Trade networks allowed some communities to continue to sell their forest products.
- **Natural assets:** Forests provided primarily non-timber forest products and to a lesser extent timber that communities could use for subsistence or to generate income. In many cases, it was the lowest-income members of communities who depended most on these resources.
- **Financial assets:** Savings generated by sales of forest products helped families to face the initial shock of the pandemic. The study estimates that more than 3 million community forest members across the lower Mekong countries covered with this study depended significantly on their savings generated by selling community forest products to cope during the lockdowns. Community forest funds also supported ongoing forest management and patrols. Revolving credit schemes provided low-interest credit to people in urgent need of fast money.
- **Physical assets:** In some places, low-income families were able to use timber to construct buildings. In one community, a building made with timber donated by the community forest user group became a venue for COVID-19 information sharing.

The study also examined the factors that enabled community forests to generate or obtain these assets. It concludes that efforts to put the following enabling factors in place would strengthen community forests and their ability to boost people's resilience and adaptive capacity:

- strong and secure long-term tenure
- high-quality and large areas of forest
- effective restoration of degraded forest
- rights to sell non-timber forest products and timber
- access to markets
- community forest funds with bank accounts and rules
- revolving credit schemes with adequate capital to support communities in a crisis
- networks connecting community forestry groups to one another in order to share information, experience, and support
- strong links with external partners, including in the private sector
- diverse livelihood options, including the ability to add value to forest products

- training programs to build capacity for sustainable livelihoods and forest management
- effective leadership and participatory decision-making

The report makes some general recommendations and also provides country-by-country summaries that highlight strategic interventions that could help community forests to support the recovery of the people most affected by the pandemic. This study also has shown that while community forests can provide important safety nets during a crisis, they are not meeting their potential to do so universally because of a range of interacting external and internal factors. There are particular gaps with respect to gender awareness, financial management and general disaster response. The findings emphasize the importance of expanding community forests and also ramping up capacity-development programs for community forest groups so that they can raise and manage more funds, recognize and address social disparities and find ways to help their members cope with the COVID-19 responses and any future disasters that may strike their climatically and financially vulnerable nations.



# Introduction

COVID-19 has caused unprecedented challenges to people in every nation and every social class. Despite the widespread and persistent challenges to nearly everyone, marginalized social groups have experienced the most serious impacts to date (Douglas, 2020; UN News, 2020; World Bank, 2020).

Even in the best of times, these groups tend to have few social safety nets: They are under-represented in governance bodies and thus their voices are not heard. They often live in remote areas and cannot easily access free health facilities or other social services (if they exist). In many countries, there is little to no enforcement of laws to protect them against violence from a spouse or other community members.

While epidemiological evidence clearly shows that older people, regardless of their socioeconomic status, have been the hardest hit by COVID-19 (CDC, 2020; Liu et al., 2020), press reports and testimonials from around the world have also shown that poor people (UN News, 2020; World Bank, 2020), ethnic minorities (Douglas, 2020) and women (Burki, 2020) have suffered disproportionately due to the COVID-19 pandemic and its social impacts.

Many of these vulnerable people the world over depend on forests for food, traditional medicines, livelihood activities or income from selling timber or non-timber forest products. The Food and Agriculture Organization of the United Nations (FAO) (2020) estimates that of the 1.2 billion people worldwide who live in extreme poverty, 90 percent rely on forest resources for at least some part of their livelihood. A growing number of these people are members of community forests.

Community forestry is a broad term for approaches that empower local people to manage, protect and benefit from forests, which they may have traditionally relied upon for generations.<sup>2</sup> These approaches have different names: social forestry, village forestry, participatory forestry, community-based forest management and people-centred forestry. These approaches also vary in the extent to which they give communities the rights to use and benefit from forest resources under formal and customary law.

The community forestry movement began in the 1970s and is now widespread throughout parts of Asia, South America and, increasingly, Africa. Despite the growing prevalence of community forestry, Viet Nam is the only country in Southeast Asia to have met its officially stated goals for community forestry expansion.<sup>3</sup> Most of the region's forests face continual threats from poachers, illegal loggers, encroachment by agribusinesses and insufficient policing of these forest crimes. Community forests are generally

faring better than other forests, such as in tackling deforestation in isolated forest areas (Porter-Bolland et al., 2012) and increasing species' richness through regular harvesting (Poudyal et al., 2019), despite receiving less support than other management regimes.

This lack of support is unfortunate because evidence suggests that community forestry is a useful tool for protecting forests and improving landscape carbon storage while improving local livelihoods (RECOFTC, 2020a). Thus, community forestry can help countries protect their environments, grow their economies and meet several of the United Nations Sustainable Development Goals. The few published studies on the ability of community forestry to improve climate or disaster resilience suggest that it provides some degree of health protection and social safety net in difficult times. A better understanding of how and to what degree community forestry provides a social safety net in general, and specifically in times of disasters, is needed if proponents of community forestry are to speed up and improve the required tenure rights processes.

The COVID-19 pandemic, while immensely tragic, provides us with an opportunity to test theories of disaster resilience—both generally and in relation to community forestry. Since the crisis began, there have been many reports of emerging environmental challenges (and benefits) as a result of the lockdowns imposed to control the spread of the disease. These have included but are not limited to: a risk of increased tenure conflicts and land-grabbing because of the reduction in independent monitoring of forest resources (FAO, 2020); more widespread forest fires due to limited fire prevention efforts (Gibbens, 2020) or higher forest use (Vyawahare, 2020) and more rapid land encroachment by agribusinesses that are taking advantage of preoccupied governments and decreased public scrutiny (Chandra, 2020; Cheema, 2020; Cotula, 2020).

Reports out of Southeast Asia (specifically to RECOFTC from the communities it works with) suggest that people who are part of community forestry schemes have had some economic resilience to the ongoing crisis. This is because, for one, such people often already have benefit-sharing mechanisms in place and so, in theory, should be able to adapt and use them to adjust to COVID-19-induced livelihood issues. Members of a community forest also already know how to use their forest for food (whether through extraction of wild foods or agroforestry) and do not depend completely on markets, which may be cut off due to travel restrictions.

There are also reports of community forests providing financial and material support to their members and wider communities during the pandemic. In Myanmar, for example, the network committee of the Myaing Kankaung community forest user group spent US\$700 on food to donate to members in need and on COVID-19 prevention materials for migrant workers who had returned to their village.<sup>4</sup> The money came from interest that community forest members had paid on loans from the community forest's revolving credit scheme. The credit scheme also suspended interest payments during the pandemic.

In Nepal between March and May 2020, some 252 community forest user groups invested US\$99,000 to donate food and non-food items to people in need and donated more than US\$70,000 to local government relief funds, benefiting more than 150,000 people in total (Gentle et al., 2020). More than 1,400 community forest user groups in Nepal offered their buildings as quarantine venues.

Community forestry as a scheme, however, differs vastly in its power and governance structures from country to country and among individual community forests within each country. This is likely to impact the ability of community forest members to respond to crises.

Most of the early reports of pandemic-resilience among community forest members are anecdotal. To achieve a better understanding of whether and how community forests can improve people's resilience, RECOFTC, in partnership with FAO, designed and undertook this research. The study relied on quantitative and qualitative surveys, at different scales, to examine the situation and experiences of people who depend on forests, in relation to the pandemic in seven Asian countries: Cambodia, Indonesia, Lao People's Democratic Republic (PDR), Myanmar, Nepal, Thailand and Viet Nam.

Phase 1 of the study took place in July–August 2020. Phase 2 took place in December 2020 and January 2021. The information generated in each phase thus reflects different circumstances with respect to the progression of the pandemic and its impacts.

In Phase 1 of the study, RECOFTC surveyed members and leaders of community forestry groups and, where possible, people in adjacent landscapes who also depend on forests but are not part of any formal community forestry group. RECOFTC validated the findings with a second Phase 1 survey conducted with government officials, academics and civil society organization staff who work closely with community forests and who could confirm or clarify responses.

After analysing the data, the team identified two contrasting community forests in each country:

- One community forest that the team considered likely to be coping well with the pandemic, for example, because its committee had been active in supporting its members or because members

had built up significant savings and did not need to resort to extreme coping measures.

- One community forest that the team considered likely to be coping less well, for example, one whose members had reported significant negative impacts of the pandemic or that had particularly degraded forests.

In Phase 2 of the study, RECOFTC talked with members of each of these selected community forests and other local stakeholders. In particular, the Phase 2 surveys examined the hypothesis that community forestry strengthens different classes of livelihood assets (natural, human, social, financial and physical) and that these strengthened assets increase people's resilience and adaptive capacity. It also sought to identify and better understand factors that enhance or hinder the ability of community forestry to strengthen livelihood assets and improve resilience.

Overall, the study gathered evidence that can inform policies and interventions to strengthen community forestry as a social and economic safety net, including through the extension of community forests and improvements in land tenure systems, in both Asia and the rest of the world. That evidence also has formed recommendations for pandemic recovery plans that would likely help to reduce the vulnerability of people who depend on forests, improve natural environments and help nations cope with disasters, improve economies and meet their Sustainable Development Goals commitments.



# Methodology

## Phase 1 survey methodology

Staff at RECOFTC's Main Office designed a survey with input from colleagues in its country offices and from representatives of the FAO Regional Office for Asia and the Pacific. The final survey contained 47 questions related to demographics, tenure issues, forest condition and use and the impacts of COVID-19 and related lockdowns and economic fallout.

Overall, 435 people answered the survey (between 59 and 70 people each in Cambodia, Indonesia, Lao PDR, Myanmar, Nepal, Thailand and Viet Nam). All respondents were members or leaders of community forest groups or were people who used forests and who lived adjacent to but were not members of a community forest.<sup>5</sup>

Due to the pandemic-imposed travel restrictions, RECOFTC country staff or the hired survey specialists conducted the survey by telephone in the local language. RECOFTC identified survey respondents through its long-standing relationships with community forest groups. In each country, RECOFTC identified 15–18 such groups and interviewed a median of four people from each group: two regular community forest members, one community forest leader and one person who depended on a forest but was not part of a formal community forest group.

The methodology for Nepal differed from the other countries. Because nearly all forests in Nepal have been turned into some sort of community forest scheme, the surveying team could not locate any forest user who was not a member of a community forest. Thus, the team surveyed 30 community forests, capturing responses from one regular community forest member and one community forest committee member in each one.

The survey responses were recorded using the Kobo Humanitarian Toolbox web application. RECOFTC Main Office staff cleaned or verified all data post-processing through the Kobo application. In general, the team dealt with inconsistencies in data by: (i) questioning country teams about specific answers to clarify results; (ii) asking country teams to share raw data files so the data-cleaning team could confirm the Kobo entries; (iii) using the team's knowledge of the situation to reclassify answers; and (iv) in one or two cases, rejecting data points entirely.

Each country survey aimed to have 50 percent of the respondents as people who identify as female and 50 percent who identify as male. This goal was not reached, with about twice as many men as women responding (66 percent men, 34 percent women). This

is likely because (i) men predominate in community forest leadership and (ii) in many countries, men are viewed as the gatekeepers of information and the bridge between villages and outsiders. Each country survey also aimed to capture responses from both minority and majority groups (achieved) as well as a diverse range of age groups (also achieved but with a bias towards middle-aged people, as explained further on).

In Phase 1 of the study, RECOFTC surveyed government officials, academics and representatives from civil society organizations who work closely with community forests in the seven countries to cross-check and corroborate the results from the main survey. This was necessary to understand perceived differences among groups on the impacts of the COVID-19 pandemic and to capture information about the actions of governments and civil society groups that marginalized members of community forests may have missed in their community or misunderstood when responding in the first survey. This second Phase 1 survey contained a subset of the previous survey questions, mostly those pertaining to perceived COVID-19 impacts and responses. Three to five people in each country responded to this survey.

Finally, RECOFTC collected data on the structure and function of community forests and similar regimes in each country (see Annex 1). The data were collected through RECOFTC Main Office internal knowledge, combined with literature reviews and discussions with RECOFTC country staff. Using this data, RECOFTC made inferences about how different types of tenure regimes may have influenced how communities with a community forest were able to cope with COVID-19 and the associated lockdowns.

## Phase 2 methodology

RECOFTC's Main Office team drafted a conceptual framework for the Phase 2 study in consultation with FAO and the RECOFTC country teams. Each country team then selected two communities to dig deeper (based on the finding of Phase I survey and their knowledge about community forest groups in the country). The country teams developed a contextualized questionnaire and checklist, listed individuals to talk with and designed locally appropriate methods to engage with them (RECOFTC's Main Office team provided guidance as necessary).

Methods included focus group discussions and informant interviews (see Annex 2 for the approach in each country). Restrictions by governments (national to local) limited the number and size of gatherings that could take place. This significantly constrained

the number of people who participated and limited access to some data sources. In total, the Phase 2 teams consulted 212 people (51.4 percent women, see table 1), with the number particularly limited in Myanmar due to COVID-19 restrictions.

The country teams used either their own staff or hired consultants to conduct the discussion and produce reports for each country, following feedback from the RECOFTC Main Office on the draft reports. RECOFTC Main Office then undertook case studies on the 14 community forests. The analysis examined the ways that community forest contributes to each of five classes of livelihood assets that reflect the five dimensions of the sustainable livelihoods framework: human, social, financial, natural and physical (DFID, 1999).

The sustainable livelihoods framework approach assumes that these assets are what provides the basis for people to undertake activities that enable them to pursue livelihood outcomes (such as health, wealth and security). It also considers the external structures and processes (laws, policies, institutions and private sector) that can affect these assets, as well as the external shocks (COVID-19 is a case in point) that can increase people's vulnerability. The sustainable livelihoods framework thus helps to organize the factors that constrain or enhance livelihood opportunities, shows how they relate to each other and aids the identification of practical priorities for actions (Serrat, 2008).

As de Haan and Zoomers (2006) noted, the sustainable livelihoods framework is "not intended to depict reality in any specific setting" but is "an analytical structure for coming to grips with the complexity of livelihoods, understanding influences on poverty and identifying where interventions can best be made". Jackson (2021) argued for applying the sustainable livelihoods framework in the context of COVID-19, stating: "In view of the need to reduce inequalities, policy-makers should endeavour to formulate strategies that embed risk assessment in the sustainable livelihoods architecture to mitigate shocks for the good of those in dire conditions associated with incidence of pandemic like COVID-19."

This FAO–RECOFTC study used the following definitions:

- **Enabling environment:** the policy and institutional context as well as access to markets and technologies that enable community forest user groups to manage their forest effectively and to benefit fairly from its resources. There should be a balance between rights and responsibilities as well as support (technical, technological and financial) to local communities in managing and benefiting from their forests.
- **Human assets:** the skills, knowledge, abilities and health needed to pursue livelihood activities. At the household level, this includes both the quantity of human resources (number of productive individuals) and their quality (what these individuals know and how hard they are willing and able to work). Human assets include knowledge and skills learned from formal education and experiential learning.
- **Social assets:** the set of social relationships that people can draw upon in pursuit of their livelihood goals. Also known as social capital, it is built from a range of factors, including friendships, networks, trusting relationships, group and organizational memberships and access to wider societal institutions. Social assets are influenced by one's access to markets, credit, government services, social standing and a range of other factors.
- **Natural assets:** the natural resource stock from which livelihoods derive. Natural resources may include land, water, forests, pastures, mining resources and biodiversity. Availability of and access to natural resources are important for local communities to survive crises and respond to climate change. In some cases, there may be plenty of resources available, but an individual or community may not have access to them.
- **Financial assets:** available resources consisting of money or convertible to money, such as savings, credit, remittances, pensions, social security payments and insurance, that provide different livelihood options. This includes resources for investment in new assets, for input into production and for responding to different vulnerabilities.
- **Physical assets:** The basic infrastructure related to transport, shelter, water management, energy and communication, as well as the tools that would allow people to maintain their livelihoods. Physical

**Table 1.** Number of people consulted in each country during the Phase 2 study

	Cambodia	Indonesia	Lao PDR	Myanmar	Nepal	Thailand	Viet Nam
Women	15	14	9	3	37	18	13
Men	6	22	18	10	18	12	17
<b>Total</b>	21	35	27	13	55	31	30

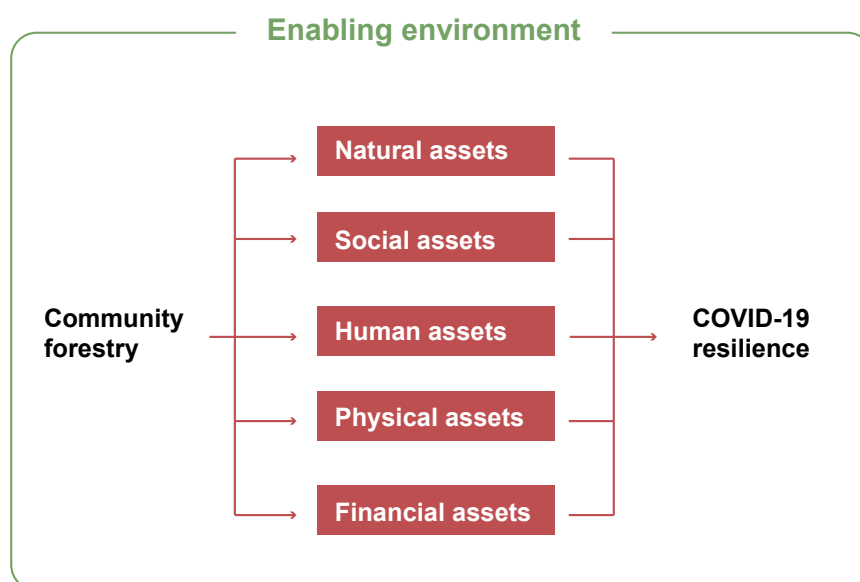


assets include things that people own and things that they have access to, such as roads, irrigation systems and telephone networks.

- **Resilience:** the ability of a system and its component parts to anticipate, absorb, accommodate or recover from the effects of a hazardous event in a timely and efficient manner, including by ensuring the preservation, restoration or improvement of its essential basic structures and functions.
- **Adaptive capacity:** the ability of a system to adjust to a hazard event, shock or threat by moderating the potential damage from it, taking advantage of its opportunities or coping with its consequences. Adaptive capacity is more narrowly focused on the specific skills and mechanisms that are deployed by human systems to contribute to resilience.

As illustrated in figure 1, the Phase 2 study set out to identify and analyse the contributions of community forestry to COVID-19 resilience. The questions examined (i) how community forestry has contributed to each class of livelihood asset and (ii) how these livelihood assets have contributed to the resilience and adaptive capacities of community forest members.

**Figure 1.** Illustration of the hypothetical contributions of community forestry to COVID-19 resilience



Source: RECOFTC, 2021.



# 1 Impacts of COVID-19 on forest communities

## Demographics and forest use

### Demographics

A total of 435 people responded to the Phase 1 survey across the seven targeted countries. Eighty percent were members of community forests (or similar) and the other 20 percent were not officially part of some sort of community forest, although they may still have had access rights to one (figure 2). The respondents represented a total of approximately 120 community forests and neighbouring areas across the seven countries. The combined area of those community forests is an estimated 27,500 hectares.

Sixty-six percent of the respondents identified as male, and 34 percent identified as female (figure 3). Roughly half of the respondents were from ethnic majority groups in their country (for example, Burmese in Myanmar, Khmer in Cambodia, Thai in Thailand), and roughly half were from a variety of ethnic minorities, including Da Nu, Rakhine, Punong, Bugis and many others. Figure 4 shows the age distribution of the respondents.

The mean household size of respondents was five people, with the national average ranging from 4.1 in Thailand to 5.8 in Nepal. Most (89 percent) of the respondents did not have a college education, and 35

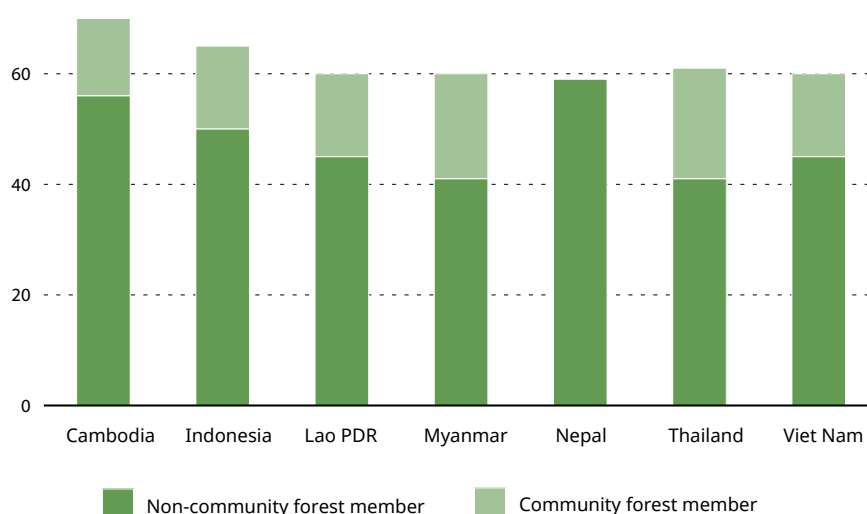
percent had no schooling, only religious schooling or stopped school after elementary education.

The vast majority (74 percent) of Phase 1 respondents cited selling agricultural products as one of their primary means of income, while 32 percent reported selling non-timber forest products. And 24 percent reported working at paid private sector jobs in the village, which included shopkeepers, seamstresses and teachers. Almost 17 percent were employed at agribusinesses or concessions, and surprisingly few (4 percent) relied on cash remittances from a family member in a city or abroad. Almost all respondents reported multiple sources of income for themselves and their family. Phase 2 involved 14 of the community forests identified in Phase 1, with two selected from each country (see figure 5 for locations).

Annex 3 provides an overview of these community forests, including demographic information. The community forests varied greatly, for example with respect to:

- **Mode of participation:** collective groups (Cambodia, Lao PDR, Myanmar, Nepal and Thailand), village forest community institutions and business groups (Indonesia), individuals (Viet Nam).
- **Date of formalization:** between 1990 (Phagarkhola in Nepal) and 2020 (one community in Lao PDR and the other community forest there is not yet formalized).

**Figure 2.** Numbers of community forest members and non-members who responded to the Phase 1 survey, by country



Source: RECOFTC, 2021

- **Gender and social inclusion:** from all women in the Phagarkhola community forest committee in Nepal to no representation of women in Tambagguruyung Village Forest Community Institution in Indonesia.
- **Forest size:** between 19 hectares (Painne Taw in Myanmar) and 5,539 hectares (Mae Tha in Thailand).
- **Sources of income:** timber (Nepal), payments for environmental services (Viet Nam), agroforestry (Indonesia), non-timber forest products (Thailand) and tourism (Indonesia).

## Forest use

Phase 1 of the study confirmed that forests provide a variety of uses and products to local people across all seven countries, including: fuel, materials, food, medicines, income, recreation and spiritual value.

- All respondents reported using forests. On average, each respondent identified 6.2 forest uses from a list of 13 as being “very” or “moderately” important. The top-three uses of forests were collection of fuel for home use or sale (73.1 percent of all respondents), building materials (72.9 percent) and forest foods (70.1 percent).
- There were no differences regionally or within countries between community forest members and non-community forest members with respect to the number of uses the local forest provided. There were significant differences among countries, with people having fewer uses they identified as “important” in Nepal (3.3 on average) and Myanmar (3.5 on average) and people in Indonesia having more (9.4 on average).
- Indonesia’s profile of uses was different from the regional picture, with 95.4 percent of respondents using forests for collecting water, 95.4 percent for agroforestry and 78.5 percent for livestock fodder, bedding or pasture. All 13 use options were rated as important by at least 72 percent of the Indonesian respondents.

- Nepal’s profile also differed. Only 25.2 percent of respondents rated the 13 use options as important. However, 96.6 percent rated fuel collection for home use or sale as important, and 79.7 percent said the same for livestock fodder, bedding or pasture.

Section 2 and Annex 3 provide details of forest use in each of the 14 communities participating in Phase 2 of the study.

## Impacts of the pandemic on communities and their forests

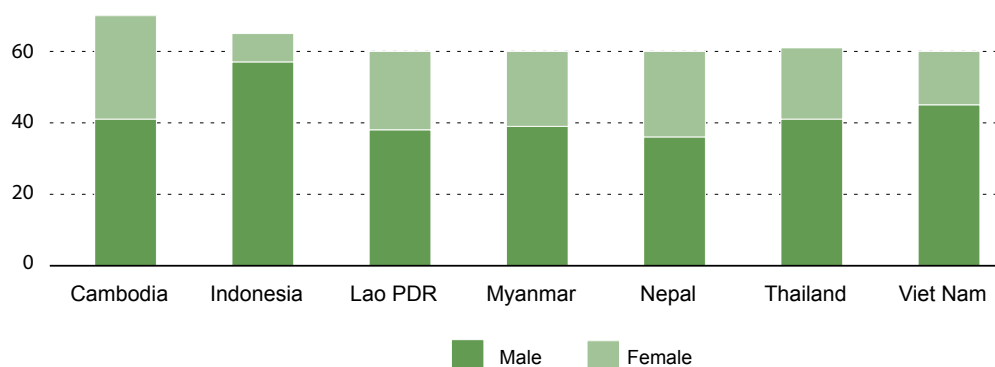
### Economic impacts

Negative impacts of the pandemic-induced lockdowns on livelihoods and food security were widespread across all countries surveyed in Phase 1 of the study. Eighty percent of all respondents said they suffered such impact. The most commonly reported impacts were: reduced market demand for forest products (49 percent of respondents); restricted access to markets due to travel bans (40 percent); higher food prices (36 percent, likely in reference to imported food); and lost income due to job closures (25 percent).

A fifth of forest users reported no such impact. This included a quarter of respondents in Lao PDR and Thailand and more than half of those in Indonesia. Multiple factors are likely at play, including the timing and nature of the COVID-19 restrictions. It is notable that respondents in these three countries were also the least likely to report having changed the way they use their forest during the lockdown (see section 1.2.2), which suggests that forest use may have at least partially offset the impacts of the initial lockdowns.

Among respondents who reported suffering impacts, the average number of impacts (from a list of 17)<sup>6</sup> that they suffered “a lot” was roughly the same for community forest members (3.98 impacts) and non-community forest members (3.19), for women (3.77)

**Figure 3.** Number of women and men who responded to the Phase 1 survey, by country



and men (3.82), and for people from minority (3.62) and majority groups (4.01). Half of the respondents (51 percent) said that increased stress and worries were affecting their health.

Most people surveyed in Phase 1 said they coped with the initial economic shock of the pandemic by either reducing spending and leisure activities (57 percent), using savings (57 percent), growing more food (41 percent), borrowing money from personal contacts (40 percent) and going with less food (38 percent).

The community members who participated in Phase 2 confirmed that the main impacts of the pandemic were economic. With widespread restrictions on travel and trade, the prices at which farmers could sell agricultural produce plummeted (table 2). In Lao PDR, the watermelon price fell so far that farmers left their crops to rot in the fields. Community forests in Cambodia and Indonesia lost income as tourism collapsed, while in Nepal, timber felling and trade also stopped. As incomes declined across the seven countries, many households felt extra economic pressure as schools closed and newly jobless family members migrated back to their home village from an urban centre.

In contrast, people surveyed in Phagarkhola, Nepal said the community experienced no significant impacts due to the COVID-19 pandemic beyond an increased demand for firewood for cooking because of the return of migrants from cities and later an increased demand for fodder as the returnees began looking after livestock. People in Baan Mae Hong Krai, in Thailand, also said they did not experience severe effects from the pandemic because they mostly spent their time in their community.

## Changes in forest use

Only 42 percent of respondents in the Phase 1 survey said they had changed their use of forests since the lockdown began (table 3). This number was smaller than expected, given the travel and market closures throughout the region, although it was

not insignificant. Of those who reported changes in use, the most common issues were: an inability to harvest or collect forest products because of travel or road bans or new restrictions on forest use (12 percent). Increased use of the forest for collecting food, collecting non-timber forest products for other purposes (fodder, bedding, building materials) or for recreation were reported by a small proportion of people (9 percent, 8 percent and 4 percent, respectively). Slightly more than 4 percent of all respondents also reported that they could no longer harvest forest products because they no longer had access to transportation.

Unlike in the other five countries, more than 80 percent of community forest members who responded to the Phase 1 survey in Myanmar and Viet Nam (combined) reported a change in how they use their forest. This compares with only 31.9 percent of community forest members across the other five countries (combined) and with 42.1 percent and 40 percent of non-community forest members in Myanmar and Viet Nam, respectively. For both countries, the difference between community forest members and non-members was statistically significant ( $p < 0.003$ ).

Myanmar and Viet Nam were the only countries for which the top-three reasons for changing forest use did not include “increased use of the forest” for collecting food or materials or for recreational and spiritual value. Instead, the top-three reasons for Viet Nam and Myanmar related to the way the pandemic limited the ability of forest users to sell products because of travel restrictions, low prices, lack of buyers or inability to access transport. In both countries, a greater proportion of community forest members cited these reasons than non-community forest members. It appears that in those two countries, most community forest users reduced their use of forests, whereas most non-members of community forests in those countries and most forest users in the other countries did not.

**Table 2.** Changes in market prices of agricultural produce before and during the COVID-19 pandemic, as reported by Phase 2 participants

Country	Produce	Producers' selling price per kilogram		Price change
		Pre-pandemic	Pandemic	
Cambodia	Cashew nuts	5,000 riel	3,000 riel	-40%
Cambodia	Rice	1,200 riel	900 riel	-25%
Lao PDR	Watermelon	5,000 kip	2,000 kip	-60%
Lao PDR	Rice	6,000 kip	4,000 kip	-33%
Indonesia	Coffee	11,000 rupiah	3,000–4,000 rupiah	-63–72%

**Table 3.** The top-three “very important” changes in forest use induced by the pandemic and related lockdown

<b>Cambodia (38.6% reported change in use)</b>	<b>Total (n=27)</b>	<b>CF (n=23)</b>	<b>Non-CF (n=4)</b>
Not selling products because no buyer or low prices	88.9 (%)	87.0 (%)	100 (%)
Using the forest more for collecting bedding, fodder, non-timber forest products	18.5	17.4	25.0
Using the forest more for collecting food	14.8	13.0	25.0
<b>Indonesia (23% reported change in use)</b>	<b>Total (n=15)</b>	<b>CF (n=11)</b>	<b>Non-CF (n=4)</b>
Not selling products because of travel bans or social distancing	80.0 (%)	60.0 (%)	25.0 (%)
Not selling products because no buyer or low prices	60.0	40.0	25.0
Using the forest more for recreation or spiritual activities	53.3	40.0	8.3*
<b>Lao PDR (31.7% reported change in use)</b>	<b>Total (n=19)</b>	<b>CF (n=14)</b>	<b>Non-CF (n=5)</b>
Not selling products because of travel bans or social distancing	63.2 (%)	57.1 (%)	80.0 (%)
Not selling products because no buyer or low prices	52.6	42.9	80.0
Using the forest more for collecting food	47.4	57.1	20.0
<b>Myanmar (68.3% reported change in use)</b>	<b>Total (n=41)</b>	<b>CF (n=33)</b>	<b>Non-CF (n=8)</b>
Not selling products because of travel bans or social distancing	65.8 (%)	54.6 (%)	50.0 (%)
Not selling products because no buyer or low prices	53.7	72.7	37.5
Not selling products because no longer can access transport	29.3	30.3	25.0
<b>Nepal (40.7% reported change in use)</b>	<b>Total (n=24)</b>	<b>CF</b>	<b>Non-CF</b>
Using the forest more for collecting bedding, fodder, non-timber forest products	41.7 (%)	-	-
Not harvesting products because of roadblocks or travel bans	41.7	-	-
Not selling products because of travel bans or social distancing	29.2	-	-
<b>Thailand (24.6% reported change in use)</b>	<b>Total (n=15)</b>	<b>CF (n=8)</b>	<b>Non-CF (n=7)</b>
Not selling products because of travel bans or social distancing	66.7 (%)	50.0 (%)	85.7 (%)
Not selling products because no buyers or low prices	60.0	37.5	85.7
Using the forest more for collecting food	60.0	37.5	85.7**
<b>Viet Nam (73.3% reported change in use)</b>	<b>Total (n=44)</b>	<b>CF (n=38)</b>	<b>Non-CF (n=6)</b>
Not selling products because no buyer or low prices	90.0 (%)	89.5 (%)	100 (%)
Not selling products because of travel bans or social distancing	86.4	86.8	83.3
Not harvesting products because of roadblocks/travel bans	81.8	84.2	66.7

Note: Percentages of all respondents, CF (community forest) members and non-CF members are proportions of the group who said they had changed their use of forests—not proportions of all country respondents.

\*Non-CF members in Indonesia had many answers tied for third place; for most uses, one out of the total four respondents cited one of the uses. \*\*Non-CF members in Thailand also used the forest more for collecting bedding, fodder and non-timber forest products, at a rate of 85.7 percent, equal to the three uses listed here.

Another effect of the initial lockdowns on forest use was an increase in forest crimes, such as illegal harvesting, poaching or encroachment. Eighteen percent of respondents said illegal activities had increased during lockdown. Most reports came from two countries: Cambodia (37 percent of reports of illegal harvesting of timber or non-timber forest products) and Myanmar (51.7 percent). In these countries, there was no notable difference between proportions of community forest and non-community forest members who reported illegalities.

It is not clear whether these issues were due to a lack of patrolling by forest rangers and community members, increased demand for forest products or a squeeze on household economies. Illegal harvesting of timber (11 percent of respondents) and of non-timber forest products (9 percent) were most often cited, and in most cases said to be committed by community members or people in neighbouring villages.

These findings relate to the period of July–August 2020 when the Phase 1 survey took place. Section 2 of this report provides more detail from the Phase 2 study on how selected communities used forests in the following period as the pandemic persisted.

### Social impacts

The Phase 1 survey revealed some gender differences in the impacts of lockdowns. Across countries, women were more likely than men to report having experienced impacts on food security due to the lockdowns. This statistically significant difference is explained by disparities in two countries: Thailand, where 90 percent of women but only 68 percent of men reported impacts, and Indonesia, where 62.5 percent of women and 43.9 percent of men reported impacts. In all other countries, similar proportions of men and women reported impacts.

Across all countries, there was clear differentiation of impacts by gender. Around 57 percent of women reported more work because of home schooling,

compared with 9 percent of men. Half of all respondents (48 percent) said women had more work because of family health care issues, while only 7 percent said that men did. About a quarter of respondents thought both men and women had to do more work to gather or grow food; and 22 percent said men had an increased work burden because they had to look for additional work, sometimes farther away, when their primary job was terminated.

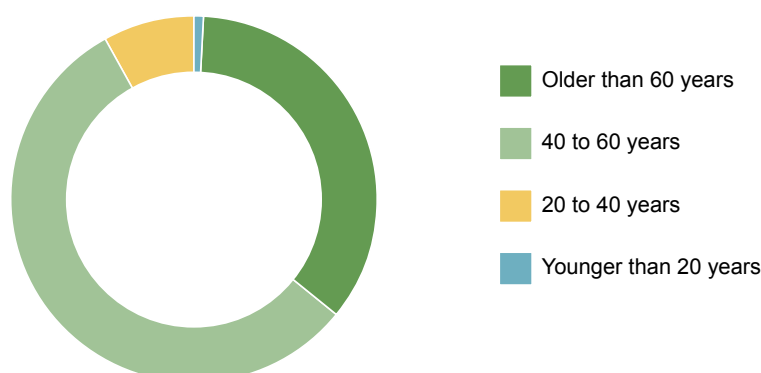
There were differences in the gendered impacts between community forest and non-community forest members in some countries. More women among the community forest members in Cambodia, Indonesia and Thailand reported doing more food growing and harvesting during lockdown, compared with women who were not members of community forests. In Cambodia and Viet Nam, more men who were not community forest members reported losing jobs, compared with men who belonged to a community forest.

Respondents also reported perceiving increased incidents of domestic violence, particularly in Viet Nam, where 13 percent said this, Nepal (at 11 percent) and Myanmar (at 6.7 percent). This reflects reports from many countries worldwide that suggest confinement during lockdown has put women in greater danger of spousal abuse (Godbole, 2020).

An influx of migrant workers back into communities, while common, did not appear to cause problems, according to the Phase 1 survey results. The only conflict that was frequently cited as a result of returning migrant workers was disagreement over quarantine times and fear that returnees might bring COVID-19 to the village. In the Phase 2 study discussions, some community members also noted that returning migrants had placed an added burden on local health facilities because they needed to be screened and isolated.

There were some positive aspects of the lockdowns and return of migrants. In the Phase 1 survey, 57 percent of respondents from both community forest

**Figure 4.** Age distribution of Phase 1 survey respondents across the seven countries



Source: RECOFTC, 2021

**Figure 5.** Locations of the 14 community forests covered in Phase 2 of the study



#### **Nepal**

- 1 Shreechhap Deurali
- 2 Phagarkhola

#### **Myanmar**

- 3 Heinze
- 4 Painne Taw

#### **Thailand**

- 5 Mae Tha
- 6 Baan Mae Hong Krai

#### **Lao PDR**

- 7 Koklouang
- 8 Nakhayang

#### **Viet Nam**

- 9 Muong Phu
- 10 Thanh Phong

#### **Cambodia**

- 11 Samaky Trapang Totim
- 12 Kbal Bey

#### **Indonesia**

- 13 Tambagguruyung
- 14 Sasaka Patengan



and non-community forest groups reported positive impacts. These included families being reunited (46 percent), cleaner air, land and water (42 percent), more people available to help with agriculture and forest labour (36 percent), health services that had long been needed being received (33 percent) and more help available for domestic tasks (27 percent). These views were echoed by community members participating Phase 2 of the study.

## Urgent needs

In Phase 1 of the study, survey respondents were asked what kinds of support they needed most urgently to recover from the COVID-19 lockdown. They were given pre-set answers and asked to rate them as being in “great, moderate, little or no need”.

Table 4 presents the top results by country and compares responses from community forest members and non-members.

The top-five greatly and moderately needed forms of support were: food at reduced prices or as donations (75 percent), cash grants (74 percent), seeds and planting materials at reduced prices or as donations (69 percent), health care supplies (68 percent) and job training or education (66 percent). Other high-scoring needs included: debt forgiveness (51 percent), more job opportunities (64 percent), machinery for livelihood activities (61 percent) and better digital access (56 percent).<sup>7</sup> Many respondents (66 percent) also cited a need for help caring for children and older persons, pointing to a possible need to work with community forests to develop care programs for children, older persons or others with special needs.

**Table 4.** The top-five most requested forms of support, by country (percentages of total respondents, community forest (CF) members and non-CF members who identified a “great need”)

<b>Cambodia</b>	<b>Total (N=70)</b>	<b>CF (N=56)</b>	<b>Non-CF (N=14)</b>
Health care supplies (free or reduced price)	80 (%)	79 (%)	86 (%)
Cash grants	77	73	93
Food (donations or reduced prices)	76	70	100
More job opportunities	69	66	76
Seeds, other livelihood inputs (free or reduced price)	69	70	64*
<b>Indonesia</b>	<b>Total (N=65)</b>	<b>CF (N=50)</b>	<b>Non-CF (N=15)</b>
Cash grants	80 (%)	80.0 (%)	80.0 (%)
Food (donations or reduced prices)	77	76	80
Seeds, other livelihood inputs (free or reduced price)	74	76	67
Help with child or older person care	69	74	53
Machinery to improve livelihood activities	69	64	73
<b>Lao PDR</b>	<b>Total (N=60)</b>	<b>CF (N=45)</b>	<b>Non-CF (N=15)</b>
Cash grants	47 (%)	51 (%)	27 (%)
Health care supplies (free or reduced price)	42	51	13
More job opportunities	40	49	7
Help with child or older person care	38	47	7
Machinery to improve livelihood activities	45	51	20
<b>Myanmar</b>	<b>Total (N=60)</b>	<b>CF (N=41)</b>	<b>Non-CF (N=19)</b>

Health care supplies (free or reduced price)	72 (%)	71 (%)	74 (%)
More job opportunities	65	71	53
Cash grants	58	63	47
Help with child or older person care	55	61	42**
Job training or education	55	56	53
<b>Nepal</b>	<b>Total (N=59)</b>	<b>CF</b>	<b>Non-CF</b>
More job opportunities	71 (%)	-	-
Job training or education	66	-	-
Food (donations or reduced prices)	61	-	-
Seeds, other livelihood inputs (free or reduced price)	46	-	-
Health care supplies (free or reduced price)	36	-	-
<b>Thailand</b>	<b>Total (N=61)</b>	<b>CF (N=41)</b>	<b>Non-CF (N=20)</b>
Cash grants	88 (%)	98 (%)	65 (%)
Job training or education	83	83	80
Improved or more irrigation	82	78	90
Help with child or older person care	87	85	85
Improved digital communication	93	93	90
<b>Viet Nam</b>	<b>Total (N=60)</b>	<b>CF (N=45)</b>	<b>Non-CF (N=15)</b>
Cash grants	90 (%)	89 (%)	93 (%)
Help with child or older person care	90	95	73
More policing (land, fires, environmental crime)	83	93	53***
More job opportunities	80	80	53***
More policing (abuse, theft, social crimes)	78	89	47***

Note: \*In Cambodia, debt forgiveness was the third-most requested form of support among non-CF members, at 86 percent. Livelihood support came in at sixth place. \*\*In Myanmar, help with older person care was the seventh (tied with cellular service and better public transport) requested from non-CF members; food donations were the fifth-most requested form of aid, tied with cash grants. \*\*\*In Viet Nam, results between CF members and non-CF members differed notably. Non-CF members cited the need for vehicles in second place (80 percent), job training and education in fourth place (67 percent), and health care supplies in fifth place (60 percent). They, unlike the CF members, did not see such need for policing and job opportunities.



# 2 Resilience

Section 1 of the report shows both the range of impacts that the pandemic has had on people who depend on forests and the ways in which those impacts varied within and among countries. These differences highlighted the need for additional work during Phase 2 of the study—to explore in more detail whether community forestry had a role in increasing people’s resilience.

This section of the report draws largely upon the discussion with members of 14 community forests

undertaken in Phase 2 of the study. It begins by outlining the ways in which community forestry creates and strengthens the five classes of livelihood assets described in the methodology section, according to the communities surveyed. It then shows how these assets contributed during the pandemic, before outlining some of the factors that affected community forestry’s potential to help in times of crisis. Table 5 provides an overview of the community forests participating in Phase 2 (for more detail, see Annex 3).

**Table 5.** Overview of the 14 community forests selected for Phase 2 of the study

	Community forest	Established	Area (ha)	Participating households
<b>Cambodia</b>	Samaky Trapang Totim Community Forest	2016	439	322 families (1,456 people)
	Kbal Bey Community Forest	2009	761	82 families (350 people)
<b>Indonesia</b>	Tambagguruyung Village Forest Community Institution	2005	1,161	1,130 households
	Sasaka Patengan Village Forest Community Institution	2008	843	492 households
<b>Lao PDR</b>	Koklouang Village Forest	2020	901	109 families (449 people)
	Nakhayang Village	Not yet	1,963	216 families (1,003 people)
<b>Myanmar</b>	Heinze Village	2017	57	24 households (of village’s 53 households and 457 people)
	Painne Taw Village	2016	19	14 households (of villages’ 30 households and 124 people)
<b>Nepal</b>	Shreechhap Deurali Community Forest Users Group	1997	78	371 households (population 2,040)
	Phagarkhola Community Forest Users Group	1990	69	71 households (population 390)
<b>Thailand</b>	Mae Tha Community Forest	2019	5,539	1,497 households (4,754 people)
	Baan Mae Hong Krai Community Forest	2016	174	82 households (260 people)
<b>Viet Nam</b>	Muong Phu	2010	2,337	235 households (1,009 people)
	Thanh Phong	2016	221	228 households (957 people)

## How community forestry creates and strengthens assets

### Human assets

Community forestry is a direct tool for harnessing human capital by bringing together community members with a common purpose. A simple measure of this human capital is the number of members of each community forest. In the community forests participating in Phase 2, this ranged from 14 households in Paine Taw, Myanmar to 1 497 households in Mae Tha, Thailand. As well as undertaking work for their own needs, the community forest members also work for the collective good, such as when planting trees, creating fire breaks or patrolling their forests.

In Viet Nam, for example, soon after the community forest in Muong Phu was established, the community set up 12 forest protection groups (of six to eight people) to conduct patrols three times a month in the dry season and once a month in the rainy season. This was in part a response to concerns about forest encroachment. The community forest fund covers the costs, including a payment of about 200,000 Vietnamese dong (US\$9) a day for each patroller.

As well as gathering and organizing human assets, community forestry can also strengthen them. An important way that community forestry does this is through the formation of a body responsible for overseeing the management of the community forest. These bodies have a different name in different countries, for example: “community forest management committee” in Cambodia or “village forest committee” in Lao PDR. The functions of these bodies also vary and can include: managing the forest, engaging with other forest stakeholders, resolving conflict, educating members about forest laws and policies, organizing patrols and tree planting, conducting fire protection activities and administering funds and/or credit schemes.

These bodies therefore require (and in many cases have been supported by RECOFTC and local non-governmental organization (NGO) partners to develop) knowledge and skills in administration (such as accounting and financial management, record-keeping, participatory decision-making and communication) as well as in practical aspects of forest management planning, fire prevention and management, forest mapping and so on. While the competence and commitment of these bodies varies, the focus groups in most of the 14 community forests that participated in Phase 2 were generally positive about them (but see section 2.3).

The Phase 2 survey participants said that community forestry committees and the wider membership of community forests gain knowledge and skills through

both experiential learning (including from peers and elders) and training provided by NGOs or government agencies.

The knowledge and skills acquired varies from place to place (table 6). For example:

- In **Viet Nam**, commune officials and forest rangers train members of the Muong Phu community forest two to three times a year to implement policies on forest protection and development, harvest of non-timber forest products and forest fire prevention.
- In **Indonesia**, members of the social forestry business group in Tambagguruyung said that they received instruction not to cut trees but no training on forest management or other forms of income generation. This community also fired its NGO extension worker due to their inactivity.

### Social assets

Community forests can strengthen trust, mutual support and community spirit when the forest users decide collectively how to manage the forest resources, share benefits and address threats, such as fires and illegal logging. For example, this was evident in Shreechhap Deurali, Nepal. People there said that they communicate with each other more and are more engaged in collective action because of their community forest. Members of the two communities in Lao PDR (in the Phase 2 discussions) said that 80–90 percent of villagers comply with the village forest rules and regulations.

Community cohesion can extend beyond the membership of community forests to include other people who benefit (for example, from forest water resources in Heinze, Myanmar). Members of the Trapang Totim Community Forest in Cambodia said that because the wider community benefits from their forest motivates them to take part in forest patrols.

Community forestry can also strengthen external relations. For example, community members in Cambodia and Myanmar said they have expanded and strengthened their relationships with government agencies and NGOs through community forestry. Through these enhanced relations, the communities have attracted financial and material support (such as tree seedlings, equipment for patrolling), advice, information, training and livelihood support programs.

Some of the communities participating in Phase 2 also joined or developed networks:

- In **Cambodia**, the Kbal Bey Community Forest members share information with and learn from peers through a community forest network platform.
- In **Lao PDR**, RECOFTC helped Koklouang villagers develop a network of teak producers and buyers, which now helps the villagers sell their planted teak.

- In **Nepal**, the Phagarkhola Community Forest Users Group collaborated with the ward-level and three other community forests nearby and, in 1997, established Nepal's first community-based sawmill.

As well as strengthening relations within communities and with potential partners, community forestry can help address conflicts (internal or external) over resources. It does this by clarifying rights, mapping and demarcating forest lands and bringing stakeholders together to settle disputes. For example, after the establishment of their community forests, such conflicts declined or ended in the Lao PDR and Viet Nam communities in the Phase 2 study.

## Natural assets

All communities in Phase 2 depend to some extent on forests for their livelihoods (both subsistence and income-generation). This is particularly true for the lowest-income members of community forests. The natural assets that forests provide vary from place to place, depending on the type, size and quality of

the forests and the rights the communities have to use them. For most communities, they include non-timber forest products, such as edible plants and mushrooms, honey, medicinal plants, firewood and fodder for livestock. Others use degraded forest areas for agricultural production (as in Thailand) or grow crops in agroforestry systems (as in Indonesia). For a minority of communities surveyed, accessible natural assets include timber, either for local use or for sale.

As well as providing these goods, community forests also provide environmental services, such as regulating water and the local climate, preventing soil erosion and landslides (as reported by the Shreechhap Deurali community members in Nepal). In some cases, the forests also have spiritual value and are sites of traditional ceremonies. In others, the natural assets attract tourists.

Community forestry strengthens natural assets by effectively managing and protecting forest resources. Members from seven of the communities participating in Phase 2 said that the quality and/or area of their

**Table 6.** Knowledge and skills acquired through community forestry, as identified by members of each community participating in Phase 2

Country or community		Areas of knowledge and skills acquired through community forestry
Cambodia	1	Community forest office management, forest management and protection (patrols)
	2	Forest management planning, accounting and financial management, organic vegetable planting and honey beekeeping
Indonesia	1	Coffee production
	2	Tourism (running homestays); coffee production and processing
Lao PDR	1	Forest protection, sustainable forest management, government rules and regulations, participatory planning, and negotiation and procedures for teak trading with local companies
	2	Sustainable harvest and trade of non-timber forest products and awareness on government rules and regulations
Myanmar	1	Forest protection, plantation
	2	Livelihood development
Nepal	1	Forest management, agroforestry, forest-based microenterprise management
	2	Forest management (such as thinning)
Thailand	1	Forest fire control
	2	Forest fire control and forest restoration
Viet Nam	1	Forest policies on forest protection and development, harvest of non-timber forest products and forest fire prevention
	2	Forest policies on forest protection and development and payments for environmental services

Note: These are not exhaustive lists but examples of topics people mentioned.

forest had increased since their community forest had been established. They attributed this to active management, community observance of rules and regulations, tree planting, fire prevention or mitigation and forest patrols.

Members from five communities (two in Viet Nam and one each in Cambodia, Lao PDR and Myanmar) said that forest crimes, such as illegal logging, illegal harvesting of non-timber forest products or land encroachment, had declined since they had established their community forest.<sup>8</sup> Forest crimes fell by 95 percent according to members of the Heinze Village community forest in Myanmar, for example.

The community members in Cambodia attributed the decline in forest crimes to two factors: First, the income generated from community forest credit revenues fund regular patrols, including food and fuel for the patrolling teams. Second, the community members regularly entering the forest to harvest non-timber forest products could also patrol and prevent trees from being cut down.

Community members in Nepal and Lao PDR also reported seeing more wildlife since their community forest was established, including more elephants near Nakhayang in Lao PDR. However, the community in Shreechhap Deurali, Nepal said an increase in monkey numbers had led to crop raiding and conflict with local farmers.

## Financial assets

### Income generation

The communities in Phase 2 have differing forest resources and differing rights to profit from those resources. Some communities (in Lao PDR, Myanmar, Nepal and Viet Nam) can sell timber. Some can sell only non-timber forest products (Cambodia and Thailand). Others sell coffee grown in agroforestry systems or attract ecotourists (Indonesia). But across all of these communities, forests make significant contributions to financial assets. For example, according to the study participants:

- In **Cambodia**, members of the Kbal Bey Community Forest harvested in 2019 around 3,000 kg of a wild fruit (*Willughbeia edulis*, or *kuy* in Khmer) with a market value of about US\$15,000.
- In **Thailand**, around 110 households in the Mae Tha community generate a total estimated annual income of more than 1 million Thai baht (US\$33,000) from such forest products as bamboo shoots, mushrooms, vegetables and herbs.
- In **Indonesia**, typical monthly incomes before the pandemic in Tambaguruyung from selling green coffee beans was 4–5 million Indonesian rupiah (about US\$287–US\$358), which enabled

the community members to send their children to schools outside of their villages.

- In **Lao PDR**, in Koklouang Village, sales of planted teak timber during 2017–2020 generated income equivalent to US\$30,456.

Such trade provides the basis for individual household savings (see section 2.2.4) and, in some cases, bolsters community funds. For example, in Lao PDR, sales of non-timber forest products in Nakhayang village and sales of teak timber in Koklouang village each generate about US\$300 per year for their respective funds, in fees paid by buyers.

Beyond direct trade in forest products, community forestry can also create work for day labourers and microenterprises. In Phagarkhola community forest in Nepal, for example, a hectare of thinning requires at least 50 person-days of labour each year. In Shreechhap Deurali Community Forest, also in Nepal, a small business making candy from ginger and other agroforestry products creates work for four to five people for six months to manage the crop plantations.

### Community forest funds and credit schemes

Most (12 out of 14) of the community forests in Phase 2 of the study have some form of financial mechanism in place. The only exceptions are the two community forests in Indonesia. In the other countries, the nature of the financial mechanisms varies.

For example, the six community forests in Nepal, Thailand and Viet Nam have funds with which to support forest management, protection patrols and (in some cases) infrastructure development and other activities. For example, in Shreechhap Deurali, Nepal, the community forest user group turned community funds to improve the livelihoods of poor and vulnerable members into subsidies for goat farming, buffalo farming, poultry raising and the provision of stationery and scholarships covering school fees and related costs.

These community forest funds have been capitalized in different ways. In Nepal, the fund is generated through the sale of forest products, particularly timber in the Shreechhap Deurali Community Forest Users Group. In Thailand, it is a combination of government funding, for example 20,000 Thai baht (US\$650) for community forestry activities, and a share of the income from the sale of non-timber forest products. In Viet Nam, the money comes from the Government through payments for environmental services and other schemes. The existence of these funds makes it easier for community forests to receive external funding, especially if the fund has a bank account and rules in place.

The size and stability of community forest funds vary. In Viet Nam, for example, the Muong Phu community's fund is stable and has funded infrastructure upgrades (see Section 2.1.5). By contrast, the fund for the community forest in Thanh Phong is not large and currently can only support forest patrolling.

Some community forests also operate a revolving fund or credit scheme. This is the case in both community forests in Cambodia and Myanmar and one of those in Nepal (Shreechhap Deurali). These schemes offer low-interest loans with which community forest members can invest in income-generating activities or use in times of urgent financial need. The loans are quicker and easier to access than other forms of microfinance. The interest that borrowers pay goes into the community forest fund and supports patrolling and forest management. In January 2021, for example, the credit scheme of Kbal Bey Community Forest in Cambodia held US\$7,500.

Some of the revolving funds were created with seed finance from a local administrative office or from NGOs. For example, RECOFTC's Scaling-up Community Forestry Project provided US\$4,500 to establish the fund in Heinze, Myanmar.

In some communities, there is no credit scheme directly under the control of the community forest, but there is a village scheme whose funds are boosted as a result of community forestry. In Lao PDR, the village fund in Nakhayang receives payments from buyers of non-timber forest products, among other sources. Most of the money (60 percent) from the buyers is committed to facilitating trade, with 40 percent earmarked for infrastructure development. In Koklouang, also in Lao PDR, the "teak fund" raises money from companies that buy teak timber from the village. This fund offers low-interest loans, but because it was only created in 2020 and currently has only US\$300 of capital, nobody has borrowed from it yet.

### Payments for environmental services and forest protection

In Viet Nam, the communities participating in Phase 2 of the study receive direct payments as a result of government policies. Muong Phu community forest, for example, received 331,980,000 Vietnamese dong (US\$14,319) in payments for environmental services, from 553.3 hectares of forest per year in the period from 2015 to 2020. It also receives 713,680,000 Vietnamese dong (US\$30,848) per year, under Decree 75, for protecting 1,784.2 ha of the Pu Hoat Nature Reserve. After spending 30 million Vietnamese dong (US\$1,296) on forest patrol and protection activities, the community forest can give each of its 235 households 4.3 million Vietnamese dong (US\$186).

## Physical assets

Community forestry can strengthen physical assets by directly funding infrastructure improvements, supplying timber for construction or attracting external support. Examples from the communities in Phase 2 include:

- In **Viet Nam**, the community forest in Muong Phu village used funds from payments for environmental services to build a cultural house, cement their roads and upgrade their irrigation canals. This led to increased agricultural productivity.
- In **Cambodia**, Kbal Bey community forest members harvested pole trees from their forest to build a sitting bench by a stream that tourists who visit and buy food from the villagers. This is another source of income for members.
- In **Nepal**, the Shreechhap Deurali community contributed towards building access roads to forests and farms, constructing a community building and setting up a sawmill. The Phagarkhola community donated 30,000 Nepali rupee (US\$300) for the construction of a gravel road around the forest and settlements.
- In the **Lao PDR**, low-income groups in both communities (in Phase 2) can now acquire timber for home-building without having to pay the relevant fee because the village authorities exempted them.
- In **Myanmar**, the Heinze community forest user group donated six tonnes of timber for constructing a building in a monastery for older persons to use. Because the forest provides water to both community forest members and non-members, external organizations have provided funding to install a reservoir and irrigation system in the village.
- In **Indonesia**, the Sasaka Patengan Village Forest Community Institution received a machine for processing coffee beans from the Ministry of Environment and Forestry's Directorate of Social Forestry Business and Customary Forest.

Overall, "physical assets" was the class of assets that community members in Phase 2 of the study were least likely to say had improved as a result of community forestry. Finance is a limiting factor. For example, the Thanh Phong community in Viet Nam uses 70 percent of the money it receives from the Government's payment for the forest environmental services scheme for its forest patrols. It sets aside the remaining 30 percent for infrastructure development, but so far there is not enough in that pot of funding to begin such work.



## How community forestry has increased people's resilience during the pandemic

### Human assets

In the Phase 1 survey, only half of all the community forest member respondents said their community forest committees had provided help to their members. Remember though, the Phase 1 survey took place early in the pandemic. In almost all communities participating in Phase 2, the community forest committees (or equivalent bodies) drew upon their capacities for leadership, facilitation, conflict resolution, communication and coordination to overcome challenges related to the COVID-19 pandemic. This included:

- acquiring and sharing accurate information about COVID-19, including from online sources not accessible to all community members (in at least nine of the 14 communities)
- encouraging compliance with public health advice and government-imposed restrictions
- coordinating COVID-19 response activities with government agencies or village authorities
- distributing hand sanitizer, face masks and other supplies provided by external partners, government agencies and the community forest group
- deciding how to share external aid and access to forest resources fairly
- helping to enforce travel restrictions and health-screening requirements by staffing checkpoints (for example, in Lao PDR, Thailand and Viet Nam)

The Phase 2 discussions indicate that in all communities, most people quickly adopted preventive measures (face masks, hand-washing and social distancing) and reduced community meetings. This action contributed to there being no recorded cases of COVID-19 in any of the 14 communities at the time of Phase 2 of the study. Community forests therefore not only provided human assets but also sustained them by helping people to stay safe, healthy and capable of doing the work of producing food, caring for children, protecting forests and so on.

The community forest committees (or equivalent) also contributed by continuing to oversee forest management and protection. This was not easy in

places where meetings related to community forestry were halted. In Kbal Bey, Cambodia, the committee adapted by holding more meetings with smaller numbers of people (three to five) rather than one large meeting with all participants.

By continuing to function, community forest committees in different countries were able to regulate access to forest resources and ensure that forest patrols were carried out, such as in Lao PDR and Nepal. This tallies with the findings from the Phase 1 survey in which respondents in all countries (except Viet Nam) said that their community forest committee helped to protect their forests from illegal harvesting, poaching or encroachment. In most countries, this was the second-most commonly cited form of support, after provision of information about COVID-19 (ranging from 7 percent of respondents in Nepal to 23 percent in Lao PDR).

### Social assets

In times of crisis, strength of community can be critical. Community forestry can foster such cohesion and create networks of interdependence and mutual support. It is clear from the discussions in Phase 2 that a sense of community spirit often contributed to people's responses to the pandemic. This was evident in ongoing patrols to protect communal forest resources, in special concern for the poorest, most vulnerable members of communities and in steps taken to accommodate the needs of newly returned migrants. It manifested through the community forest committees (or equivalent) as they made decisions about forest resource access and use, fair distribution of material aid and the use of communal funds.

The degree to which social networks developed through community forestry have had positive effects on people's resilience is notable in the context of a pandemic that has massively reduced social capital by forcing individuals, households and entire communities into varying degrees of isolation or minimization of social contact.

Some community forests used wider networks to gain external support after onset of the pandemic. However, the extent to which community forests received such support varied greatly (table 7). For example, while 98.2 percent of Phase 1 survey respondents in Cambodia said that their community forest had received external support, only 16 percent of respondents in Indonesia and 17.8 percent of respondents in Viet Nam said this.

**Table 7.** Proportion of community forest members in the Phase 1 survey who said their community forest had received external support, by country

	Cambodia	Indonesia	Lao PDR	Myanmar	Nepal	Thailand	Viet Nam
%	98.2	16	46.7	63.4	20.3	36.6	17.8

Common forms of support included the provision of information on COVID-19 prevention (reported by 91 percent of all respondents whose community forest received external support) and supplies of masks, soap and hand sanitizer (64 percent). Less common, community forests received food donations (45 percent), cash loans (27 percent) or cash grants (25 percent).

The Phase 2 discussions, which took place later in the pandemic, provided more detailed insights into the ways in which community forests have so far received external support. For example, community forests in Lao PDR, Myanmar and Nepal each received assistance from government agencies or NGOs with which they had good existing relations:

- In **Lao PDR**, villagers in Koklouang sell their planted timber through a partnership agreement, supported by RECOFTC's FLOURISH project. The villagers also received public health materials from RECOFTC when the pandemic hit, enabling the village to take actions to prevent the spread.
- In **Myanmar**, through its strong relationships with the Forest Department and organizations, such as True Friends, Research for Development and RECOFTC, the community forest user group of Heinze Village received hand sanitizer, face masks, COVID-19 awareness posters and equipment to support patrolling such as jungle boots, sleeping bags, knives and a lawn mower. The community forest user group in Painne Taw also received food, hand sanitizer, masks and small sums of money from aid organizations and the local government.
- In **Nepal**, the Shreechhap Deurali community forest committee actively engaged with the local government to mobilize support early on, which included food and protective equipment for its members.

As in the Phase 1 findings, some of the other community forests in Phase 2 received little to no support of this kind.

### Natural assets

According to the Phase 2 discussions, the main natural assets that community forests provided (as of January 2021) in most of the seven countries were non-timber forest products, including food plants, mushrooms and materials, such as bamboo and rattan. Crop production also increased in home gardens and underutilized land in some forest communities. In some places, demand for firewood increased due to restricted trade and the energy needs of the returned migrants. In Shreechhap Deurali, Nepal, for example, household demand for firewood doubled. Having easy access to fuelwood decreased pressure on household budgets.

In some countries, such as Lao PDR, members of community forests with rights to sell planted timber could continue to do so. However, in Shreechhap

Deurali in Nepal, logging ceased completely. This meant timber was unavailable when the community needed it to build new housing for returned migrants. In Indonesia, both of the communities in Phase 2 of the study continued to grow coffee in plantation agroforestry. Despite the depressed prices for coffee, these communities were still able to generate some income from their natural assets.

The Phase 1 survey findings show that it was generally the community members most in need, such as long-term residents with low incomes or recently returned migrants, who benefited from the natural assets in community forests. Community members in Cambodia, Lao PDR, Myanmar, Nepal and Thailand all indicated this.

### Financial assets

The ability to sell forest products (pre-pandemic) provided many community forest members with savings that they could turn to as the crisis unfolded. In the Phase 1 survey, 57 percent of respondents said they had used savings to cope. In all countries except Indonesia, respondents rated the use of savings as one of their top-three coping strategies described as "very important". The proportion of respondents who said this ranged from 20 percent in Viet Nam and Indonesia to 74.6 percent in Nepal. Significantly more community forest members (at 44.2 percent) than non-community forest members (at 32.7 percent) said that using savings was a very important coping mechanism.

Overall, among the Phase 1 survey respondents, more than a third of community forest members (37.4 percent) across all countries sold timber or non-timber forest products as a main source of income: 12.5 percent sold timber, 35.3 percent sold non-timber forest products and 10.4 percent sold both. Nearly half (46 percent) of them said their use of savings during lockdown was "moderately" or "very" important. Therefore, overall, close to a fifth (17.2 percent) of community forest members used income generated from community forestry as an important coping mechanism during their lockdown periods. Extrapolation from the survey sample suggests that personal savings generated by selling timber and non-timber forest products from community forests helped an estimated 3 million people in the lower Mekong region to cope during the first months of the lockdowns.

Savings are, however, finite. And with incomes down and economic activity curtailed, community forest funds and revolving credit schemes provided a lifeline in some situations, particularly as the pandemic wore on. Their generally small size, though, limited the number of people who could benefit. Some examples from the Phase 2 discussions are illustrative:

- In **Cambodia**, all 33 families who are members of the Samaky Trapang Totim Community Forest credit scheme borrowed from it during the pandemic to

cover household costs and farm inputs. Each could borrow up to 500,000 Cambodian riel (US\$120), but only 10–12 families could borrow at any one time because of the small size of the fund.

- In **Lao PDR**, community members in Koklouang village could borrow from the teak fund. But because the fund was only created in 2020, it has just US\$300 of capital.
- In **Myanmar**, all forest user group members in Heinze (24 households) received loans from the revolving fund of 200,000–250,000 Myanmar kyat (roughly US\$140–US\$180).

Some community forests used some of their management funds to pay for masks and hand sanitizer to distribute to members and/or other villagers (as in both community forests in Viet Nam in Phase 2 of the study) or to donate to the local government COVID-19 recovery program (as in Shreechhap Deurali in Nepal, which donated US\$50). And in some cases, external organizations channelled money through community forests. In Myanmar, older residents of Heinze Village received 800,000 Myanmar kyat (US\$600) from Research for Development through the community forest user group. In Lao PDR, the World Bank's Sustainable Forestry for Rural Development Project had (before the pandemic) provided finance to the Nakhayang village fund. This enabled the fund to offer loans to people in need during the pandemic.

Other community forests, such as Koklouang in Lao PDR and Tambaguruyung in Indonesia, received no external financial support. At the time of Phase 2 of the study, the villagers in Sasaka Patengan were waiting to receive credit from the General Service Agency to maintain their coffee production.

### Physical assets

Physical assets developed through community forestry contributed less than other asset classes during the pandemic. The only one of the 14 surveyed communities that mentioned such contributions explicitly was Heinze village members in Myanmar. A building made from timber donated by the community forest user group was used as a community centre and for raising awareness about COVID-19.

## Factors that increased community forestry's potential to help in the pandemic crisis

Each community in the study coped in different ways, aided to varying degrees by the differing classes of livelihood assets their community forest provided. This reflects both the diversity of community forestry models within and among countries and the fact that the potential for community forestry to enhance livelihoods depends on foundational factors. And several factors influence the extent to which

community forestry can provide or strengthen those assets.

### Tenure and rights

Tenure arrangements and rights over resources vary among the countries and communities surveyed (the community forest profiles in Annex 3 provide details). The two community forests in Lao PDR in Phase 2 of the study illustrate how secure tenure and the right to sell timber have made a difference after onset of the pandemic:

- Koklouang Village mapped out and demarcated the boundaries of its community forest through a participatory land use plan and developed a village forest management plan approved by the district authority, enabling the village to protect and manage its resources. Teak smallholders have registered tree certificates and so can legally sell timber from planted teak trees.
- In Nakhayang Village, since there is no approved participatory land use plan, there are no clear boundaries to distinguish ownership. People from neighbouring villages often go there to harvest forest products, which contributes to the loss of forest and creates conflict among communities. Previously, Nakhayang also sold teak timber to private companies. But because the legal requirements changed in 2016, it has been unable to do so legally because the village has neither an approved participatory land use plan nor a village forest management plan. As teak smallholders do not have registered teak certificates, they cannot legally sell timber from their planted teak trees.

The longer the tenure lasts, the greater the ability of a community to make and implement long-term plans and to see the benefits of their efforts to restore degraded forest land and (in those countries where this is permitted) plant trees for future harvesting. Most of the communities in Phase 2 of the study, however, have no rights to sell timber.

Community members also spoke of intangible benefits of secure tenure. In Indonesia, for example, they spoke of the feeling of security in terms of managing the land and a sense of being made to feel like "an equal partner" with the Perum Perhutani, which is the state body that "owns" the land.

### Forest size and quality

The size and quality of a forest correlates with the amount of resources it contains and, ultimately, its ability to support sustainable livelihoods over the long term and allow communities to handle shocks in the short term. This was particularly clear in comparisons between each pair of community forests in Cambodia, Myanmar and Viet Nam in Phase 2 of the study. For example:

- In **Cambodia**, just 82 families in Kbal Bey Community Forest are managing 761 hectares of what is a mix of good quality and degraded deciduous forest. The forest provides a variety of

valuable non-timber forest products. By contrast, in Samaky Trapang Totim Community Forest, four times as many families (332) are managing a much smaller area (439 hectares) of forest that is all degraded and supplies fewer resources.

- In **Myanmar**, Heinze's community forest is bigger (57 hectares) and of higher quality than Paine Taw's community forest (19 hectares). The community forest user group in Heinze has greater access to non-timber forest products and was able to donate six tonnes of timber for a community building earlier in the pandemic. By contrast, Paine Taw's degraded forest lacks the quality and size of timber trees needed for construction and also supplies fewer non-timber forest products.

The size of forests is also crucial in contexts in which area-based payments are made, as with payments in Viet Nam for forest protection and forest environmental services.

- In **Viet Nam**, Muong Phu has 235 households and manages 2,337.5 hectares of non-degraded quality forest. By contrast, Thanh Phong is about the same size (228 households) but manages only 221 hectares of mostly degraded forest. Through area-based payments, Muong Phu receives 1,045,660,000 Vietnamese dong (US\$45,350), whereas Thanh Phong gets only 78,600,000 Vietnamese dong (US\$3,400). Per household, Muong Phu receives 13 times more than Thanh Phong.

The quality of the forest land that governments allocate as community forests also affects the ability of communities to actively improve their forest resources. For example:

- In **Myanmar**, the Heinze community forest planted tree seedlings that the Forest Department provided, and 95 percent of them survived. But when Paine Taw community forest tried to do the same, also with seedlings from the Forest Department, only 5 percent survived because of the rocky soil in the degraded forest.

### Community forest leadership and governance

The communities surveyed indicated that the capacity, commitment and organization of their community forest committees (or equivalent) has been key to both the long-term management of their forests and the response to the COVID-19 pandemic. Beneficial traits that community members mentioned included trustworthiness, transparency, ability to coordinate with external actors and ability to facilitate participatory processes.

In relation to the pandemic, community members highlighted the capacity of effective community forest committees to access information, to coordinate with local authorities and to seek and distribute aid from external organizations. But members from three communities also voiced concerns about the effectiveness of their community forest leaders.

Problems they cited included poor leadership, a lack of financial transparency, unequal treatment of community forest members, poor communication, inadequate capacity to monitor community forestry activities and poor networking and internal governance.

### Supportive forest-sector policies

Community members in Lao PDR and Viet Nam, in particular, highlighted policies that strengthened their livelihood assets. In Lao PDR, Prime Minister Order 15 (2016) introduced legal requirements for the harvesting and transportation of timber. Villagers said this helped to reduce illegal activities and enabled their forest to recover. A Prime Ministerial decree (in 2019) promoting commercial tree planting gave the Koklouang village residents more opportunities to benefit financially from their forest and led to reforestation of degraded land. In Viet Nam, such policies as payments for forest environmental services, Program 75 and Program 30A have proven effective in developing people's livelihoods in the communities of Muong Phu and Thanh Phong.

### External support

The quantity and quality of external support community forests receive vary greatly. In the Phase 1 survey, only 42.3 percent of respondents reported that their community forest received external support from the government or civil society organizations. While most of the communities in Phase 2 of the study had received some form of support, some received very little or none at all. And even those relatively well-supported community forests could benefit from more support, according to their members. The amount of support that communities received depended to a large degree on the competence, commitment and networking abilities of the community forestry committee (or equivalent body) as well as the availability of such opportunities (development projects with resources and flexibility to support after onset of the crisis). There was also a positive feedback process at work: community forests (and their committees) that received training and other forms of support have grown stronger and thus are more likely to access additional support in the future.

### Concern for the most marginalized

When the pandemic began, many people were able to rely on savings to cope with the initial economic shock. As the pandemic endured, many of these people could continue producing food on their farmland. But for the poorest members of communities, without land or savings, these options were not possible. Rights to use forest resources were disproportionately important for them.

In some of the communities in Phase 2 of the study, the community forest committee made special dispensation for people with the greatest needs. In Lao PDR, for example, the leadership of both villages

(in the study) prioritized marginalized groups by exempting them from paying fees for timber and firewood from the forest.

In Nepal, community forest user groups undertake regular well-being rankings of their members to equitably distribute benefits. They applied this approach to identify vulnerable households when distributing COVID-19 aid (Gentle et al., 2020). As Gentle et al. pointed out, community forest user groups are better than government agencies at identifying the most-in-need households.

### **Easily accessible credit**

As the Phase 1 survey showed, while forests have helped people cope, what forest users really need is additional economic support. Small credit schemes linked to community forest committees could address many of the needs that the respondents identified.

In that initial survey, a small percentage of respondents noted getting cash loans or grants or emergency funding from their community forest (15 percent in Myanmar reported positively on this question, but for all other countries, the responses were either zero or in the low single digits). This may have been because, at that time, people still had savings to draw on. The Phase 2 discussions provided more insights in how revolving credit schemes were providing vital finance to community members. But

not all community forests have these schemes, and some of those that exist are not very large.

Overall, 76 percent of the respondents in the Phase 1 survey expressed a “great need” for either a cash loan, cash grant or debt cancellation. Cash grants were in the top-three forms of assistance most requested by respondents in all countries except Nepal. And across the seven countries, 39 percent of community forest users said that borrowing money had been “moderately” or “very important” during the first lockdown. They were more than twice as likely to turn to family and neighbours for loans (90.8 percent of these borrowers) than to banks (40 percent) or to local governments and civil society organizations (41.5 percent).

Across Cambodia, Indonesia, Myanmar, Nepal and Thailand, most community forest members (83.4 percent) said their community forest committee had a bank account, but far fewer said this in Lao PDR (15.5 percent) or Viet Nam (26.7 percent). Given that most community forest groups have a bank accounts, these findings suggest that more community forest committees could fill a gap by managing local microcredit schemes and revolving loans but that they currently lack funds and capacity to do so.



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# 3 Discussion and recommendations

## Conclusions

The COVID-19 pandemic has had far-reaching impacts on the lives and livelihoods of forest communities in the seven countries covered in this study. But during the first year, as economies closed down, forests continued to provide food, materials and livelihoods, especially to the people most in need.

The surveys highlighted the ways in which community forestry can enhance each of five classes of assets (table 8). These assets are mutually reinforcing: Strong capacity and commitment in a community forestry committee (human assets) can inspire community cohesion and attract support through external relations (both social assets) and can protect and enhance forests (natural assets), enabling people to use them sustainably in ways that generate income and community funds (financial assets) that can pay for infrastructure development (physical assets).

As each of these classes of assets improves, the overall potential for community forests to support livelihoods increases. This creates scope for reinvestment (of money, labour and so on) and raises the adaptive capacity of the participating communities.

Across the seven countries, community forests contributed to livelihood assets and enhanced people's resilience to different degrees and in different ways. Some communities had particular strengths in some areas but not others. As section 2.3. highlights, certain foundational factors that influence the potential for community forestry to enhance livelihoods were not present in all contexts. For example, the size and quality of forests that communities managed was a major factor in determining both the natural and financial assets. The right to generate income by selling timber, and not only non-timber forest products, was another factor that varied among the communities.

**Table 8.** Ways that livelihood assets strengthened by community forestry increased resilience to the pandemic impacts

Asset class	Contribution to community resilience
<b>Human assets</b>	Community forest committees applied their communication, coordination and leadership skills to access and distribute information and supplies of masks and hand sanitizer and to mobilize personnel to enforce health and travel restrictions and protect forests. Community members applied knowledge gained through experience or training to provide food and income for their families.
<b>Social assets</b>	Community cohesion translated into high levels of compliance with public health advice. Good external relations generated financial and material support from NGOs and government agencies. Trade networks allowed some communities to continue to sell their forest products.
<b>Natural assets</b>	Forests provided non-timber forest products (primarily) and timber (to a lesser extent) that communities could use for subsistence or to generate income. In many cases, it was the lowest-income members of communities who depended most on these resources.
<b>Physical assets</b>	In some places, low-income families were able to use timber to construct buildings. In one community, a building made with timber donated by the community forest group became a venue for COVID-19 information sharing.
<b>Financial assets</b>	Savings generated by sales of forest products helped families to cope with the initial shock of the pandemic. Community forest funds supported ongoing forest management and patrols. Revolving credit schemes provided low-interest credit to people in urgent need of fast money.

The findings presented in this study suggest that ensuring that the following enabling factors are in place would strengthen community forests and their ability to boost people's resilience and adaptive capacity: strong and secure long-term tenure; high-quality and large areas of forest; effective restoration of degraded forest; rights to sell non-timber forest products and timber; access to markets; community forest funds with bank accounts and rules; revolving credit schemes with adequate capital to support communities in a crisis; strong links with external partners, including in the private sector; diverse livelihood options, including the ability to add value to forest products; training programs to build capacity for sustainable livelihoods and forest management; and effective leadership and participatory decision-making.

Just as the five asset classes affect each other, so do the underlying factors. Baynes et al. (2015) explored this in a study that concluded that five factors contribute to the success of community forestry either directly or through indirect effects on several subsidiary factors. The five factors they identified were: socioeconomic and gender inequality; community forest governance; property rights; government support; and material benefits to community members. As Baynes et al. pointed out, the complex interplay of these factors (and their subsidiary factors) limits the extent to which project support to community forests can be effective and highlights the need for a systems approach that considers a broad range of success factors. The findings of the present study support those conclusions.

Taking such approaches can address identified needs while enabling community forestry to have an important role in pandemic recovery plans. Annex 1 recommends ways to do this in each of the seven countries in the study. More generally, as countries embark on efforts to build back better as the pandemic recedes, it is clear that community forestry offers a route to do this.

For example, community forests are well positioned to stimulate economic recovery through their hyper-local credit schemes that enable members to affordably invest in agricultural production and other livelihood activities. Cash injections to such schemes, delivered through economic stimulus packages, would ensure that money reaches communities in need, enters local economies and increases in size through interest paid on loans, further strengthening the community forests' financial assets. However, as the Phase 1 and Phase 2 findings reveal, not all community forests have the necessary financial structure and competencies needed to manage revolving credit schemes. COVID-19 recovery plans should therefore focus on developing these capacities where they are absent.

## Recommendations

This study demonstrates that community forests can provide important safety nets during a crisis, especially when certain enabling factors are present. However, community forests are not meeting their full potential to do so universally because of a range of interacting external and internal factors.

Clearly, there is still a long way to go, particularly in terms of gender awareness, financial management and general disaster response. The findings of this study highlight the importance of expanding community forests and ramping up capacity-development programs for community forests so that they can raise and manage more funds, restore and improve the quality of the forest resources they manage, recognize and address social disparities and find ways to help their communities endure through the remainder of the COVID-19 pandemic and any future disasters that may strike these climatically and financially vulnerable nations.

Annex 1 suggests some country-specific strategic interventions. What follows are some suggested interventions to respond to findings from the study (table 9):

### Overall

- The broad range of ways in which community forests can strengthen people's resilience to shocks (if the right conditions are in place) that this study demonstrates highlights how important it is for countries to continue to expand community forestry and improve land tenure systems to ensure local community members have clear and strong rights over forest resources.
- The disparities in forest size and quality among communities in Phase 2 highlight the need for governments to ensure that the forests they allocate to communities are of sufficient size and quality to enhance livelihoods of the community members. Governments can also support communities to improve the quality of their forests through investments in tree planting, payments for high performance and training in forest management and silvicultural techniques.
- The pandemic has had differing impacts on the surveyed women and men in relation to their workloads and responsibilities and has also led to an increase in domestic abuse in some countries. We suggest expansion of awareness and sensitization training, such as through the RECOFTC WAVES initiative, including on approaches for women's empowerment and community dialogue on gender-based violence. In addition, it is paramount to continue to use forestry as a vehicle for empowering women by mainstreaming gender considerations into forestry actions.



- The forest protection patrols that the community forest committees in all seven countries organized shows that, by strengthening social cohesion and providing legal tenure to local people, community forestry can be a key approach to preventing illegal activities. The ability of communities to prevent forest crimes would be enhanced if governments, development partners and civil society organizations provide specific support to strengthen the capacity of community forestry groups to perform this role.

### Income generation and access to finance

- Three quarters of the Phase 1 survey respondents said that selling agricultural products was one of their main sources of income. This highlights the potential for integrating community forestry into wider landscape management and agroforestry approaches to boost food security and nutrition at the same time as protecting, restoring and sustainably using forest resources.
- Based on the findings from communities in Cambodia, Myanmar and Nepal that have village saving and loans associations or revolving funds, the creation and/or strengthening of such mechanisms (such as by increasing their size and linking them to microfinance) would increase the ability of community forest members to access credit or emergency grants. Such mechanisms have been very important in poor communities when coping with personal emergencies, for example, when someone gets sick or someone quickly needs to make a small investment in a livelihood activity.<sup>9</sup> Undoubtedly, they could take on a larger role in helping communities deal with crises, such as the remainder of the COVID-19 pandemic.
- Building the capacity of community forest committees to manage funds and disburse them efficiently and fairly among members would strengthen the financial safety net that community forests can provide in times of crisis.

### Support networks and infrastructure

- Noting that in the Phase 1 survey, 57.7 percent of community forestry members said that their community forest group had received no external support and were less able to support their members, it is essential for governments, donors and civil society organizations to provide more support to these bodies, including by providing resources and information during emergencies and by training community forest committees in disaster preparedness and response. Networking among community forestry groups should also be explored as a mechanism for sharing information, experience and support between communities.
- Stronger links between local governments and community forestry groups, particularly through improved mechanisms for information sharing and

knowledge management, would help overcome gaps in the data on poor and vulnerable people and improve the capacity of governments to target and support those who most need help during crises.

- Community forest committees would be better able to respond to emergencies if they considered potential crises in their planning, identified the most vulnerable community members, improved their ability to mobilize support, increased their flexibility in the use of resources and organized their finances to provide grants or loans when emergencies strike.

### Livelihood support

- Phase 1 survey respondents in Thailand in particular expressed a need for improved digital access. This is relevant to all countries in this study. Improved digital access will help warn people of disasters and crises while also influencing how communities respond to these events. And in “normal” times, digital access can provide market information and insights that help community forest members access online weather and climate information relevant to agricultural production, market their products, grow their forest enterprises, become more profitable and streamline supply chains.
- A majority of the Phase 1 survey respondents said they wanted more training (66 percent) and job opportunities (64 percent). Increased donor support and technical assistance for forestry training and jobs in fields such as forest land restoration and management can improve forest carbon storage and productivity, thus both mitigating climate change and increasing the benefits forest communities receive from their lands.
- Providing necessary equipment as well as training in product development and marketing, enterprise development and management would support forest communities to add value to their forest resources and increase their financial security.

### Enabling legal environment

- The benefits felt by community members in Myanmar, Lao PDR and Viet Nam that have been able to harvest and sell timber during the pandemic to date suggests that removing the legal and regulatory barriers that prevent communities from selling sustainably harvested timber would bring benefits in other countries that currently do not allow community forest members to do this.
- As shown by the example of Koklouang in Lao PDR, reforms aimed at improving forest governance and tackling illegal logging can reduce pressure on community forests and allow forests to recover.

**Table 9.** Summary of the relevance of different short-term and medium-term interventions, by country

	Country						
	CAM	INDO	LAO	MYA	NEP	THA	VN
<b>Short-term interventions (up to 12 months)</b>							
Governments, donors and civil society organizations must provide more resources and information support to community forestry.	X	X	X	X	X	X	X
Improve sharing of information on poverty and vulnerability between governments and community forestry groups.	X	X	X	X	X	X	X
Increase donor support and technical assistance for forestry training and jobs in such fields as forest land restoration and management.	X		X	X		X	
Expand approaches to promote gender awareness and empower women's leadership in forest management.	X	X	X	X	X	X	X
Strengthen community capacities to prevent forest crimes and illegal activities.	X			X			X
Improve digital access for community forestry members.	X	X	X	X	X	X	X
<b>Medium-term interventions (up to 36 months)</b>							
Reform or improve legal framework to simplify and clarify the process of community forestry allocation and ensure devolution of strong and clear rights.	X	X	X	X		X	
Provide additional technical support and resources needed to speed-up allocation process.	X	X	X	X		X	
Allocate community forests of sufficient size and quality to sustain livelihoods.	X			X		X	
Develop community capacities to incorporate crisis risk reduction in forest management plans.	X	X	X	X		X	X
Ensure integration of community forestry into relevant development and land-use management plans at all levels, including through agroforestry approaches.	X	X	X	X	X	X	X
Create and/or strengthen credit mechanisms, ensuring efficient and equitable access among members.	X	X	X	X	X	X	X
Remove legal and regulatory barriers to enable communities to sell sustainably harvested timber.	X	X			X	X	
Support communities to add value to forest products through providing capacity development and access to technology and finance.		X	X	X	X	X	

Note: CAM = Cambodia; INDO = Indonesia; LAO = Lao PDR; MYA = Myanmar; NEP = Nepal; THA = Thailand; VN = Viet Nam.

# Annex 1. Country overviews and recommendations

For each of the seven countries, this annex provides an overview of community forestry, summaries of findings from Phase 1 and Phase 2 of the study and conclusions and recommendations for strategic interventions.

## Cambodia

### Community forestry context

In Cambodia, there are three types of community forestry schemes: community production forests, community protected areas and community fisheries (in flooded forests). This study considered the first two types.

Communities must follow guidelines to establish community production forests in areas under the jurisdiction of the Ministry of Agriculture, Forestry and Fisheries. They can establish community protected areas in any protected area under the governance of the Ministry of Environment's Directorate General of Local Communities. Both are governed by an elected management committee that must develop regulations on forest use, a management plan and agreements to guide activities. Both can receive 15-year management right agreements. In both cases, communities have the right to manage resources, based on their regulations and management plans, once they have signed agreements with the relevant provincial and national government agencies. Both types also have exclusion rights, although in practice they rarely exclude outsiders from using the forest resources as long as the user does not violate their regulations.

Community production forests allow timber extraction and agroforestry. Community protected areas do not. Neither type allows the community to enter into forest-use agreements with third parties (such as agribusinesses). Both types can establish a development fund (with bank account and regulations for use), and each type has one committee member who acts as a cashier. The governing committees are required to make annual presentations to the community forestry members on activities and finances, but the degree to which this happens is often dependent upon the degree of external financial and technical support. They are not required to develop a benefit-sharing system, but the costs and benefits of a community production forest or a community protected area are written into each forest management plan. Governing committees also establish group rules and regulations that include the membership fees, the responsibilities of the members and the right of members to use or benefit from forest resources.

The Ministry of Agriculture Forestry and Fisheries, through its Forestry Administration, has jurisdiction over production forest and community production forests. Legal frameworks for community forestry include the Forestry Law (2002), the Sub-decree on Community Forestry Management (2003), Community Forestry Guidelines (MAFF, 2006) and the National Forest Programme (MAFF, 2010). In the national forest program, the Government set a target of 2 million hectares of production forest under community forestry by 2029. This target needs to be reviewed and updated, given the current status of production forest (around 1.5 million hectares in total). According to official 2018 statistics, there were 636 community forests, covering 516,812 hectares and involving 168,248 families (Forestry Administration, 2019).

The Ministry of Environment's General Department of Local Communities is mandated to support community protected areas, which can be established under community protected area guidelines (2017). The Ministry has not set coverage targets but aims to establish a community protected area for all villages located in and around protected areas. As of 2020, there were 174 community protected areas, covering 296,511 hectares and involving 46,121 families (DCL, 2020).

### Phase 1 findings

Almost 96 percent of the survey respondents in Cambodia reported impacts from the COVID-19-related lockdown, the largest proportion of any among the seven countries surveyed. And 23 percent of the respondents reported an increase in forest crimes as a major concern.

Male non-community forest members were far more likely than male community forest members to report that they had lost a paid job as a result of the COVID-19 crisis. This could suggest that in Cambodia, men in community forests are less dependent upon external sources of income than other people in forest landscapes. Alternatively, it might mean that community forest members had fewer opportunities to benefit from outside employment and thus had fewer paid jobs to lose. Further research would provide deeper understanding of sources of income and livelihoods in community forests and identify ways to ensure that those jobs and livelihoods are disaster resilient.

Non-community forest members reported growing more food as a coping strategy more than the community forest members did. They also requested

food donations or reduced-price food as a most-needed form of assistance, much more than community forest members did. This suggests that community forest members have more food available to them at times when food supply chains are disrupted. This is likely because community forests have tenured access to land that they already farm through agroforestry and also collect forest foods from. Research has shown that people who depend on forests have more diverse, nutritious and stable diets than those without forest access (Rowland et al. 2017). This is another reason to promote broader forest tenure rights, improved agroforestry practices and better documentation of traditional knowledge about forest foods. Together, these actions and information can improve Cambodia's forest cover and help ensure that people who depend on forests do not suffer from hunger when supply chains break down.

Overall, non-community forest members in Cambodia reported using coping mechanisms at much higher frequency than did community forest members. This may imply that non-community forest members have been more heavily impacted by the crisis because community forests have some social safeguards in place in Cambodia. Community forests must each have a financial account and benefit-sharing mechanism. RECOFTC has worked with community forest groups to strengthen those mechanisms so they are better able to provide loans to the communities and support environmental rehabilitation. Such work on community forest bank accounts must be expanded so that every community forest has a strong credit system, with a disaster-response plan that is able to serve as a safety net for its members in times of national crises.

RECOFTC has worked with community forest groups in Cambodia to pilot credit schemes and revolving funds that have proven successful in helping forest communities rehabilitate their land and begin to develop small-scale sustainable livelihoods. Despite this, Cambodian respondents reported little access to funding from their community forest committee. This suggests that more community forests need to have better financial structures in place and that they need to organize their finances in a way that they have spare funds to give out as grants or loans when emergencies strike.

## Phase 2 findings on community forestry and livelihood assets

The two community forests surveyed in Phase 2 of the study were Samaky Trapang Totim Community Forest and Kbal Bey Community Forest (see Annex 3). By the time of Phase 2, the livelihood assets associated with these community forests had contributed during the pandemic period in the following ways.

- **Human assets:** Members of both community forests devoted time to patrolling their forest to prevent forest crimes. Community forest members

and leaders had accessed and shared information about COVID-19 and preventive measures.

- **Social assets:** Both community forests had mobilized social assets (external networks) in ways that helped their members. In Kbal Bey, the Ministry of Agriculture, Forestry and Fisheries was supporting projects on vegetables, fruits and beekeeping that were helping increase income for community forest members. In Samaky Trapang Totim, community forest members received face masks and hand sanitizer to protect themselves and others.
- **Natural assets:** In both cases, the quality and quantity of forest had improved as a result of community forestry (including tree planting). People had noticed an increase in the density and diversity of non-timber forest products in Trapang Totim and an increase in wildlife populations in Kbal Bey. After onset of the pandemic, people in both communities continued to harvest non-timber forest products for sale and home consumption.
- **Financial assets:** In both cases, community forest credit schemes enabled members to easily borrow money in times of need.
- **Physical assets:** Not available.

Both of these community forests supported their members through the pandemic in various ways, in particular with the use of revolving credit. However, they differed in their ability to provide non-timber forest products. This was due to the big difference in forest size and quality between the two communities. In Trapang Totim, 322 families manage 439 hectares of degraded forest. In Kbal Bey, only 82 families manage 761 hectares of a forest that is only partly degraded.

## Conclusions and recommendations

The pandemic had big impacts on livelihoods, such as tourism services, sale of agricultural products and paid work in garment factories. But the community forests continued to provide their members with non-timber forest products (mushrooms, fruits, vegetables and/or medicinal plants) for household use, reducing the need to spend money. Other community forest products, such as timber, also continued to offer potential for income-generation through sustainable and legal harvest and trade.

Other strengths of community forestry that have been useful in the pandemic include easy access to loans from the revolving credit schemes and networking with other communities, the government (Forestry Administration and commune council), private sector actors (middlepersons, companies) and NGOs. This circle of networks enables community forests to access timely and accurate information and receive external support.

The following strategic interventions could help the community forests in Cambodia to support the

recovery of the people most affected by the pandemic in Cambodia.

- **Continue to expand, formalize and strengthen the rights of local communities through the community forestry scheme.** Most surveyed community forest members responded to COVID-19 impacts through household savings and safety net (food) from their community forest. Members of the two community forests surveyed in Phase 2 were able to access and use forest products because of their strong tenure rights in the form of formal management right agreements. Without these, the forest land would likely have become converted to other land use and possibly privatized. Ensuring stronger and expanded rights over more high-quality forest land would enable community forest members to have greater adaptive capacity in recovering from the pandemic impacts and help them respond effectively to any future crises, including those related to climate change. In the short term, development partners should continue facilitating community forest establishment and formalization by engaging with mandated government offices (Forestry Administration and provincial, district and commune authorities) and training communities on the formalization process. Development partners also should provide recommendations based on field experiences to advocate for policy changes in rights so that local communities have strong incentive to invest in a community forest. This includes extending the duration of management right agreements beyond the current term of 15 years to at least 30 years to realize the profit from tree planting, simplifying the guidelines for establishing a community forest (to reduce unnecessary complications, costs and the time frame) and reduce the regulatory barriers hindering communities from commercializing community forest products. Support is also needed for community engagement processes to ensure that communities have full free, prior and informed consent in community forestry land registration processes now undertaken by the Ministry of Agriculture, Forestry and Fisheries.
- **Develop community forest management plans that reflect the vulnerability of members via a simplified and cost-effective planning process.** A community forest management plan is a precondition for communities to harvest and trade forest products (including timber) for commercial purposes. But less than 20 percent of the total community forests in Cambodia have an approved management plan for implementation.<sup>10</sup> None of the plans include a vulnerability assessment, although all of them were developed through lengthy, costly and technically complicated processes (Gritten et al., 2015). A simplified, cost-effective community forest management planning process that includes a community vulnerability assessment will generate disaster- and pandemic-sensitive plans for the forest and ensure that the plan responds to the needs of the user group members. Development partners should work
- with community forest groups, the Forestry Administration and local authorities to pilot and demonstrate management planning processes that reflect the needs and vulnerabilities of members (to climate change, disasters and pandemics). Based on these experiences, guidelines for simplified management planning procedures with a vulnerability component should be developed for Forestry Administration endorsement, which can then be shared with other community forest development partners across the country. The National Community Forestry Programme Coordination Committee, a subgroup of the Technical Working Group for Forestry Reform, is an appropriate mechanism to ensure review and buy-in of the guidelines by all community forest stakeholders.
- **Actively implement community forest management plans, including the sustainable and legal harvest of forest products (timber and non-timber forest products), to improve forest health and generate financial resources for local communities.** In both community forests surveyed in Phase 2, members reported utilizing community forest products within the framework of their community forest management plan. More than 100 community forests in Cambodia each have an approved management plan, but many are unable to implement it to their full potential due to a lack of funds and capacity. Prevailing enabling conditions generally make management plan implementation a cost-incurring task for community forest members (patrolling and tree planting) rather than a benefit-generation activity (harvesting products for sale and consumption). Under the current community forestry guidelines, even if communities have their management plan approved and resources available for harvest, they are not able to harvest for commercial purposes until after five years of management plan approval. Because there is no clear guidance on commercial timber harvesting for community forests, no community forest in Cambodia to date has been able to legally harvest timber. Situations such as the COVID-19 outbreak can hinder management plan implementation because community forest members may focus on livelihood activities that generate more income and neglect cost-intensive responsibilities, such as forest patrols or fire prevention. To support active community forest management plan implementation, development partners should employ a training-for-action approach on the necessary technical tasks (patrolling, tree planting and silviculture) that fit local conditions so that trained skills will be applied immediately. To promote and encourage the uptake of benefit-generating activities (harvest and trade of forest products), development partners should pilot and demonstrate innovative practices (deadwood harvesting and trial timber harvests in community forests) to showcase the ability of local communities in sustainable forest management and harvesting of forest products. The National

Community Forestry Programme Coordination Committee should be utilized as a platform to share experiences and provide evidence-based recommendations to remove the barriers that inhibit community forest management plan implementation.

- **Increase sustainable financing for community forest management through capitalization and operation of a community forest credit scheme and a mini trust fund.**

As noted, implementation of some community forest management plan activities (patrolling, fire break construction, tree planting) can incur significant costs. Without benefit-generation activities, these costs are borne by local communities. Through microfinance mechanisms, such as community forest credit schemes and mini trust funds, revenue can be generated to support management activities, especially in the absence of income-generating activities. In both of the community forests surveyed in Phase 2, the credit schemes established over the past three years with support from RECOFTC and partners appears to be instrumental for effective community forest management, even during the ongoing COVID-19 pandemic. Development partners should support credit schemes and mini trust funds in community forests with formal agreements and where a community forestry development fund is in place so that money can be channelled under the name of the community forest. It is necessary for development partners to facilitate establishment of the scheme where they do not exist and help to define the interest rate (borrowing from credit scheme), determine regulations for revenue sharing and facilitate agreement on the rules of fund management, reporting and monitoring and evaluation, with the participation of all community forest user group members. Capacity development is also needed to ensure that the mandated community fund managers have the knowhow to properly manage their group's fund. The involvement of other stakeholders, such as the Forestry Administration and local authorities, is also needed to help ensure oversight and accountability in fund management.

they do share benefits, they are not required to set up a specific mechanism for benefit-sharing. Timber extraction is only allowed if the forest is already a production forest; it is not allowed in protection or natural forests. *Hutan desa*, *hutan tanaman rakyat*, and *hutan kemasyarakatan* get 35-year tenure rights. The length of tenure for *hutan adat* has not yet been defined, while for *kemitraan kehutanan* it depends on the agreement between the parties involved. The *hutan desa* requires that the permit holder is a management institution established through a village regulation. Management permits can be area use permits, environmental services use permits or non-timber forest product business use or regular permits.

For the *hutan kemasyarakatan*, the use permits come from high-level authorities. For *hutan desa* and *hutan kemasyarakatan*, the forest users are required to form either a farmers group or a village-led cooperative that can sustainably use and derive income or livelihoods from the forest. Once again, the rules around the *hutan adat* are still unclear but do require users to somehow provide proof of long-term historical use. Finally, the *kemitraan kehutanan* involves cooperation around forest area use between communities and forest managers, forest management units or forest concession holders. The communities form a farmers group and plant commodities. An agreement between a community and the forest management unit or the licence holder company defines the rights and obligations of each party and the use of those commodities. While most of these Indonesian community forestry programs have social inclusion, participatory decision-making and fair use of resources as stated goals, they generally are not set up to have governing bodies that provide other types of social welfare or social protections. There are at least eight other types of "sustainable communities" and related forestry practices that the Directorate General of Social Forestry does not formally recognize as community forests.

Indonesia's last target was to formalize community management rights to 10 percent of its forest area (or 12.7 million hectares) by 2019. By December 2020, the community forestry models covered more than 4.4 million hectares of forest and involved 895,769 households.<sup>11</sup>

## Indonesia

### Community forestry context

Indonesia has five types of community forestry regimes as officially defined by the Directorate General of Social Forestry and Environmental Partnership. These are *hutan desa* (village forest), *hutan kemasyarakatan* (community forest), *hutan tanaman rakyat* (community forest plantation), *hutan adat* (traditional forest) and *kemitraan kehutanan* (forestry partnership). All allow ecotourism, use of environmental services and extraction of non-timber forest products. All community forest user groups are each required to have a bank account, and while

### Phase 1 findings

Only 48 percent of community forest members in the first survey in Indonesia reported that they had experienced negative impacts from the COVID-19 crisis. While this portion was large, it was smaller than what was reported in any of the other countries covered in the study. The country's community forestry system is unique in that there are many modalities, each adapted to different forest types and local community and government needs. Most are livelihood- and income-focused, such that to set up the community forest there must also be a commitment to set up a sustainable, profitable enterprise or cooperative in the community forest.

This focus on deriving sustainable livelihoods from forests may have helped community forests face the initial financial shock of the pandemic. The Directorate General of Social Forestry and the Ministry of Environment and Forestry need financial and technical support so they can reach their community forestry goals more rapidly and are better able to help communities develop community-based forest enterprises that make them stronger in the face of disasters.

Survey respondents reported the largest number of uses of their forest among any of the countries covered in the study. They cited an average of 9.4 uses as being “important”. In contrast, respondents in Nepal reported an average of 3.3 important uses. Forest use in Indonesia was high across several categories: agroforestry (at 95.4 percent of respondents); collecting water (95.4 percent); collecting building materials for home-use or sale (83.1 percent); fodder, bedding and grazing land for livestock (78.5 percent); and collecting craft materials for home use or sale (78.5 percent). This broad set of uses likely contributed to the Indonesian respondents reporting relatively few impacts from the lockdown.

Community forest members in Indonesia noted the need for machinery to improve livelihood activities as one of their top-five most needed forms of assistance to help with recovery from the pandemic. No other countries reported this as a top need. This again reflects the focus of community forest user groups in Indonesia on enterprise development. The community forest user groups that RECOFTC works with in the country produce coffee, pulp, honey, fruits and more. But even in the past, the user groups requested machinery frequently. Support for community forestry should focus on small grants and technical training programs that can help community forest user groups develop and expand their sustainable livelihood activities further and can help them keep supply chains local, making them resilient in times of nationwide crises.

Only 17 percent of the community forest members in the study responded that they had received help from their community forest committee. This strongly suggests that despite positive work on enterprise development in the country’s community forest user groups, the community forest management committees are not set up to help their members respond to crises. Donor assistance in Indonesia should also focus on capacity-building for governance and disaster resilience and response in community forest committees.

Compared with other countries, Indonesia’s community forest committees were the least likely to either provide support to their members (22 percent did, compared with 100 percent in Viet Nam) or receive outside support (16 percent did, compared with 98 percent in Cambodia). A fifth of the survey respondents resorted to using savings to cope during the lockdown. Indonesia was the only country where

use of savings was not among the top-three most commonly used coping mechanisms.

## Phase 2 findings on community forestry and livelihood assets

The two community forests surveyed in Phase 2 of the study were Tambagguruyung Village Forest Community Institution and Sasaka Patengan Village Forest Community Institution (see Annex 3). By the time of Phase 2, the livelihood assets associated with these community forests had contributed during the pandemic period in the following ways.

- **Human assets:** Not available.
- **Social assets:** The head of Tambagguruyung Village Forest Community Institution provided fruit seeds to some members and is trying to get external support through networking with local companies. There is now a better relationship between both communities and the Perum Perhutani.
- **Natural assets:** In Sasaka Patengan, whose main livelihood before the pandemic was tourism, villagers used the forest to switch to coffee production. Tambagguruyung villagers also continued to produce coffee beans after onset of the pandemic, although prices had been depressed.
- **Financial assets:** Not available.
- **Physical assets:** Sasaka Patengan villagers received a machine for processing coffee beans from the Ministry of Environment and Forestry’s Directorate of Social Forestry and Customary Forestry Business Development. When onset of the pandemic deprived the village of its main source of income (tourism), the villagers increased coffee production.

The two Indonesian community forests were the only ones out of all 14 surveyed in seven countries that lacked a financial mechanism. Both are in urgent need of financial support to maintain their livelihoods. Tambagguruyung Village also needs support to diversify its agroforestry products away from reliance on coffee.

## Conclusions and recommendations

With greater inputs and technical support, community forests in Indonesia could increase local food production. This would also help the community members, particularly the poorer households, to produce their own food during a crisis like the pandemic. By diversifying crops produced through agroforestry, community forests have supported community members who lost their job and sources of income due to COVID-19. This would require coordination with different government agencies and private sector actors and would contribute towards alleviating the burden on community members, including through stronger collective action. By doing so, community forestry would help reduce the

widening inequalities between those with and without resources in a community by providing capacity and financial access to the latter.

The following strategic interventions could help community forests to support the recovery of the people most affected by the pandemic in Indonesia.

- **Develop and promote financial inclusion for small-scale forest enterprises.** The forest-based income of members from the community forestry business groups of both communities surveyed during Phase 2 had declined dramatically because of the pandemic due to drops in commodity prices and loss of market access. These small-scale groups also had not been able to provide financial assistance to members during the crisis, nor did they receive outside support (only 22 percent of community forest management committees in Indonesia surveyed during Phase 1 provided support to community forest members, and only 16 percent reported receiving outside assistance). To promote a green recovery in rural areas, the Government should work with development partners to develop stimulus packages to revitalize community forestry business groups hard-hit by the COVID-19 restrictions. The packages should focus on expanding the access of forest entrepreneurs to financial services, targeting the most in need and going beyond social security measures and direct cash assistance to include financial incentives, such as tax holidays for rural enterprises, zero-interest repayments and debt repayment delay. This would help the hardest-hit rural communities cope with debt incurred as a result of the pandemic responses and provide resources needed for small-scale forestry enterprises to recover.
- **Promote equitable and accountable community forestry institutions.** Only 17 percent of Indonesia community forest members during the Phase 1 survey reported receiving help from their community forest committee. Community forestry business groups of both communities surveyed during Phase 2 lacked by-laws for internal governance; one had no women in group leadership positions and was characterized by conflict due to a lack of trust between group leaders and members. This suggests that many community forest management committees have weak governance structures and are not adequately set up to help their members respond to crises, especially those who are most vulnerable. Development partners should therefore strengthen existing legal instruments and develop guidelines to enhance social inclusion in community forestry institutional establishment and functioning.
- **Enhance community forest management practices through improved agroforestry to increase the potential of forest resources to provide economic returns and food security to local communities.** Food security has been an issue in the pandemic due to lack of market access and loss of income. Almost all Indonesian respondents in the Phase 1 survey (95 percent)

reported agroforestry as an important use of forest resources. Current government policies steer communities to invest in agroforestry products for export, such as coffee, rubber and cacao. But the prices of these commodities have dropped due to the pandemic (the price of coffee beans for the two villages in the second survey dropped from a pre-pandemic price of 11,000 Indonesian rupiah per kilogram to 3,000–4,000 Indonesian rupiah), leaving many farmers with no safety net. Promoting strategies for diversifying agroforestry production to include staple foods and fruit products would help to stabilize economic returns and food security during times of crisis. Development partners should work with community forest groups and stakeholders to improve community capacities in agroforestry systems for food security and income generation. Community-based capacity development initiatives should integrate local and traditional knowledge with scientific and policy-relevant knowledge.

- **Strengthen food and livelihood security monitoring.** This is necessary to provide up-to-date information on the impacts of the COVID-19 responses on forest communities at risk. Developing such a system requires collaboration of all government levels, technical experts, food producers, marketers and other food market participants to share data, information and analysis to develop a stronger understanding of the pandemic's various effects on forest communities' livelihoods. The system should link to and help improve the Government's GoKUPS platform,<sup>12</sup> for example, by adding a vulnerability index to help identify households for the stimulus package.

## Lao People's Democratic Republic

### Community forestry context

In Lao PDR, community forest schemes are referred to as village forestry. A village forest includes all families in a village with forest land that has been allocated by the district authority to the village authority for long-term and sustainable use. All members must participate in the preparation, implementation and the monitoring and evaluation of an approved village participatory land-use plan, a village forest management plan and village forest rules. There are rules around a number of issues, including rules for resolving conflicts (such as boundary disputes) and for sharing benefits. A management committee governs the village forest, but the village decides rules around the structure and function of their committee as well as the benefit-sharing and financial systems. These rules are therefore not consistent across the country. During the village land-use planning process, a village decides whether to classify the village forest as a protection forest, conservation forest or production forest. This classification determines how the villagers can use and manage the forest. In general,



communities can use non-timber forest products for household purposes and can also sell them for profit, and they can sell timber with prior permission from the State. Villagers have no land ownership rights because all land belongs to the State, but they have rights to use, manage and benefit from the land allocated to them.

These are the legal and policy instruments supporting village forestry: Forestry Strategy, 2020; Department of Forestry Guidelines No. 1476: Village Forest Management Plan, 2016; Department of Forestry Guidelines No. 1477: Village Forest Management Planning 2016; and Forest Law, 2019. The 2019 Forest Law was the first to allow communities to harvest timber for commercial purposes. This reflects the growing recognition of the role of local people in the production, use, conservation and protection of village forests. The Department of Forestry aimed to support 1,500 villages to prepare village forestry management plans through participatory processes by 2020. Data on areas of forest under community management are not available.

### Phase 1 findings

Selling non-timber forest products was the second-most important source of income reported in the first survey, and it was greater for community forest than non-community forest members. Community forest members reported some level of forest use for every pre-set category, while non-members had low forest use rates; for many categories they reported no use. This suggests higher forest dependency among community forest members, which is not surprising, given that they have clear tenure rights over their lands and therefore have easier access to use and harvest from them. Community forest members also reported using the forest to collect wild foods as a coping mechanism after onset of the pandemic much more frequently than non-members did. These findings suggest that clear forest tenure and use rights have been at least a partial social safety net in this time of crisis in Lao PDR. Thus, assistance should focus on expanding community forestry and further clarifying and expanding the existing laws on forest tenure.

While only 31.7 percent of survey respondents in Lao PDR reported changes in forest use because of the COVID-19-imposed restrictions, fewer community forest members reported changes in use than non-members. This supports our assertion that clear tenure rights allow people to use and manage their land more effectively and more consistently, which can help them mitigate emergencies and disasters.

Only 15.5 percent of community forest members in Lao PDR had a bank account, and the same proportion had a benefit-sharing scheme. This highlights areas for strengthening the abilities of community forests to support their members.

Survey respondents reported limited COVID-19-induced gender disparities. This was a surprising finding, considering RECOFTC's experience of gender issues in the country and media reports from around the world that have noted significant gender-differentiated impacts of the pandemic responses. The low reporting of pandemic-induced changes differentially affecting men and women might indicate that the considerable pre-pandemic disparities have simply continued. We recommend further assessment of the capacity of communities in Lao PDR to understand and identify gender-differentiated biases. We suggest that awareness and sensitization training (such as through the RECOFTC WAVES program) be continued and expanded.

A relatively large proportion of community forest users (25 percent) reported no lockdown-related impact on livelihoods or food security. In contrast, 95.7 percent of survey respondents in Cambodia reported such impact.

### Phase 2 findings on community forestry and livelihood assets

The two community forests surveyed in Phase 2 were Koklouang and Nakhayang (see Annex 3). By the time of Phase 2, the livelihood assets associated with these community forests had contributed during the pandemic period in the following ways.

- **Human assets:** In both cases, the village forest committees made efforts to protect their forests even during the restrictions while allowing villagers to collect forest products and were largely successful. These committees raised awareness among their communities about the pandemic and how to stay safe, including by aiding enforcement of travel restrictions and other rules.
- **Social assets:** Both community forests mobilized social assets (external networks) in ways that helped their members after onset of the pandemic. In Nakhayang, this included financial support from the World Bank and public health materials from RECOFTC. In Koklouang, villagers benefited from a RECOFTC project that helped them develop a network of teak producers and buyers. This helped to offset the economic impacts of the pandemic by increasing benefits from their teak plantation.
- **Natural assets:** After onset of the pandemic, people in both communities continued to harvest non-timber forest products for sale and home consumption. The people who relied more on the local forest for their livelihood were affected less than those who relied on external jobs, including those working in cities in Lao PDR and Thailand. Residents in Nakhayang could only extract timber for local use, whereas those in Koklouang were also able to sell timber (planted teak trees) from their forest.
- **Financial assets:** Both communities have funds to which community forests contribute by way of

fees paid by buyers of teak (Koklouang) and non-timber forest products (Nakhayang). The World Bank's Sustainable Forestry for Rural Development Project provided Nakhayang with funds enabling it to provide loans.

- **Physical assets:** Low-income groups in both communities could acquire timber for home-building without having to pay the relevant fee, after the village authorities exempted them.

The most significant difference between these two communities and their abilities to respond to the pandemic thus far is that the Lao authorities have formally authorized the Koklouang Village Forest. And teak smallholders have registered certificates for their planted teak trees, whereas this is not yet the case in Nakhayang. This has meant that only villagers from Koklouang can legally sell teak, which they continued to do after onset of the pandemic.

## Conclusions and recommendations

Village forestry helped people who lost jobs and livelihoods due to the COVID-19 restrictions. This was possible by the pre-pandemic effort of communities to each develop and implement a village forest management plan and, following that, develop partnership agreements with the private sector to supply and develop forest products. The Government and donor-funded projects, such as those from the Asian Development Bank and the World Bank, now could help to improve the efficiency of community forest activities and provide local communities with improved access to financial, technical and organizational support.

The following strategic interventions could help community forests to support the recovery of the people most affected by the pandemic in Lao PDR.

- **Speed up the process for the formal allocation of forests and forest land to villagers by investing resources and strengthening human capacities.** Results from the Phase 1 survey indicate village forest group members have relied on non-timber forest products as an important source of income and have relied on their forest as a source for wild foods throughout the pandemic. These findings suggest that clear forest tenure and use rights have provided at least a partial safety net in this time of crisis in Lao PDR. The new Forestry Law and the Land Law, both enacted in 2019, provide an enabling framework for formally recognizing rights in forest lands. However, because the legislation is new and yet to be widely implemented, many communities have not yet exercised and benefited from these rights. Development partners should work with mandated government agencies, such as the Provincial Agriculture and Forestry Offices, on piloting and demonstrating procedures to speed up the formalization of village forests, particularly through participatory land-use planning and village forest management planning processes.

- **Develop organizational and technical capacities of small and medium-sized forest-product enterprises.** Income yields for many of the village forestry group members and smallholders could increase if they were organized into entrepreneurial associations to collectively increase the volume of forest products available and thus enhance their collective bargaining power with market buyers. This is exemplified by the Koklouang teak producers' group, which has negotiated higher prices for planted teak timber for their members. Development partners should strengthen the capacities of interested local village forestry groups to organize into enterprise groups around forest products and help facilitate partnerships with interested market buyers. Experiences and lessons learned should be shared with policy-makers and village authorities to improve the enabling environment for attracting private sector interest and investment for partnerships with village forestry groups. RECOFTC has developed a guideline to facilitate these processes.

- **Establish and support the development of village forestry funds.** Only 15.5 percent of village forest members surveyed in Lao PDR had a bank account and a benefit-sharing scheme, so there is currently minimal scope for the groups to provide direct financial or material assistance to their members during times of crisis, in contrast with surveyed communities in Cambodia and Myanmar. As demonstrated in those other countries as well as in Koklouang (one of the villages in the study), formally established village forestry funds can be an important resource to support the implementation of an approved village forest management plan and the livelihoods of group members as well as for members to borrow money from at low interest rates during times of crisis. In the Lao context, these village forestry funds are administered and managed by the villagers through a village forestry unit, based on guidelines developed and approved by the villagers and village authority. Development partners should work with other stakeholders to provide "seed funding" to interest village forestry units to start up a village forestry fund. They should then support the units in the establishment of implementing regulations and procedures and capacity-building in the management of the village forestry fund and create opportunities for enhancing women's roles in the management of the funds.

## Myanmar

### Community forestry context

Policies and laws supporting the development of community forestry in Myanmar include the Forest Policy (1995), the Forest Law (2018) and the Community Forestry Instructions (2019). There are three modalities of community forestry: (i) collective management and collective ownership (the standard

modality); (ii) collective management and individual ownership; and (iii) collective management, with a mixture of individual and collective ownership. Each community forest user group must create a community forest management plan, which the management committee of the community forest user group follows to supervise the community forestry activities. The Forest Department, which is under the Ministry of Natural Resources and Environmental Conservation, also ensures that each forest user group's work is in line with the community forest management plan.

Tenure rights last for 30 years and can be extended for 30-year increments depending on the desire of the forest user group and their success in implementing their community forest management plan. Access and management rights are allowed, but exclusion rights are not clear due to overlapping legal instruments issued by other government agencies. Alienation rights are not fully provided in Myanmar's Community Forestry Instructions (which only includes the right of forest owners "permitting his/her legitimate heir(s) to inherit his/her own assets related to community forestry"). Each community forest management plan must include a benefit-sharing mechanism. Activities allowed include anything defined in the plan; if new activities are planned, they must be submitted for approval.

The National Forest Master Plan (2001/2002–2030/2031) set a community forestry target of 2,270,000 acres (approximately 919,028 hectares) during the 30-year period. As of 2020 (after 20 years), the achievement was 858,090 acres (approximately 347,404 hectares), which is equivalent to 37.8 percent of the total target area. A total of 6,366 community forest user groups comprising 161,696 households have been awarded community forest certificates to manage forests (Oo, 2021).

## Phase 1 findings

More than 15 percent of respondents in Myanmar reported that their community forest committee had given cash loans from the community forest fund to families after onset of the pandemic restrictions. RECOFTC has worked in Myanmar to help community forest user groups build and manage funds that can be invested into the environment and community members. These results suggest that the community forest groups are doing something right with respect to funding mechanisms, which is something that needs to be replicated more broadly within the country and regionally. We suggest further research on community forests that have been most helpful with loans and other assistance during this crisis. The data can inform the design and improvement of community forest funding schemes across the country.

The survey respondents, like in nearly every country in the study, noted job training, education and more

job opportunities as urgent needs to recover from the ongoing crisis. Community forest members reported this need more than the non-community forest members did. Non-members reported more positive impacts from the COVID-19-imposed restrictions than did community forest members, with most positive impacts related to having more family members from the migrant workforce returning home. Together, this suggests that community forests in Myanmar are not providing enough job opportunities. This result is not surprising.

Myanmar was the last country among those in the region to open its borders for cooperation (pre-pandemic) and to develop community forestry schemes. Community forests have been effective at preserving and rehabilitating forests, but activity planning is complex under the country's community forestry laws, which likely are hindering progress towards enterprise and job development. We suggest that donor interventions focus on simplifying the laws around community forestry management and planning and on providing training and technical support to people in community forests so they can sustainably benefit from the land they are working to protect.

More than 80 percent of community forest members in the Myanmar survey reported a change in how they used their forest after the onset of the pandemic restrictions. This compares with just 42.1 percent of non-community forest members. The top-three reasons for changing forest use related to the way the pandemic had limited the ability of forest users to sell products because of the travel restrictions, low prices, a lack of buyers or inability to access transport. A greater proportion of community forest members cited these reasons than non-members. A larger proportion of community forest members also had resorted to using their savings than non-members. These differences between community forest members and non-members' experiences may relate to the relatively recent development of community forestry in Myanmar, compared with other countries in the Asia-Pacific region.

The survey respondents reported limited COVID-19-induced gender disparities. This was a surprising finding, considering RECOFTC's experience of gender issues and media reports from around the world that have noted significant gender-differentiated impacts of the pandemic. The low reporting of pandemic-induced changes differentially affecting men and women might indicate that the considerable pre-pandemic disparities have simply continued. We recommend further assessment of the capacity of communities to understand and identify gender-differentiated biases. We suggest that awareness and sensitization training (such as through the RECOFTC WAVES program) be continued and expanded in the country.

In Myanmar, 43 percent of the survey respondents reported an increase in forest crimes, and almost 20

percent stated it was a major concern. Nearly half (41 percent) of the surveyed community forest members reported receiving some support from community forest committees. Only 8.3 percent of respondents said travel restrictions limited their ability to harvest or collect products.

## Phase 2 findings on community forestry and livelihood assets

The two community forests surveyed in Phase 2 of the study were Heinze and Paine Taw (see Annex 3). By the time of Phase 2, the livelihood assets associated with these community forests had contributed during the pandemic period in the following ways.

- **Human assets:** The capacities the community forest management committees gained through training helped these bodies manage the fair distribution of material assistance among the community members and reduce risk of infection by raising awareness.
- **Social assets:** Both communities used their networks to acquire assistance from external organizations. This included receiving equipment for patrolling, face masks, hand sanitizer, food and small sums of money.
- **Natural assets:** Members of both community forests (especially poor households) harvested non-timber forest products for their subsistence during the critical times. The Forest Department allocated Heinze good-quality forest but allocated Paine Taw degraded forest. As a result, Heinze had more resources to draw upon.
- **Financial assets:** The availability of revolving funds, to some extent, had reduced financial burdens. Without these funds, the poorest households had to borrow money from outsiders at a high interest rate to buy materials to support their livelihoods. All 24 household members of the forest user group in Heinze had taken loans from the fund in this pandemic time.
- **Physical assets:** A building made of timber donated by the Heinze Village was used as a community centre and to raise awareness about COVID-19. Paine Taw's forest is too degraded to supply timber.

The most significant difference between these two communities and their abilities to respond to the pandemic thus far is that the quality of forest allocated to Heinze was much better than that of the forest allocated to Paine Taw. This enabled villagers in Heinze to harvest and use more non-timber forest products than villagers in Paine Taw. It also meant that Heinze could extract timber to such a degree that it was able to donate 6 tonnes for construction of a community building. Paine Taw, in contrast, has been unable to extract timber because its forest lacked adequate supplies.

## Conclusions and recommendations

Rural people in Myanmar have dealt with the impacts of the pandemic using all five classes of livelihood assets derived from community forestry. Community forestry will maintain an important role in the post-pandemic recovery, but it is essential to strengthen each asset to help people recover.<sup>13</sup>

The following strategic interventions could help community forests to support the recovery of the people most affected by the pandemic in Myanmar.

- **Incorporate vulnerability assessments into community forest management plans so that they address the vulnerabilities of local community members, particularly women, poor households and other marginalized groups.** Almost 40 percent of the country's rural population lives below the national poverty line, while one in six people struggle to meet their basic food needs (World Bank, 2017). The Community Forestry Instruction 2019 states that gender equity shall be considered in the formation of the community forestry management committees. But a gap remains in many community forests (including the two forests in the study). There is also no requirement for a vulnerability assessment to be included in the current community forest management process. All formalized community forests in Myanmar already have a management committee and an approved management plan. Thus, development partners should work with the Forestry Department and stakeholders (such as the Gender Equality Network) to pilot and demonstrate models to restructure the management committees and revise the community forest constitution and management plans. In the short term, these pilots should be on community forests in a selected township. They should focus on incorporating a vulnerability assessment into the community forest development process to ensure that the needs and vulnerabilities of all members are accounted for and incorporated into each community forest management plan. And they should ensure that marginalized members are equitably represented within the community forest leadership.
- **Establish revolving funds for every community forest in Myanmar.** The Government's loan mechanisms typically need collateral and other requirements that are beyond the capacity of rural poor households, many of whom are community forest members. Interest rates for loans without collateral in rural areas are generally high (ranging from 2 percent to 10 percent per month<sup>14</sup>). The establishment of a community forest revolving fund through grant money or other sources could help community forest members improve their livelihood. They also could use it as a coping mechanism to respond to emergency situations, such as the COVID-19 pandemic or natural disasters. In the two villages surveyed in Myanmar, community forest members used their community forest revolving fund effectively to support their

livelihoods as well as improve the quality of their forest. Lessons from the establishment of the community forest revolving funds<sup>15</sup> as well as similar initiatives<sup>16</sup> could inform the development of short- and medium-term initiatives to pilot and scale up the establishment of more such funds. In addition to working with the Forest Department, partners such as the Myanmar Microfinance Association and private banks might be approached to explore financing opportunities and provide technical support to develop revolving funds in the community forest context.

- **Develop legal instruments and provide technical and financial support and other forms of assistance for promoting agroforestry practices in community forests.** In this pandemic time, most of the community forestry members have collected non-timber forest products from their community forest and neighbouring forests for their subsistence. Agroforestry has proven to be a cost-effective approach to offer options to meet immediate needs related to food security and livelihoods. But agroforestry practices are not well established across many community forests. The Community Forestry Instruction 2019 allows community forests to apply any agroforestry systems that are suitable to the local conditions within their community forest. The Forest Department has already undertaken an assessment for agroforestry development, in line with the recently enacted ASEAN Guidelines for Agroforestry Development. In the short term, development partners can assist the Forest Department to issue formal instructions for community forest agroforestry development by piloting models and sharing relevant field experiences and good practices. The Community Forest Network Working Group as a platform to coordinate with other relevant government agencies (agriculture, livestock and fisheries) could facilitate inputs from these agencies. Private sector engagement is, to some extent, necessary for processing and marketing agroforestry products. Partnerships should be explored with relevant member associations of the Union of Myanmar Federation of Chambers of Commerce and Industry, such as the Myanmar Fruit, Flower and Vegetables Producers and Exporters Association.
- **Strengthen community forest user group networks in terms of information sharing, mutual support and coordination with government agencies, the private sector, development partners and non-state actors.** Community forest processes help empower human and social assets. The study findings indicate that community forest members have received various support through local township-level community forest networks and from other network members as well as external organizations. If these networks do not function effectively, community forest members may have difficulty accessing information as well as technical and financial assistance. The Community Forestry Instruction 2019 mandates

the Forest Department to facilitate the networking of different community forest groups. The national Community Forestry Strategic Plan 2018–2020 (under discussion for extension) identifies the development of community forest enterprise networks as a key target. In the short term, lessons from the establishment of previously established community forest member networks<sup>17</sup> could inform the development of short- and medium-term initiatives to pilot and expand the local networks into townships where they do not exist. In the longer term, community forest development partners could also explore how they could support township-level community forest networks to organize into networks at the state, region and national levels as well as link with multistakeholder community forest working groups at those levels.

## Nepal

### Community forestry context

Nepal has several types of community-based forest management regimes (table 10), the two largest of which in number of participating households are community forest and collaborative forest management. In the former, community forest user groups and executive committees that the group members elect govern the forest. They have a community forest operational plan that defines harvesting and other uses. Division Forest Offices have the authority to hand over forests to community forest user groups. The tenure is indefinite, but the operational plan must be reviewed every five to ten years. Tenure rights include full community use of timber and non-timber forest products and other use rights, except actual land-ownership. Financial accounts are compulsory and are independently managed by the executive committee. Benefit-sharing is also compulsory and is part of the operational plan. Community forests allow ecotourism, land allocation to the poorest members of the groups, the establishment of forest-based enterprises and several other activities.

In collaborative forest management, forest areas are jointly managed in a partnership between the federal government (represented by the respective division forest office), the local government and local communities. Those stakeholder groups form a collaborative forest management group comprising representatives of those stakeholders, with a local community representative as the president. Tenure is indefinite, but once again, the operational plan (which dictates use and harvesting) is reviewed every five to ten years. Tenure rights include community use of 50 percent of available forest products (with 40 percent for the federal government and 10 percent for local government) but do not include land rights. Financial accounts are mandatory and managed by the division forest officer, accountant of the division forest office, and group president. Benefit-sharing is also mandatory and is developed as described.

Collaborative forest management allows ecotourism but none of the other uses of community forests.

The Government's Forest Sector Strategy (2016–2025) sets the goal of allocating 60 percent of the country's forest to community-based management by 2025, including 2.3 million hectares (40 percent of the country's forest area) as community forests. Recent statistics suggest that the target for community forests has been met (table 10).

Nepal has a nationwide membership-based network of 22,415 community forest user groups called the Federation of Community Forestry Users, Nepal. According to the Federation, between March and May 2020, some 252 of its member forest user groups mobilized social, financial (US\$99,058) and human resources to support the poorest and most vulnerable households within their groups. In addition, they donated US\$70,184 in financial support to the local government's relief fund, reaching 152,700 poor and vulnerable people in total (Gentle et al., 2020). More than 1,400 community forest user groups offered their buildings as quarantine centres during the crisis.

### Phase 1 findings

Among the survey respondents in Nepal, using savings was the top way of coping after onset of the economic fallout of the COVID-19 crisis. With 74.6 percent of respondents giving this answer, it was the highest reported use of savings of any country surveyed. When difficult economic times hit, the first thing people do is cut back on leisure spending. When that is not enough, using savings will be the next option. Only once savings have been exhausted do people seek out more extreme measures of

coping, such as borrowing or going without more basic needs, such as adequate food.

This result suggests the importance of savings as a coping mechanism for community members. Community forestry has long existed in Nepal and has been successful at protecting forests. These resources have a greater potential to be used by people to develop stable livelihoods that allow them to save money as well. In the country's community forests, benefit-sharing and financial accounts are compulsory and can help communities save money and be mobilized to support vulnerable members in times of need. These mechanisms should be replicated elsewhere throughout the region and bolstered in any community forest in Nepal with relatively smaller savings.

Almost 12 percent of the survey respondents reported increased violence towards women in the community forest area. This is consistent with reports from around the world that COVID-19-associated lockdowns have resulted in more gender-based violence. The RECOFTC WAVES program has been training gender leaders in the forestry sector in Nepal and throughout the Asia-Pacific region. We suggest that gender awareness and sensitization training be greatly expanded into the forest communities and to the local government and police forces. There are also many ways to improve women's ability to report on violence, including through phone apps that also help them locate a safe shelter or receive advice and mental health support. Investing in such technologies is an important part of protecting the women who are often the primary users and protectors of a forest.

Despite the long-standing tradition of community forests, only 27 percent of the survey respondents

**Table 10.** Status of community-based forest management models in Nepal

Management regime	Area (ha)	Remarks
Community forest	2,312,545	Community has full rights to manage and use forest resources. Some 22,266 community forests are registered (as of January 2020), * with 8.5 million people in households engaged in community forestry.
Collaborative forest management	75,665	Government and communities jointly manage the forests. Communities do not have full rights.
Leasehold forest	45,043	Leased to poor people for 40 years with full management and use rights.
Religious forest	2,054	Handed to religious institutions with limited management intervention.
Buffer zone community forest	138,184	Located in buffer zones around protected areas. Communities have limited management roles and use rights.
Buffer zone leasehold forest	257	Leased to poor families in buffer zone areas for management and use of resources.

Note: \*Unpublished data provided by Federation of Community Forestry Users, Nepal.  
Source: Unpublished data provided by the Ministry of Forests and Environment.

reported that they had received assistance from their community forest committee.<sup>18</sup> This may be because community members had enough savings to weather the crisis as it existed at the time of the survey or received relief from local governments or other sources. It could also suggest that despite benefit-sharing and finance mechanisms, community forest committees are not set up to provide aid in times of crisis. We recommend digging deeper into this subject to find out why support from committees was not received. If needed, we recommend providing capacity support to integrate disaster preparedness in community forest management.

No survey respondent reported using a “very degraded” forest. In fact, the respondents in Nepal had the largest proportion of respondents reporting use of “pristine” forest of any of the seven countries (at 41 percent of the forest sites mentioned, compared with 13 percent on average across Cambodia, Lao PDR, Indonesia, Myanmar, Thailand and Viet Nam). But respondents here also reported the smallest number of uses of forests of any the seven countries. They cited an average of 3.3 uses as “important”. In contrast, survey respondents in Indonesia reported an average of 9.4 important uses. In Nepal, use concentrated in three categories: collecting fuel for home use or sale (96.6 percent of respondents); fodder, bedding and grazing land for livestock (79.7 percent) and collecting building materials for home use or sale (57.6 percent). Given the reported high-quality of forests, this suggests that greater use could potentially be made of these resources to generate funds for community forests to improve members’ livelihoods and to weather future crises.

## Phase 2 findings on community forestry and livelihood assets

The two community forests surveyed in Phase 2 were Shreechhap Deurali Community Forest Users Group and Phagarkhola Community Forest Users Group (see Annex 3). By the time of Phase 2, the livelihood assets associated with these community forests had contributed during the pandemic period in the following ways.

- **Human assets:** In Shreechhap, the return of migrants meant there were more people to take part in fire control, if needed. In Phagarkhola, returnees regularly attended meetings of community forest user groups. They increased their understanding of the importance of the community forest and their role in managing it.
- **Social assets:** In Shreechhap, the community forest committee actively engaged with the local government to mobilize support for their users. The local government support included food and sanitary kits.
- **Natural assets:** Harvesting of fodder, firewood and non-timber forest products increased in both communities as migrants returned to the villages. Because logging had been halted, timber was not available.

- **Financial assets:** The Shreechhap Deurali Community Forest user group donated 5,000 Nepali rupee (US\$50) to the local government as COVID-19 recovery support.
- **Physical assets:** Not available.

Shreechhap respondents suffered from a lack of timber extraction during lockdown, while Phagarkhola community forest members depended less on their forest for timber. The forest in Phagarkhola is dominated by shrubs and is therefore unable to supply timber to send to the market. Both communities said they experienced no significant impacts of the COVID-19 restrictions, apart from increased demand for firewood due to the return of migrants from cities.

## Conclusions and recommendations

Community forest user groups are the lowest-level grass-roots organization and are the smallest unit recognized by law in Nepal. Because they can be mobilized to identify most vulnerable groups, they can coordinate, plan, implement and monitor recovery activities related to the COVID-19 pandemic. They can receive technical support and funds from municipal governments, other government agencies and funding agencies and channel it to the most vulnerable people in the communities.

The following strategic interventions could help community forests to support the recovery of the people most affected by the pandemic in Nepal.

- **Allocate certain areas of community forest for income generation by poor and vulnerable people.** Economic opportunities are limited for poor and vulnerable people, including in the surveyed communities (both rounds). They have been unable to find jobs, given the high rate of unemployment<sup>19</sup> in the Nepali job market and their lack of skills and education. Another consistent pattern is that most of the poor and vulnerable people have limited access to land for farming, which is the main source of livelihood for the majority of Nepalis and most common for those lacking skills and education. A large share of such people, about 3 million people, many of whom are Dalits, have either no land or have just enough to build a house. Providing them land would enable them to practise agroforestry and produce food or animals for their own consumption or send products to the market. Such activity would have important contributions in savings (which 74.6 percent of respondents in the Phase 1 survey reported using). Those without savings are likely the ultra-poor households. When the pandemic hit, they were affected the most. Neither of the surveyed community forest user groups have allocated any land for ultra-poor members to produce food or commercial agroforestry products. With technical and financial support (including long-term support for sustainable business development, these groups can develop areas

for short-, medium- and long-term economic opportunities through multilayered agroforestry programs. The Community Forestry Development Guidelines 2008 allow such practice inside community forest areas, and is already practised by many community forest user groups. This intervention has contributed towards alleviating poverty or reducing the vulnerability of ultra-poor households (Oli, 2014). This could be expanded by supporting community forest user groups to identify potential land for allocation, identify ultra-poor or vulnerable members, form subgroups and help them (with resources and capacity) plan and implement activities on the allocated forest land.

- **Facilitate collaboration among the community forest user groups with similar potential to achieve scale to develop and send forest products to market.** As reported by communities surveyed in Phase 2, community forest has contributed to improved forests, which echoes findings from the Department of Forest Research and Survey assessment (2015) that there was an increase of more than 5 percent in stem numbers between 1987 and 1998, and between 2010 and 2014. The improvements in forests, however, are not reflected in providing economic benefits to community forest members. This is evident in community forests without timber to sell, a reality that has contributed to the declining interest of members who are now more drawn to tangible income (not in forest products such as fuelwood and fodder in the past). There is scope for promoting non-timber forest products and harvesting timber products from forests that increase the availability of local employment and income opportunities to poor and vulnerable households and communities who have lost incomes and sources of livelihood due to the pandemic responses. Yet, cumbersome regulatory process (Gritten et al., 2015) and the high cost of harvest and transportation do not make economic sense for them to send their small surplus to the market. With policy and capacity support, the communities producing small amounts of such products could collectively fulfil the regulatory requirements and access markets, lower their transaction costs and increase their per-unit return. Given that community forest user groups in Nepal are required to spend at least 35 percent of revenue to uplift vulnerable groups (by supporting their income-generating activities), increasing the income of community forest user groups would improve their assistance to vulnerable members.
- **Support local (municipal) governments to develop integrated development plans that prioritize recovery and support the livelihoods of poor and vulnerable people.** Local governments are financially strong (with more than US\$3 million annual budget). They have a strong mandate for local development, which includes supporting poor and vulnerable households. Despite the Forest Act 2019 and the Local Government Act 2017 that mandate local governments to engage with

community forest user groups in local development (and spend 35 percent of their budget to directly benefit women, Dalits, poor and vulnerable communities), their actions are not coordinated. This has constrained the capacity of community forest user groups without resources to support their members affected by the pandemic. Likewise, resource-rich community forest user groups, such as those that are able to sell timber, have sizable funds but have not been effective in reducing the vulnerability of its members. An integrated plan of municipalities that identifies the most vulnerable families and strategic interventions to enhance their resilience by collective mobilization of municipality and community forest user groups' resources would quicken the recovery process and reduce their vulnerability to similar events in the future. This requires facilitation and capacity support to municipality and community forest user group leadership for developing and implementing an integrated recovery plan.

## Thailand

### Community forestry context

Thailand's Community Forestry Act was promulgated in 2019. Its aim is to conserve and restore forests, strengthen cooperation to promote the culture and traditions of communities and ensure the balanced and sustainable use of natural resources in communities. There is only one type of community forestry scheme. Community forests comprise local villages and are governed by a committee that develops a five-year management plan. The tenure is indefinite. And tenure rights allow for the collection, use and consumption of non-timber forest products, the planting and harvesting of non-high-value timber species for household use and ecotourism. It also allows alienation rights of those outside the community. All use is tax free because it is for household use only; timber sales are forbidden. There is no requirement for community forest groups to have a financial account, although many do. Benefit-sharing mechanisms are required. The Community Forestry Act does not yet have subordinate laws to define the regulations for benefit-sharing, although they are expected to be forthcoming. Under the Act, community forests are divided into areas for conservation and areas for use. The community forestry target is 1.6 million hectares by 2025. As of May 2019, the total area of forests under community forestry agreements was 1,180,513 hectares, covering 15,236 villages (RECOFTC, 2020b).

### Phase 1 findings

Thailand was the only country in the study whose survey respondents cited better digital access as one of their most urgent recovery needs. This is likely a general need that would exist regardless of COVID-19, but it is important that the respondents noted it.



RECOFTC has been helping community forest groups to develop networks, including digital ones, to amplify their voices. We believe this has raised awareness about the importance of digital access. Better digital access can help warn people of disasters and crises and how to respond to them. Through market analysis apps, it can help them identify entry points into markets for products. This would help streamline supply chains at all times and help community forest enterprises grow and become more profitable.

In Thailand, 15 percent of the community forest members in the survey reported that they received job training as a form of assistance from the Government, donors or civil society organizations during the lockdown. In particular, one respondent noted that the Royal Forest Department had employed people from community forests to plant seedlings. Considering that job training, education and job opportunities were among the top-five requests for assistance from almost all the countries, we recommend that such forms of job training and job opportunities be encouraged and expanded through donor support and technical assistance. This should especially target such jobs that can improve forest carbon storage and productivity, thus mitigating climate change impacts and maximizing the benefits that people who depend on forests can receive from their land.

Non-community forest members reported using forests more than members; this may be because many non-members were tree smallholders and referred to their plantations as “forests” that they used. Only 8.7 percent of respondents in Thailand reported that the condition of the forests they used was “very degraded”, which is significantly less when compared with the six other countries (at 20.1 percent on average). Non-community forest members were much more likely to report using “very degraded” forest (at 22.2 percent of respondents) than community forest members (at 5.9 percent). While this is a statistically significant difference, the numbers of responses were too few to conclude that it is a reliable result. Beyond this finding, it is difficult to draw conclusions about the differential impacts of the lockdown on community forest members and non-members in Thailand. On one hand, the proportion of non-members who suffered impacts under the lockdown (85 percent) was greater than that of community forest members (70.7 percent). On the other hand, the average number of impacts suffered “a lot” was higher for community forest members (5.4) than non-members (3.4). We recommend further research to understand whether community forests in Thailand have some degree of disaster resilience due to practices that could be replicated elsewhere.

Thailand had a relatively large proportion of forest users (24.6 percent) who reported no impact from the lockdown on their livelihood or food security, when compared with the other six countries. In contrast, 95.7 percent of respondents in Cambodia reported impact due to the lockdown on their livelihood or food

security. While 90 percent of the female respondents in Thailand reported suffering impact, only 68 percent of the men did. This was the greatest gender disparity of any of the seven countries.

## Phase 2 findings on community forestry and livelihood assets

The two community forests surveyed in Phase 2 of the study were Mae Tha Community Forest and Baan Mae Hong Krai Community Forest (see Annex 3). By the time of Phase 2, the livelihood assets associated with these community forests had contributed during the pandemic period in the following ways.

- **Human assets:** Learning from their long experiences of advocating for a community forest, the Mae Tha Community Forest adopted a participatory self-management process to respond to the pandemic situation while maintaining livelihoods. The forest management committee of the Baan Mae Hong Krai Community Forest received guidance and support from government agencies. Both were active in sharing public health information with their members.
- **Social assets:** Both communities have partnerships with local authorities and other relevant stakeholders that link the forests and livelihoods.
- **Natural assets:** Both communities can collect non-timber forest products and dead wood for household consumption or sale.
- **Financial assets:** In both cases, there is no revolving credit fund, but there is a community forest management fund.
- **Physical assets:** Not available.

The main difference between these two community forests and their resilience to the pandemic thus far is that Mae Tha Community Forest took a proactive approach to developing a response. Its strong human assets, developed through decades of advocating for community forestry, gave its leadership the knowledge and skills to develop a participatory process through which the community came to understand the pandemic threat and collectively decide what to do about it. By contrast, Baan Mae Hong Krai Community Forest was reactive, receiving information from authorities and passing it on to community members.

## Conclusions and recommendations

The COVID-19 pandemic has had big impact on Thai people and the communities that depend on forests. The pandemic-related travel restrictions and market closures prevented community forest members from selling their products, including non-timber forest products, and thus reduced household incomes. However, the community forests continue to serve as a significant source of food and have contributed towards enhancing people’s resilience.

The following strategic interventions could help community forests support the recovery of the people most affected by the pandemic in Thailand:

- **Develop leadership capacities to enable community forest groups to fully exercise their forest rights to respond to crises.** This is exemplified by the case of Mae Tha Community Forest, which took a proactive approach to developing a response to the pandemic. Its leadership had the knowledge and skills to develop a participatory process through which the community came to understand the pandemic threat and collectively decided what to do about it. Leadership capacity also enables these groups to better advocate for their interests, when community forest representatives are invited to participate in national policy discussions or high-level decision-makers.
- **Support the development of community forest management plans to enhance natural assets within community forests.** The Community Forest Act 2019 requires all registered community forests develop a community forest management plan. These plans enable communities to establish clear objectives and actions for community forest management and utilization. Support is required to help the community forest group members understand the technical requirements of such a plan (forest resource surveys, for instance). It is also required to facilitate their members to develop a plan that reflects local conditions as well as the real needs and management capacities of the community. Such support could include the development and piloting of simplified forest resource survey methods that complete the community forest plan requirements and can be easily done by communities. It also could include working with governments to develop guidelines for this.
- **Leverage existing recovery plans and private sector commitments to provide local communities with funds and knowledge resources to enable them to generate income from their forest and land resources.** Considering the changed post-pandemic context (such as a reduced demand for products due to a lack of international tourists), financial resources could be channelled into the community forest management funds through community forest landscape restoration activities. There is increasing interest for this from many private sector actors. It could be linked to the Government's stimulus recovery plan, which provides opportunities to allocate funds for community-based natural resource management. Financial support for the poorest and most vulnerable groups should be considered because it is difficult for these groups to access formal credit schemes. Community forest management funds could be a mechanism to provide small grants or in-kind assistance to members struggling to cope.

- **Facilitate partnerships between local communities and private sector actors to produce and add value to products from community forests to enhance household resilience.** In this pandemic time, the surveyed communities could generate good income from selling non-timber forest products. This potential could be scaled up by developing fair partnership arrangements with private sector actors. Interested community forest groups need capacity development and facilitation support to organize into community-based enterprises so that they can harvest, produce and sell products as a group to increase leverage with market traders. RECOFTC has developed guidelines to facilitate this process.

## Viet Nam

### Community forestry context

Community forestry and community-based forestry are the two regimes in Viet Nam. In the former, the forest is owned by the community and governed by the local government. Tenure rights last 50 years, financial accounts are not required, and benefit-sharing mechanisms are defined by the community. A special article in the Forestry Law of Viet Nam specifies that ethnic minorities must be included in the planning and use of the community forest, and traditional uses must be allowed.

In community-based forestry, forests are owned by state owners or forest enterprises. Communities or individuals sign an annual forest protection contract that defines how state owners will pay the community to protect the forest. The communities have no tenure rights, and financial accounts and benefit-sharing mechanisms are variable, depending on the contractors. Communities are paid for any contracted labour they provide.

Decree 156/2018/ND-CP outlines the forest land allocation process. District People's Committees develop the forest land allocation options and plans, with final approval coming from the Provincial People's Committee, following verification with the Department of Agriculture and Rural Development. In 2014, more than 10,000 communities had land-use certificates for a total of 524,477 hectares, or 3.7 percent of the country's total forest area (Nguyễn Bá Ngãi, 2020). By December 2019, out of 4,256,579 hectares under the direct ownership of local people, the forest area assigned to communities to collectively manage and use was 1,216,982 hectares. This accounted for 8.3 percent of the country's total forest area. Nearly 60 percent of the community forest area was natural forest, while the remaining 40 percent was plantation forests.<sup>20</sup>

## Phase 1 findings

In Viet Nam, 85 percent of the survey respondents said travel restrictions limited their ability to harvest or collect products either “a little” (26.6 percent) or “a lot” (58.3 percent). This compares to just 27.2 percent of respondents in the other six countries, and may reflect the stricter restrictions on movement in Viet Nam.

More than 80 percent of the surveyed community forest members in Viet Nam reported a change in how they used their forest after onset of the pandemic, while it was only 40 percent among the non-community forest members. The top-three reasons for changing forest use related to the way the pandemic had limited the ability of forest users to sell products due to travel restrictions, low prices, a lack of buyers and/or inability to access transport. A greater proportion of community forest members cited these reasons than non-members.

Every community forest member in the survey reported getting assistance from their community forest committee. The universal support may be testament to Viet Nam’s participatory community forest formation process. Or it may reflect the country’s strong national response to the COVID-19 pandemic. We recommend investigating this issue further and replicating the positive practices more widely.

Viet Nam was the only country in which no study participant reported that community forestry committees had helped to protect their forests from illegal harvesting, poaching or encroachment. Reflecting this, 93 percent of community forest members said they wanted more policing of land, fires and environmental crimes.

The male non-community forest members were far more likely than male community forest members to report that they had lost their paid job as a result of the COVID-19 crisis. This could suggest that men (and perhaps women) in community forests are less dependent upon external sources of income than other people in forest landscapes. Alternatively, it might mean that community forest members have fewer opportunities to benefit from outside employment and so had fewer paid jobs to lose. We recommend a follow-up study for a deeper understanding of sources of income and livelihoods in community forests and to identify ways to ensure that those jobs and livelihoods are disaster resilient.

Viet Nam stood out among the seven countries in terms of gender-based violence, with 25 percent of women reporting increased abuse of women. Overall, 13.3 percent of both male and female community forest members and non-members reported an increase in violence against women. There was no clear indication of whether or not being a member of a community forest made a difference regarding

gender-based violence. Regardless, we believe gender-sensitivity training and improved policing of rights abuses in community forest areas could help communities reduce gender-based violence. Interestingly, Viet Nam was the only country in which community forest members listed “more policing for human rights abuses and social issues” among the top-five forms of assistance requested.

## Phase 2 findings on community forestry and livelihood assets

The two community forests surveyed in Phase 2 were Muong Phu and Thanh Phong (see Annex 3). By the time of Phase 2, the livelihood assets associated with these community forests had contributed during the pandemic period in the following ways.

- **Human assets:** The community forests have developed in their members good knowledge of forest policies and aspects of forest management. After onset of the pandemic, community forest leaders coordinated with local authorities to promote public understanding of the pandemic and compliance with the government-imposed restrictions.
- **Social assets:** In both villages, community funds were mobilized to buy face masks and hand sanitizer for free distribution to community forest members and the wider population.
- **Natural assets:** Both communities have the right to use and sell non-timber forest products and planted timber from their forests.
- **Financial assets:** Both communities receive area-based payments for forest protection (Muong Phu) and forest environmental services (both communities). While these payments are substantial in Muong Phu, they are small in Thanh Phong, which has a smaller area of forest.
- **Physical assets:** In Muong Phu, community forestry has contributed to the community building and upgrading the access road and canal system, which in turn have contributed to agricultural production and market access for forest products.

The main difference between these two community forests and their resilience to the pandemic is that Muong Phu has a much larger area of forest so receives far larger payments for forest environmental services. This put Muong Phu in a much better financial position and, after onset of the pandemic, enabled it to make investments in infrastructure, unlike Thanh Phong.

## Conclusions and recommendations

The pandemic has had many negative social and economic impacts in Viet Nam. It also has created an opportunity to review and restructure socioeconomic policies. And it has helped the country develop strategic interventions for a sustainable, green and

resilient economic recovery and to shift from a linear to a circular economy in the post-pandemic period.

For example, Viet Nam has an opportunity to restructure value chains in the agriculture and forest sectors towards sustainability and disaster resilience. Because community forests can provide essential inputs to forest product value chains, they will be important in the post-pandemic recovery over the next few years.

The following strategic interventions could help community forests to support the recovery of the people most affected by the pandemic in Viet Nam:

- **Empower community forest groups so that they can proactively respond to future crisis situations.** The members of the two community forests in Phase 2 were able to respond well to the pandemic situation because their leadership coordinated with local authorities to promote public understanding of the pandemic and compliance with the government-imposed restrictions. Community funds were quickly mobilized to buy face masks and hand sanitizers for free distribution. Learning from these experiences, development interventions should build up local leadership capacities to identify and address emerging issues through participatory processes. Target groups would be members of community forestry boards.
- **Improve community forest management plans by enhancing livelihood components and incorporating vulnerability assessments.** Not all community forests in the country have a management plan (including the two in the Phase 2 study). Existing management plans focus on forest protection, limiting livelihood development opportunities for local communities. Although a special article in the Forestry Law of Viet Nam specifies that ethnic minorities must be included in the planning and use of the community forest and that traditional uses must be allowed, vulnerability assessments are not required. Supporting interested communities to develop a community forest management plan that considers members' vulnerability to crises and with a focus on enhancing forest-based livelihoods options, such as agroforestry, would enable them to diversify their income streams and strengthen their food security. Development partners could provide technical assistance and funding in the short term to help communities establish and implement their management plan.
- **Develop and implement mechanisms to improve the management, allocation and use of community forest funds.** Community forest user groups in Viet Nam typically operate community forest funds, which are often primarily financed through area-based payments for forest protection and forest environmental services. As demonstrated by the community forests in the Phase 2 survey, the amount of payment the funds receive is largely dependent on the size of the community forest. There are also no legal stipulations requiring fund governance and benefit sharing to be equitable to more vulnerable community members. Options for enhancing community forest fund financing and management need to be identified and piloted. Participatory action research should be conducted with local stakeholders at selected sites to consider comparable revenue streams and opportunities for income generation (for example, by applying agroforestry). It also should identify gaps and opportunities in the payment schemes for forest protection and forest environmental services (including how benefit-sharing could prioritize vulnerable group members).

## Annex 2. Country-specific survey approaches in Phase 2

Country	Approach	Remarks
Cambodia	<p>Data collection: Second week of January 2021.</p> <p>Methods: Two focus group discussions in each community (including with women and older members of communities). Interviews with community forest members, management committee members, community forest credit group and local authorities. RECOFTC consulted 21 people (15 women).</p>	Conducted by RECOFTC staff
Indonesia	<p>Data collection: Second week of January 2021.</p> <p>Methods: Four focus group discussions with members of village forest community institutions (representing men, women and youths in farmer business groups). Interviews with leaders of farmer business groups. Data collected over one day in each community.</p>	Conducted by RECOFTC staff
Lao PDR	<p>Data collection: 4–11 January 2021.</p> <p>Methods: Four focus group discussions with people involved in village forestry, with women's groups represented in each discussion. Interviews with people from village authorities (head of village, village party secretary, forestry unit, security, Lao Women's Union, Youth Union), village forestry unit and teak plantation group members.</p>	Conducted by RECOFTC staff
Myanmar	<p>Data collection: 3–4 January 2021.</p> <p>Methods: Focus group discussion with representatives of community forest user groups. Interviews for follow-up questions after the survey. The 13 participants (10 men, 3 women) represented different marginalized groups in the two villages.</p>	Conducted by RECOFTC staff
Nepal	<p>Data collection: 18–21 January 2021.</p> <p>Methods: Focus group discussions and community consultations (45 community members, including 33 women) and interviews with community forest users group leaders, local government representatives, Divisional Forest Office representatives and community forestry network representatives.</p>	Conducted by RECOFTC staff
Thailand	<p>Data collection: 7–20 January 2021.</p> <p>Methods: Focus group discussions and consultations with community forest committee members, elderly groups, general community forest members, community health volunteers, forest product collectors and youths in the communities (15 people from Mae Hong Krai and 12 people from Mae Tha). Interviews with community leaders, relevant government agencies and women (three in Baan Mae Hong Krai and four in Mae Tha).</p>	Consultant hired for the survey
Viet Nam	<p>Data collection: Last week of December 2020.</p> <p>Method: Interviews with community forest committee members, including women and older persons, using prepared questionnaire.</p>	Consultant hired for the survey

## Annex 3. Community forests compared in Phase 2 of the study

### Cambodia

Name	Samaky Trapang Totim Community Forest	Kbal Bey Community Forest
<b>Location</b>	Romtomb Commune, Rovieng District, Preah Vihear Province	Tipou Commune, Santuk District, Kampong Thom Province
<b>Population</b>	322 families (1,456 people) (706 women)	82 families (350 people) (152 women)
<b>General livelihoods</b>	Main: rice and vegetable farming Subsidiary: gold mine exploration (for some)	Main: rice farming  Subsidiary: livestock husbandry, fishing, ecotourism
<b>Year established</b>	2016	2009
<b>Community forest area</b>	439 hectares	761 hectares
<b>Forest quality (condition)</b>	Degraded (recovering)	Degraded (recovering)
<b>Tenure</b>	Use of timber and non-timber forest products allowed for 15 years, with royalties paid for commercial use and a five-year moratorium on commercial harvest of timber.	Use of timber and non-timber forest products allowed for 15 years, with royalties paid for commercial use and a five-year moratorium on commercial harvest of timber.
<b>Major benefits from community forestry</b>	Non-timber forest products (such as mushrooms, bamboo shoots) for all members, with poor members selling these products to generate income.	Non-timber forest products (fruit, vegetables and medicinal plants) for all members, with poor members selling these products to generate income.
<b>Gender composition of leadership body</b>	Nine women in the 15-member committee.	Two women in the 11-member committee.
<b>Knowledge and skills gained through community forestry</b>	Community forest office management, forest management and protection (such as patrolling).	Forest management planning, accounting and financial management, organic vegetable planting and beekeeping for honey.
<b>Community forest finance mechanisms</b>	Community forest credit (a fund to improve access to finance for needy members of the community forest).	Community forest credit
<b>Community forestry's contribution to physical assets</b>	None	None
<b>Social contributions of community forestry</b>	Clear boundary demarcation and rules of forest resource management or use have minimized conflicts. Community forest management committee helps resolve any conflicts that arise.	Clear boundary demarcation and rules of forest resource management or use have minimized conflicts. Community forest management committee helps resolve any conflicts that arise.

## Indonesia

<b>Name</b>	Tambagguruyung Village Forest Community Institution	Sasaka Patengan Village Forest Community Institution
<b>Location</b>	Lebakmuncang Village, Ciwidey Subdistrict, South Bandung District, West Java Province	Patengan Village, Rancabali Subdistrict, South Bandung District, West Java Province
<b>Population</b>	1,130 households	492 households
<b>General livelihoods</b>	Main: coffee production and eucalyptus plantations  Subsidiary: agroforestry crops such as chilli, avocado, dekopon orange	Main: tourism (homestay, food stalls) Subsidiary: selling farm products such as strawberries, tea and coffee
<b>Year established</b>	2005	2008
<b>Community forest area</b>	1,161.67 hectares	843.52 hectares
<b>Forest quality (condition)</b>	Intact	Intact
<b>Tenure</b>	Harvest and selling of non-timber forest products for five years.	Harvest and selling of non-timber forest products for five years.
<b>Major benefits from community forestry</b>	Selling of coffee beans and ecotourism.	Selling coffee beans (main) and ecotourism (subsidiary).
<b>Gender composition of leadership body</b>	No women in Forest Village Community Institution or Social Forestry Business Unit committees.	One woman in a social forestry business group committee, but no women in Forest Village Community Institution committee.
<b>Knowledge and skills gained through community forestry</b>	Coffee production.	Tourism (running homestay); coffee production and processing knowledge.
<b>Community forest finance mechanisms</b>	None	None
<b>Community forestry's contribution to physical assets</b>	None	None
<b>Social contributions of community forestry</b>	Fewer conflicts between Perum Perhutani and community, and some social forestry business groups support each other.	Fewer conflicts between Perum Perhutani and community.

## Lao PDR

<b>Name</b>	Koklouang Village Forest	Nakhayang Village
<b>Location</b>	Houayxai District, Bokeo Province	Paklai District, Xaiyaboury Province
<b>Population</b>	109 families (449 people including 211 women)	216 families (1,003 people, including 485 women)
<b>General livelihoods</b>	Main: agriculture (rice farming and cattle husbandry). Subsidiary: non-timber forest products, fruit orchards and teak or rubber plantations	Main: agriculture and animal husbandry. Subsidiary: collecting food and other non-timber forest products
<b>Year established</b>	2020	Not yet (in the process)
<b>Community forest area</b>	901 hectares	1,963.06 hectares
<b>Forest quality (condition)</b>	Moderate	Degraded
<b>Tenure</b>	Rights to manage, protect, use (including customary use) forest and forest lands allocated by the State to the village; rights to sell planted trees and non-timber forest products for indefinite period.	Although villagers collect and sell non-timber forest products, it is not legal because there is no State-approved village forest management plan.
<b>Major benefits from community forestry</b>	Foods, non-timber forest products, firewood and medicinal plants from the forest and selling of timber from plantations.	Foods, non-timber forest products, firewood and medicinal plants from the forest and (until 2016) selling of timber from plantations.
<b>Gender composition of leadership body</b>	One woman in the four-member committee.	One woman in the four-member committee.
<b>Knowledge and skills gained through community forestry</b>	Improved knowledge on sustainable forest management, government rules and regulations, participatory planning and negotiation and procedure on teak trading with local companies.	Sustainable harvest and trade of non-timber forest products; awareness on government rules and regulations.
<b>Community forest finance mechanisms</b>	Teak fund	Village fund that also supports community forest members.
<b>Community forestry's contribution to physical assets</b>	None (the village forest is new and does not yet have resources for this).	None
<b>Social contributions of community forestry</b>	Good relationships among villagers and with neighbouring villages due to demarcation; free timber to villagers who are poor or live with disabilities for personal use.	Conflicts mediated by the head of unit of the village; the local community has agreement with neighbouring villages to tackle deforestation and manage non-timber forest products sustainably; free timber to villagers who are poor or live with disabilities for personal use.



## Myanmar

<b>Name</b>	Heinze Village	Painne Taw Village
<b>Location</b>	Kalein Aung Sub Township under Ye Phyu Township, Dawei District, Tanintharyi Region	Ye Phyu Township, Dawei District, Tanintharyi Region
<b>Population</b>	24 households in community forest user group, out of 53 households and 457 people in the village (223 men and 234 women)	14 households in community forest user group, out of 30 households and 124 people in the village (60 men and 64 women)
<b>General livelihoods</b>	Home gardens growing rubber, cashew nut and betel nut	Orchard and home gardens
<b>Year established</b>	2017	2016
<b>Community forest area</b>	57 hectares	19 hectares
<b>Forest quality (condition)</b>	Dense forest	Degraded
<b>Tenure</b>	Rights to harvest and sell timber and non-timber forest products (according to management plan) for 35 years.	Rights to harvest and sell timber and non-timber forest products (according to management plan) for 35 years.
<b>Major benefits from community forestry</b>	Timber and non-timber forest products such as dog fruit; water from the forest (also benefiting the wider community).	Timber and non-timber forest products such as earth star mushrooms, bamboo shoots and zin byun ( <i>Dillenia</i> species).
<b>Gender composition of leadership body</b>	One woman in the five-member committee.	One woman in the five-member committee.
<b>Knowledge and skills gained through community forestry</b>	Knowledge on forest protection, plantation.	Knowledge on livelihood development.
<b>Community forest finance mechanisms</b>	Revolving fund	Revolving fund
<b>Community forestry's contribution to physical assets</b>	Irrigation system developed; community forest user group donated timber for a building at the monastery.	None
<b>Social contributions of community forestry</b>	Community forest user group members are united in managing their forest, and they have good relationship with Forest Department and supporting NGOs.	Good relationship with local government and supporting and aid organizations.

## Nepal

<b>Name</b>	Shreechhap Deurali Community Forest Users Group	Phagarkhola Community Forest Users Group
<b>Location</b>	Chautarasangachokgadi Municipality-13, Sindupalchowk District, Bagmati Province	Bhumlu Rural Municipality-4, Kavrepalanchowk District, Bagmati Province
<b>Population</b>	371 households (population 2,040)	71 households (population 390)
<b>General livelihoods</b>	Agriculture (grains, vegetables and animal husbandry)	Agriculture (grains, vegetables and animal husbandry)
<b>Year established</b>	1997	1990
<b>Community forest area</b>	78.29 hectares	69.86 hectares
<b>Forest quality (condition)</b>	Well stocked	Moderately stocked
<b>Tenure</b>	Harvest and selling of timber and non-timber forest products allowed for indefinitely (a valid management plan required).	Harvest and selling of timber and non-timber forest products allowed for indefinitely (a valid management plan required).
<b>Major benefits from community forestry</b>	Timber, firewood, fodder, leaf litter.	Timber, firewood, fodder, leaf litter.
<b>Gender composition of leadership body</b>	Eight women in the 15-member committee.	All women in the 10-member committee.
<b>Knowledge and skills gained through community forestry</b>	Knowledge and skills on forest management, agroforestry and running forest-based microenterprises.	Knowledge and skills on forest management (such as thinning).
<b>Community forest finance mechanisms</b>	Community forest user group fund and a revolving fund.	Community forest user group fund (but no revolving fund).
<b>Community forestry's contribution to physical assets</b>	Contributed to a community building, a community sawmill and construction and repair of access roads.	A community sawmill (a joint effort of four community forest user groups); construction of a gravel road.
<b>Social contributions of community forestry</b>	Strong networking with local government and other supporting agencies; empowerment of women and poor community members (through support and space for them to voice their views).	Collaborative relations with the local government and neighbouring community forest user groups.

## Thailand

<b>Name</b>	Mae Tha Community Forest	Baan Mae Hong Krai Community Forest
<b>Location</b>	Mae Tha Subdistrict, Mae On District, Chiang Mai Province	Village number 8 Baan Mae Hong Krai, Mae On District, Chiang Mai Province
<b>Population</b>	1,497 households (4,754 people) (male-female ratio = 1.02:1)	82 households (260 people) (male-female ratio = 1:0.97)
<b>General livelihoods</b>	Agriculture (vegetables, rice), fruits from organic farming and animal husbandry (beef and milk cows)	Agriculture (rice, vegetable), fruit and livestock farming
<b>Year established</b>	2019	2016
<b>Community forest area</b>	5,539.2 hectares	174 hectares
<b>Forest quality (condition)</b>	Moderately stocked	Moderately stocked
<b>Tenure</b>	Collection of non-timber forest products, and dead wood is allowed (harvesting of timber is prohibited in natural forests); tenure is indefinite (but a management plan must be prepared every five years).	Collection of non-timber forest products, and dead wood is allowed (harvesting of timber is prohibited in natural forests); tenure is indefinite (but a management plan must be prepared every five years).
<b>Major benefits from community forestry</b>	Water and non-timber forest products such as bamboo shoots, mushrooms and herbs for household consumption and selling.	Non-timber forest products such as mushroom, bamboo shoots and wild vegetables and insect eggs for household consumption and selling.
<b>Gender composition of leadership body</b>	Two women in the 20-member committee.	Two women in the 15-member committee.
<b>Knowledge and skills gained through community forestry</b>	Knowledge and skills on forest fire control.	Knowledge and skills on forest fire control and forest restoration.
<b>Community forest finance mechanisms</b>	Community forest management fund, but no revolving fund.	Community forest management fund, but no revolving fund.
<b>Community forestry's contribution to physical assets</b>	None	None
<b>Social contributions of community forestry</b>	Shared understanding and collective decision-making for managing forest resources; partnership with local authorities and relevant stakeholders in linking forest and local livelihoods.	Partnership with local authorities and relevant stakeholders in managing forests and supporting community members' livelihoods.

## Viet Nam

<b>Name</b>	Muong Phu	Thanh Phong
<b>Location</b>	Thong Thu Commune, Que Phong District, Nghe An Province	Muong Nuoc Commune, Que Phong District, Nghe An Province
<b>Population</b>	235 households (1 009 people)	228 households (957 people)
<b>General livelihoods</b>	Agriculture and forestry production	Main: agriculture and forestry production Subsidiary: small businesses
<b>Year established</b>	2010	2016
<b>Community forest area</b>	2,337.5 hectares	221 hectares
<b>Forest quality (condition)</b>	Well-stocked forest	Degraded forests
<b>Tenure</b>	Rights to use forest and harvest and sell non-timber forest products and planted timber for 50 years.	Rights to use forest and harvest and sell non-timber forest products and planted timber for 50 years.
<b>Major benefits from community forestry</b>	Payments for forest environmental services from government and non-timber forest products, such as honey, yellow flower tea, bamboo shoots and medicinal herbs.	Payments for forest environmental services from government and non-timber forest products.
<b>Gender composition of leadership body</b>	Nine women in 15-member committee.	Seven women in 15-member committee.
<b>Knowledge and skills gained through community forestry</b>	Knowledge to implement forest policies on forest protection and development, harvest of non-timber forest products and forest fire prevention.	Knowledge on forest policy.
<b>Community forest finance mechanisms</b>	Annual payments for forest environmental services from the Government to the community.	Annual payments for forest environmental services from the Government to the community.
<b>Community forestry's contribution to physical assets</b>	A new cultural house; upgrade and repair of the village access road and canal system.	None
<b>Social contributions of community forestry</b>	Reduced conflicts due to clear delineation of forest boundaries; a mutual sense of forest protection among community members.	Minimal

# Endnotes

1. Also referred to in some contexts as village forestry, social forestry, traditional-use forestry, among others.
2. By “local people” we mean Indigenous Peoples or ethnic minorities, women, youth, individuals and communities who have geographic, economic, social and cultural relationships with forests.
3. As of December 2018, there were 4,111,848 hectares of forest under direct ownership of local people, against a 2020 target of 4 million hectares (RECOFTC, 2020b)
4. Outcome harvesting documentation for RECOFTC’s Scaling-up Community Forestry Project (10 October 2020).
5. As explained in the introduction, “community forestry” is a generic term that can describe any of a wide variety of models that vary greatly and that goes by a different name in different places. For the sake of simplicity, this study uses “community forestry” to mean any of these approaches and models.
6. The 17 options were: 1. No longer able to sell products because we cannot access markets due to roadblocks or travel bans. 2. No longer able to sell products because there are no buyers. 3. No longer able to sell products because we have no transportation to markets. 4. No longer able to harvest or collect products because of roadblocks or travel bans. 5. No longer able to harvest or collect products because we have no transportation. 6. No longer able to make products because we cannot access materials to purchase. 7. No longer able to make products because we cannot afford materials to purchase. 8. No longer grow food or products because we cannot afford inputs. 9. No longer earning cash remittances from family members abroad/in urban areas. 10. No longer able to access transport to get to our jobs. 11. No longer able to access markets to buy food. 12. Nutritious food was not available at markets. 13. We could not access water. 14. Increased expenditures and costs as food prices have risen. 15. Increased stress or worries impacting health. 16. Jobs have temporarily or permanently closed. 17. Roadblocks or travel bans prevent us from getting to our jobs.
7. The survey did not ask respondents to specify what kinds of machinery they needed and did not ask respondents to specify why they wanted better digital access. RECOFTC’s case studies suggest that the machinery required will vary among community forests. For example, for coffee-producing communities it might include coffee sorting, de-pulping and roasting machines. In Myanmar, community forests have already been providing mowers. In Nepal, there is an interest in machines that make pellets from branches and small pieces of wood. In terms of digital access, this is likely to include access to information on government services, weather services and market information.
8. This is not to say that forest crimes did not decline in the other nine community forests—just that people in the five communities cited here made a point of mentioning this in the Phase 2 focus group discussions.
9. RECOFTC, personal staff communications with communities.
10. Community forest statistics published by the Forestry Administration in 2019.
11. Unpublished data shared by the Directorate General of Social Forestry and Environmental Partnership.
12. A government database of social forestry enterprises providing information, such as the location and type of business enterprise, level of entrepreneurship capacity, numbers of facilitators and extension agents in the locality and types of products. The platform is mainly used by the Government to deliver technical capacity development interventions for communities focusing on entrepreneurship.
13. All data were collected prior to the 1 February 2021 military intervention in Myanmar, the full implications of which were unfolding at the time of writing. The findings of this study remain more relevant than ever, given that the loss of basic services and current economic and social instability constitute the type of shock against which community forests help local communities display resilience.

14. The Myanmar Times reported an informal lending rate of 2 percent per month in 2018 (Thant, 2018). RECOFTC partners in early 2021 reported informal lending rates of 5–10 percent per month without collateral.
15. Under the Scaling Up Community Forestry Project implemented by RECOFTC with funding from the Government of Norway from December 2014 to February 2018. The project supported 94 community forestry groups in seven regions of Myanmar to establish community forest revolving funds.
16. For example, the Evergreen Village Project (Mya Sein Yaung) implemented by the Department of Rural Development in the Ministry of Agriculture, Livestock and Irrigation, with support from the World Bank.
17. Under the Scaling Up Community Forestry Project, which supported the establishment and functioning of a township-level network in seven regions of Myanmar, and the Voices for Mekong Forests Project, implemented by RECOFTC with
18. This is, however, contested by some community forestry leaders, who said they facilitated relief distribution closely working with local governments.
19. According to the Nepal Labour Force Survey 2018–2019 by Central Bureau of Statistics, 11.4 percent people were unemployed and 39.3 percent people were underemployed.
20. Decision No. 1423 / QD-BNN-TCLN dated 15 April 2020 of the Ministry of Agriculture and Rural Development, <http://www.kiemplam.org.vn>.

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At RECOFTC, we believe in a future where people live equitably and sustainably in and beside healthy, resilient forests. We take a long-term, landscape-based and inclusive approach to supporting local communities to secure their land and resource rights, stop deforestation, find alternative livelihoods and foster gender equity. We are the only non-profit organization of our kind in Asia and the Pacific. We have more than 30 years of experience working with people and forests, and have built trusting relationships with partners at all levels. Our influence and partnerships extend from multilateral institutions to governments, private sector and local communities. Our innovations, knowledge and initiatives enable countries to foster good forest governance, mitigate and adapt to climate change, and achieve the Sustainable Development Goals of the United Nations 2030 Agenda.



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