Threat or Possibility: Land Rights & Disaster-Vulnerability

A qualitative study on land rights, tenure security and disaster-vulnerability in light of the 2018 land law amendment in Myanmar



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ABSTRACT

Secured land tenure is considered to play a crucial role in decreasing disaster-vulnerability. By signing Sendai Framework, Myanmar Government agreed to focus its policies on reducing risks of natural disasters. However, in 2018 it issued an amendment to the Vacant, Fallow and Virgin Land Management Law, criminalizing tenure without land certificates, affecting particularly ethnic farmers.

To date, few studies have discussed the relationship between tenure security and disaster-vulnerability. Likewise, the assessment lied unexplored in the literature on Myanmar. Thus, the thesis contributes by developing an understanding of land rights impact, in light of the new amendment, on ethnic farmers' tenure security, and the subsequent effect on their disaster-vulnerability. Data were derived from interviews with practitioners in Myanmar and used Sen's capability approach to frame the analysis.

The research found that land rights, in light of the amendment, increase ethnic farmers' tenure insecurity, which decreases their possibilities to alleviate disaster-vulnerability. This results from lacking protection of customary land practices and structural barriers, causing difficulties for applying and acquiring the certificates to secure tenure. However, the certificate represents possibilities to attain financial means to recover from emergencies like disasters. Nonetheless, the difficulties of acquiring the certificate hinder the opportunities to decrease disaster-vulnerability.

Keywords: land rights, tenure, disaster-vulnerability, ethnic minorities, Myanmar Words: 19.994/20.000

LIST OF ABBREVIATIONS

CCVFV - Central Committee for Vacant, Fallow and Virgin Land

CSO – Civil society organization

DLMS - Department of Land Management and Statistics

DRR - Disaster risk reduction

EAO – Ethnic Armed Organization

EMReR - Enlightened Myanmar Research Foundation

FAO - Food and Agricultural Organization, UN Agency

FAB – Farmland Administrative Bodies

KIO – Kachin Independent Organization (Kachin armed group)

KNU - Kachin National Union

LUC - Land use certificate

NCA - National Ceasefire Agreement

NLD - National League for Democracy (political party)

NGO - Non-governmental organization

UN – United Nations

VFV - Vacant, Fallow, and Virgin

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1 INTRODUCTION

In the wake of climate change, natural hazards such as floods, hurricanes, or earthquakes are observed and predicted to increase in their occurrence. This trend has been creating serious challenges to vulnerable populations and development efforts aiming to improve their livelihoods. Nonetheless, the frequency of natural hazards is not the main issue. It is the inability of human systems to cope with their impact, which is what turns a hazard into a disaster (UN-Habitat, 2010, p. 12). Therefore, the natural disasters' root causes are the "underlying vulnerability and lack of resilience in human systems" (p. 12). To decrease damages of natural disasters, the new Sendai Framework for disaster management was developed in 2015 at the third UN World Conference on Disaster Risk Reduction (thereafter DRR). The framework expands the focus from sole post-disaster management to prioritize preparedness and resilience-building (UN, 2015). This is to be achieved through implementing policies, plans, programs, and creating a budget to reduce vulnerability and exposure to natural disasters (UN, 2015, p. 9; Mitchell, 2011). Therefore, the new disaster management emphasis is to address the root causes hindering the capabilities to cope with hazards - the vulnerabilities.

1.1 VULNERABILITY & LAND TENURE

Vulnerability or inability to endure the occurrence of natural hazards with minimal damages depends on many factors, including land tenure.

By definition, vulnerability is "the diminished capacity of an individual or group to anticipate, cope with, resist and recover from the impact of a natural or man-made hazard" (IFRC, n.d.). This is caused by several factors such as physical characteristics (age, sex, disabilities), but also "a wide variety of dynamic and long-term social, economic, and political processes," including poor governance, discrimination and inequality (IFRC, n.d.; UN-Habitat, 2010, p. 12; Johnson et al., 2018, p. 84). One of the major contributors to vulnerability is poverty as the poor are more likely to be frequently exposed to hazards, and less likely to possess the resources to recover fast and/or build resilience (IFRC, n.d.). Essentially, sources of livelihoods are crucial, and for many in developing countries, they are derived from land.

Secure land tenure is an important aspect to build capacities to cope with natural hazards. Protected land rights secure livelihoods, particularly for rural populations, food security, and shelter (UN-Habitat, 2010; Mitchell, 2011, p. 2). Contrary, insecure tenure, having no proof of legal ownership, shows reduced incentives to invest into protective measures, such as using stronger housing

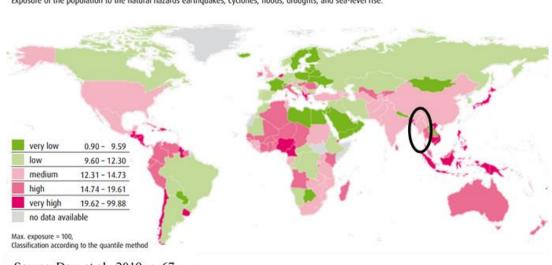
material, building flood barriers (Walch, 2018; Reale & Handmer, 2011; Chagutah, 2013), and to adopt more sustainable practices (Walch, 2018, UN-Habitat, 2010). Furthermore, insecure tenure is critical after the disaster as it puts people at risk of losing the rights to their lands, becoming landless, and to recovery aid, in some cases. Consequently, they lose the ability to recover fast, to re-establish livelihoods, and thus to return to their normal lives (Walch, 2018; Handmer et al, 2017; McEvoy & Mitchell, 2019). Hence, insecure land tenure can exacerbate the disaster-vulnerability by reducing the ability to cope and recover fast, mainly for rural populations. In this light, protection of land rights is essential to enable secure land tenure, which represents means of livelihoods that capacitates for investment into preparedness and faster recovery, allowing to develop capacities to decrease disaster-vulnerability.

THE CASE OF MYANMAR

Myanmar is one of the countries frequently exposed to natural hazards. While the country ranks medium among countries at risk of exposure to natural hazards, see the circle in Map 1, it ranks very high regarding the lack of coping capacities, as shown in Map 2 below (Day et al., 2019, p. 67). The lack of capacities is also reflected in the fact that Myanmar has ranked the highest on fatalities caused by extreme weather events between the years 1998-2017 (Eckstein & Hutfils, 2018, p. 8). It is, therefore, reasonable to suspect that natural disasters in Myanmar are caused by the failure of human systems to cope with them rather than by the frequency of natural hazards. Particularly, in light of the controversial land legislation.

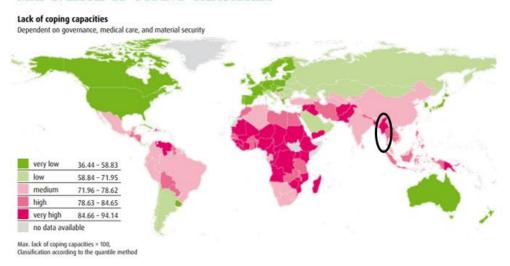
Exposure of the population to the natural hazards earthquakes, cyclones, floods, droughts, and sea-level rise.

MAP 1: EXPOSURE TO NATURAL HAZARDS



Source: Day, et al., 2019, p. 67.

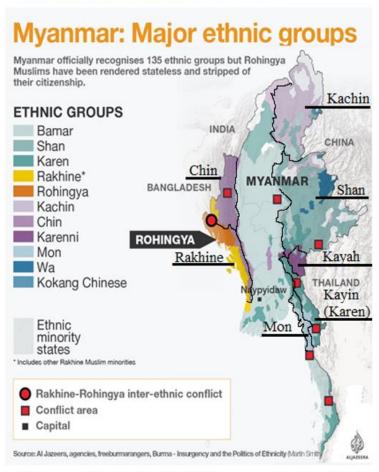
MAP 2: LACK OF COPING CAPACITIES



Source: Day, et al., 2019, p. 67.

To reduce vulnerability and to cope better with natural hazards requires tenure security. However, the Myanmar Government passed new land legislation in 2018 that rather threatens the tenure and so potentially reduces capabilities to cope with hazards. The Government issued an amendment to the Vacant, Fallow, and Virgin Land Management Law (hereafter VFV law), criminalizing tenure without land use certificates (hereafter LUCs). The amendment builds on the 2012 VFV law and the 2012 Farmland law that both require LUCs to prove the right to use these two types of land. Nevertheless, the amendment increased the threat of land dispossession by stipulating a deadline of March 11, 2019, to apply for the LUCs. After this date, the continuous usage is prohibited, and if found in use, punished financially and/or with imprisonment. Furthermore, the new LUC enforcement strengthens the VFV law, which allows any "unregistered land" to be seen "as empty and unused," classifying it as VFV (Suhardiman et al., 2019, p. 369). The amendment has thus legally turned "many rural people into official 'squatters'," whose land rights are not recognized without having/applying for LUCs and allowing the Government, the ultimate owner of the land, to reclaim their lands (p. 369). However, this is a sensitive topic in Myanmar as land, mainly in these ethnic states, has been expropriated for "public purposes" throughout history (Scurrah et al., 2015). Therefore, while Myanmar is a signatory of the Sendai Framework, by issuing the amendment the Government rather threatens the land tenure then secures it for those owning no official land title. Consequently, it contradicts the idea of the Sendai Framework approach to enable preparedness for better and faster recovery as it threatens rural population rights to their farmlands and so livelihood sources. Nonetheless, while these laws endanger anybody without the proof of applying for/ owning a LUC, ethnic minorities are at the highest risk.

The ethnic minorities are at higher risk as their land is predominantly classified as VFV, and none of the mentioned laws fully recognize ethnic costumery land-use practices. The ethnic minorities reside predominantly in seven border states, while the low lands are inhabited by the ethnic majority – the Bamar (see Map 3). These seven states carry the names of the largest ethnic minorities in its territory – Rakhine, Chin, Kachin, Shan, Kayah, Karen (also called Kayin), and the Mon states. While there are almost 50 million acres classified as VFV land in Myanmar, out of that 75% is located in the ethnic states (San, et al., 2018). This essentially makes ethnic populations more endangered by the VFV amendment as land in their states are predominantly classified as VFV, although the land may be in use. This is because the ethnic farmers practice shifting (or swidden) cultivation, which means leaving the land unused for it to recover after cultivation (Scurrah et al., 2015, pp. 4, 12-3). However, as left unused it exposes the ethnic farmers, lacking LUCs, to the VFV laws, thus hindering their land rights and tenure security.



MAP 3: LOCATION OF MAJOR ETHNIC GROUPS

(Al Jazeera, 2017, adjusted to highlight the names and borders of ethnic states)

Furthermore, the registration progress creates further barriers. The certificates are issued for a fee, after the presentation of identity cards, which is problematic in many ways (McCarthy, 2016, p. 3). Firstly, the issue of national identity cards has been faced by the Rohingya minority, who are not seen as citizens (Naing, 2019). Secondly, and more generally, the need for the LUCs creates a leeway for the Farmland Administrative Bodies (FAB) to decide on the land ownership, which the people may have inhabited for generations without official land title (pp. 3-4). Therefore, given the lack of legal protection of the ethnic agricultural customary practices and dominant VFV land located in their states, it is possible to assume that ethnic minorities, and their tenure, are most affected by the land laws. Hence, it is reasonable to focus on ethnic minorities when assessing the effects of laws and existing structural realities on disaster-vulnerability in Myanmar.

Consequently, as highlighted, the disaster risk reduction approach includes the crucial role of land in reducing disaster-vulnerability, the Myanmar Government seem to be acting in contradiction to this approach. This is because the 2018 amendment in combination with the 2012 land laws seems to rather increase tenure insecurity, which can increase the disaster-vulnerability of the ethnic population. Thus, this research aims to investigate whether and why ethnic minorities' land tenure is most endangered by the 2018 amendment, and how that influences their capabilities to prepare or recover from the occurrence of natural hazards. In doing so, the research assesses firstly the effect of land rights on the tenure insecurity, and subsequently the impact this may have on the vulnerability to natural hazards. More specifically, my research question states:

How do land rights in Myanmar impact the tenure security of ethnic minorities in light of recent land law reforms, and how does that affect their vulnerability to natural disasters?

1.3 PREVIOUS RESEARCH & THE GAP

In the global DRR literature land tenure is discussed as an influencing factor, however, tenure is omitted in DRR literature focusing on Myanmar. In the case of Myanmar, the literature is split to assess either disaster risk reduction or land rights and tenure.

The literature on DRR mainly discussed on one hand factors that make communities vulnerable to natural hazards (floods being the main focus), and on the other the institutional settings in disaster responses. Generally, poverty and fragile housing have been seen as a significant factor that increases the vulnerability of communities in flood-prone areas (Kawasaki et al., 2019). However, additional studies point to other factors beyond economic variables, such as the degree of adaptation and geographical specificities influencing exposure to hazards (Otsuyamaa et al., 2018). The other strand of literature

focuses on co-governance and collaborative networks across disaster management actors (Srikandini et al., 2018; Zaw & Lim, 2017; Htein et al., 2018). They found an increased density of interactions, suggesting more cooperation among actors, including the state's military, and greater role, though not stronger bargaining power, of CSOs and NGOs. In general, a rather persistent top-down, hierarchical approach driven by the Government's demands was identified.

The literature on land rights suggests continuous path-dependent colonial legacies, weak land administration, and the land laws problematics, affecting mainly the ethnic communities. The VFV law is perceived to continue to employ the colonial concept of "waste" lands, often including lands under active fallow cycles or grazing, maintaining the Government's power to confiscate land for "public purposes" (Scurrah et al., 2015, p. 2). Likewise, as land administration remains using outdated cadastral maps, continues to suffer from overlapping laws and institutional competencies, causing a conflict of interests, gray-zones are created allowing for further exploitation (Scurrah et al., 2015; Htoo & Scott, 2018; Suhardiman, et al., 2019; Mark, 2016). Overall, the literature seems to suggest that the laws endanger mainly the ethnic small-scale farmers, as not reconditioning their customary practices (Hudson-Rodd & Nyunt, 2001; McCarty, 2016; Kramer 2015).

In the global context, few articles are assessing the effects of tenure insecurity on disaster-vulnerability and in a limited number of contexts. As discussed, insecure tenure causes investment disincentive to protective measures due to the possibility of losing land and investment. Walch (2018) finds this outcome in the Philippines, as well as the increased exposure to hazards to protect one's property. Other case studies, focusing on Southern Africa (Chagutah, 2013) or Asia Pacific Islands (Mitchell, 2009 and 2014), touch upon mainly land grabbing after disasters, and loss of livelihoods. Additionally, reports by INGOs such as the FAO (Mitchell, 2011) and UN-HABITAT (2010) point to a general trend of tenure insecurity exacerbating disaster-vulnerability, with no specific cases. Nonetheless, the little focus on tenure insecurity impact on disaster-vulnerability has been explicitly mentioned by Reale & Handmer (2011) as well as Chagutah (2013) and continues to exist given the scarcity of contextualization. This gap is observable in the DRR literature on Myanmar as it does not touch upon the effects of tenure nor the land rights and rather focuses on other causes of disastervulnerability. Therefore, this thesis aims to enrich the literature by assessing the effects of land laws on land tenure security and its impact on disaster-vulnerability in Myanmar.

1.4 THEORETICAL FRAMING

To support the assessment, Amartya Sen's capability approach will be used as a theoretical framework.

The capability approach focuses on the possibility to make choices and opportunities that are available to an individual to proceed towards the desired

outcome. Essentially, Sen highlights in his approach that when freedoms exist and the circumstances allow to use the freedoms towards personal development, it should enable a person to proceed towards the life the person upraises (Sen, 1999). In this sense, the approach focuses on "inequality of opportunity" and the need for equal freedoms (Arroyoa & Åstrand, 2019). Capabilities are then dependent on "the opportunity, choice, and ability of people 'to transform resources'" into personal goals, which is based on deliberate actions (agency), active citizenship, and rights (Arroyoa & Åstrand, 2019). The approach stresses the role of the structure in which people live and the role of their agency, when the structures are not restrictive, to attain their goals. While Sen's attention was the attainment of development, in this paper the logic of the framework is applied to discuss the abilities of minorities to decrease their disaster-vulnerability. In this sense, the freedom analysis will be substituted, or complemented, by rights discussion. Nonetheless, unlike freedoms, Sen stresses that rights to be enforceable require a duty-bearer to provide them (Sen, 1999).

Hence, it is argued that when freedom of opportunities and choices, given structural barriers and insufficient protection of land rights exist, tenure security is negatively impacted and so the possibilities and choices to decrease one's disaster-vulnerability.

1.5 DATA COLLECTION AND METHODS

To assess the impacts to answer the research question, a single case study research was employed to provide in-depth insights into the unique context of Myanmar. The primary data used were online semi-structured interviews with practitioners in Myanmar that were triangulated with few existent INGO reports targeting tenure in light of the legislation, the laws themselves, or disaster preparedness. Additionally, a thematic analysis was used to find the over-reaching themes stemming from the interviews. The benefit of this tool is that it enables to identify the main ideas and their interaction, while maintaining context-sensitivity (Creswell, 2003; Bryam, 2012). By using these data and methodology it was aimed to assess the novel relationship between land rights, in light of the land laws, and disaster-vulnerability in Myanmar's context.

Myanmar makes an interesting case study as it is one of the most ethnically diverse countries in the world while being prone to natural disasters. It has 135 recognized minorities, and a history of conflicts between the Government and the ethnic states, where land rights have played its role. In few ethnic states, but fully only in Karen state, the issue of land administration let to the establishment of local land policies to protect customary land rights. Nonetheless, despite the recent transitioning to democratic governance, starting with the first democratic election in 2011, the national ceasefire has not been concluded yet, while the new legislations have sparked new frustrations. Furthermore, Myanmar became a signatory of the 2015 Sendai Framework, suggesting the DRR agenda to be part of the Government policies. And as discussed previously, while Myanmar may be

rather moderately at risk of natural hazards, it lacks coping capabilities, which may be influenced by land tenure issues. This background of the ethnically diverse newly transitioning country towards democracy, where land has always played an important role makes Myanmar a good case study.

This research intends to contribute to the academic literature by understanding the land rights impact on the tenure and disaster-vulnerability, in the under-researched context of Myanmar. Given the suggested problematic circumstances of outdated maps and problematic recognition of customary practices, it is expected that the tenure security will be negatively impacted, and so the capabilities of ethnic farmers decrease their disaster-vulnerability. The findings can provide a deeper understanding of the importance of land rights, and tenure security for DRR efforts in Myanmar.

The thesis is structured to start with the literature review that explains previous studies and positions the research in it. Afterward, a theoretical framing, methodology, and types of data are explained. This is followed by the collected data presentation and discussion. Finally, it will conclude by reflecting on the research limitations and the potential outlooks for further research.

2 LITERATURE REVIEW

This section discusses previous research on DDR and land tenure. It defines land tenure (in)security and explains the observed impacts of unsecured tenure rights on disaster-vulnerability drawn from different case studies. In doing so, the section highlights the literature gap and the contribution to narrow the gap.

2.1 LAND TENURE (IN)SECURITY

Secured land tenure has been defined by Chagutah (2013) as "a contractual agreement between the citizen and the State, demarking ownership of a plot of land. It is a promise of permanent residence and a clear statement that the Government will not evict residents without compensation and much negotiation" (p. 7). Nonetheless, as Mitchell (2014) points out, this does not need to be in the form of "land titles," it can also be "land use certificates, records of occupation, or lease" (p. 112). In other words, one does not need to be the landowner to be able to secure their tenancy rights. Nevertheless, secured tenure should ensure the protection of property rights against others' interests, as well as "a degree of economic security" (Mitchell, 2009, p. 4; Mitchell, 2017, p. 237). Consequently, tenure security enables people to rebuild back better, safer, and faster as upon returning to their lands, they can start resuming their livelihoods and so ensure their food security (UN-HABITAT, 2010; Walch, 2018).

Contrary, tenure insecurity embodies the "likelihood that rights in the land will be lost" (Real & Handmer, 2011, p. 161). As an outcome of lacking proof of occupancy rights, those who had to leave their homes due to a hazard occurrence are at heightened risk of land grabbing (Mitchell, 2009/2015; Unger et al., 2017; McEvoy & Mitchell, 2019; Walch, 2018; Fitzpatrick & Compton, 2014). Mitchel (2009) points out the experiences from the early 2000s natural disasters (2004 Asian tsunami, earthquakes in India and Indonesia, tropical cyclones in the Philippines and Samoa), where after the disasters land grabbing occurred, causing loss of livelihoods (p. 1). Nonetheless, land grabs happen also before disasters hindering the possibility to prepare for the evicted. In the following section, the three most re-occurring aspects in which the lack of land rights, and so tenure insecurity induces disaster-vulnerability are discussed in the global context.

2.2 THE ROLE OF INSECURE TENURE IN FUELING THE DISASTERS-VULNERABILITY

The role of insecure tenure in fueling vulnerability to natural disasters can be separated into the issues arising in the absence of land tenancy documentation before, during, and after the hazard/disaster takes place.

2.2.1 INVESTMENT DISINCENTIVES

Tenure insecurity has been heavily correlated with inducing investment unwillingness in DRR measures.

This has been associated with the fear of losing the land, by land grabbing or eviction before or after the disaster, and so the investment (Brown & Crawford, 2006; Walch, 2018; Handmer et al., 2007; Reale & Handmer, 2011; Mitchell, 2009/ 2011/ 2015/ 2017; McEvoy & Mitchell, 2019; Chagutah, 2013). Walch (2018) confirms this attitude of reluctance in the Philippines after the 2012 Typhoon Haiyan. The respondents have indicated that the reason for not investing in stronger housing materials (canvas, bricks), windbreaks, or flood barriers is due to the fear of losing their land, which they do not legally own as lacking official land titles (p. 129). While many studies discuss income/poverty as a joint factor with land insecurity to drive vulnerability (for example Chagutah, 2013; Usamah et al., 2014), Griffith-Charles et al. (2014) expand the discussion by applying economic behavior, which may be independent of the income variable. They suggest that despite having funds available (not needing to take credit) the reluctance to invest in "mitigation strategies" can be invoked anyways because of the "fear of losing the investment and the land to counterclaimants before and after the disaster" (p. 140). This behavior is connected to the "assurance effect" of formalization, where the rights to the land serve as an assurance of the long-term benefits of an investment (p. 147). The Philippines' Government body responsible for rehabilitation and recovery (OPARR) also notes that tenure security increases incentives to invest and to attain more careful use of land, if there is a certainty of inheritance (in Walch, 2018, p. 129). Chagutah (2013) brings an example from Peru, where formalization of land tenure for informal urban settlers was "associated with a 68% increase in the rate of housing renovation within only four years of receiving a title" (p. 7). Conversely, tenure insecurity increases the likelihood of abstaining from investment, which endangers the tenants due to fragile housing, and, by making their lands more damage susceptible, endangering their sources of livelihoods and food security, particularly for farmers. Nevertheless, tenure insecurity not only disincentivizes investment, but it may also lead to discouragement to leave the land.

2.2.2 WORSENED LIVING CONDITIONS & EXPOSURE

Another aspect reoccurring in the literature is the high risk of land grabbing, leading to increased vulnerability to natural disasters in terms of worsening livelihoods and increased exposure.

The loss of land may result in food insecurity; particularly for those deriving livelihoods and food supplies from their land – farmers (Mitchell, 2011, p. 5). Besides, the most vulnerable to land loss are those having low income, savings, or asset base (UN-HABITAT, 2010). Becoming landless also for non-farmers makes them more susceptible to the hazards as their coping potential may decrease due to worsen livelihoods and food security. Furthermore, tenure insecurity increases the incentive for prolonged, while potentially avoidable, exposure to the hazard. Walch (2018) found in the case of the Philippines that men are more likely to remain in the households throughout the hazard occurrence to secure their land ownerships and possessions, despite many acknowledging the risk of death or injury involved (p. 129). As the interviewees explained - "they did not want to leave before the storm because they feared landowners would use the opportunity to bar them from returning or imposing a ban on construction unless the informal settlers provided compensation" (p. 129). On the other hand, Usamah et al. (2014) highlight the role of community trust and cohesion to compensate for the lack of tenure security in the Philippines. They found neighbors safeguarding the property for those, who had to leave their homes, and contributing to joint reconstruction efforts and communal warnings. Consequently, land insecurity may increase one's exposure to natural hazards, and damage, if not fully loose source of livelihoods, unless strong community cohesion and trust are in place. Nevertheless, the literature suggests not only the loss of livelihoods but also the potential loss of relief eligibility to negatively impact the recovery process.

2.2.3 DIFFICULT ACCESS TO CREDIT, AID, AND RECOVERY

The land title was witnessed to be a condition for credit and post-disaster aid, and so an enabler for faster recovery.

Walch (2018) mentions that in the Philippines after the 2013 Typhoon, the people, who did not possess some kind of proof of land ownership/lease, could not access the "reconstruction loans" or "government compensation" (p. 131). McEvoy & Mitchell (2019) bring the case from the capital of the Solomon Islands, where no title let to "isolation from government disaster response services [...] and restricted access to information and expert knowledge to inform potential disaster risk reduction and climate change adaptation actions" (p. 4). Nonetheless, this is not only the case for governmental aid. Before the change of position towards the challenges of owning land titles in developing countries, USAID also did not provide aid to poor families without land titles after a natural disaster in Grenada in the years 2004 and 2005 (Griffith-Charles et al., 2014). Walch (2018) likewise found that those, with "no land tenure [,] recover slower from disasters than do people who own land" (p. 130). Furthermore, the respondents themselves

identified "land" as the aspect "they most needed for recovery" (p. 131). This was because the inability to return to their lands made them "dependent on the government and NGO programs" (p. 131), making them vulnerable upon aid termination. Therefore, land tenure insecurity, essentially, complicates peoples' recovery after the disaster. Likewise, it increases their vulnerability to future disasters, as their chances of building back better/safer and fast are hampered, prolonging the period of income/livelihoods disturbance.

To conclude, the most reoccurring aspects, that increase people's vulnerability, to natural hazards can be divided into three stages – before, during, and after the hazard occurrence. In the pre-disaster stage lack of tenure security has been observed to discourage investment into safety measures, leaving the households less protected and more susceptible to damage. At the onset of the hazard, the absence of protected land rights may increase exposure to the hazard, and thus the risk of higher casualties. In the aftermath, the conditional eligibility for governmental relief may prolong the aid-dependency period, rather than enabling people to recover their livelihoods. Nonetheless, while in the global context the DRR-related academic literature and international organization's reports (such as the FAO and the UN) recognize the role of land in the disaster risk reduction efforts, for the case study of Myanmar this connection is lacking, although land issues are a prominent challenge in the country.

2.3 THE CASE OF MYANMAR

The academic literature on Myanmar has been explored in two separate strains – one focusing on disaster risk reduction and the other on the land rights.

2.3.1 DISASTER RISK REDUCTION

The literature on disaster risk reduction in Myanmar has mainly focused on the populations living in disaster-prone areas and on the institutional aspects of disaster management.

While the literature classified on average poorer families to live in flood-prone areas, it also suggests community cohesion to compensate for the lack of resources and to provide needed support. Kawasaki, et al (2019) found that communities living in flood-prone areas tend to be poorer, however, not stipulating a clear relationship between vulnerability and income. The vulnerability of the poor is demonstrated in the fragile housing, and fewer capacities to resist and recover from the disaster. Nonetheless, Otsuyamaa et al (2019) found in the Ayeyarwady river region (inhabited by Bamar majority) a strong sense of community to compensate for the income differences. While they identified on average poorer communities living in the flood-prone areas, they found that those with more resilient housing (build higher and from stronger material) offer housing to those with more fragile housing. Likewise, they found

that richer families, owning boats, helped those without such assets to commute. Similarly, James & Paton (2015) confirm the strong social cohesion among the Buddhist delta communities by pointing to communities sharing food after Cyclone Nargis. They also identified low mobility from farming and fishing communities in the aftermath, as most returned given the "kinship and family networks, social networks, cultural ties and land title deeds to the land the farming and fishing families have worked for generations" (pp. 217-8). This finding makes thus resettlement unfeasible.

Furthermore, while "on-farm" labor returned and agri-business (including micro, small and medium-sized ones) were "urged to resume production" to recover income, only 27% of households had access to small grants or credit to restart their businesses (p. 217). In the end, leaving social networks to fill in - as 95% of households reported getting financial support from their families and friends (p. 217). Similarly, positive community resilience was found by Kawasaki et al. (2017), where Buddhist monks substituted the Government's role of providing warnings and even offered temporary housing in their monasteries. Nonetheless, while this may be the case among communities with strong cohesion, or where the danger of land-grabbing is stemming from within the community, it seems less likely to protect those without land titles from interests of third parties like private companies, or the Government. Furthermore, REACH assessment in Norther Rakhine found people being aware of the natural hazards, however, lacking resources and knowledge to respond to them. The latter is an outcome of inaccessible information due to radio forecasting in a language not understood by all, given the variety of dialogues, and usage of technical terms (2015, pp. 3-4). This creates problematic situations in the camps for internally displaced people, where they "in some cases reportedly refused to evacuate in government-provided vehicles due to a total lack of information and high levels of distrust about where they were being moved and why" (p. 31). In light of the previous literature, only 65% of people surveyed have a place to evacuate to -34% identified monasteries or religious buildings, while 21% well-built houses in their communities (p. 24). Essentially, this creates a big barrier as lack of knowledge and directives may further increase vulnerability to natural disasters. On this note, the other stain of DRR literature focuses on the interaction among main actors in disaster risk reduction.

The literature defines the nature of interactions to be hierarchical, top-down driven by the Government's demands and interests while maintaining the military omnipresent in the disaster management (Srikandini et al., 2018; Zaw & Lim, 2017; Htein et al., 2018). Nonetheless, while interaction amongst different levels of Government bodies, military, NGOs, INGOs, and CSOs, seems to increase, allowing for more space for NGOs and CSOs, it was found not necessarily increasing their bargaining power to influence the policies.

2.3.2 LAND RIGHTS

The literature on land rights focuses mostly on the description of the historical problematics connected to land such as land grabbing and acquisition, legal and administrative path dependency, and the problematics of the new land laws.

The literature points to the historical importance of land in Myanmar. Land has played a special role as a source of power since colonial times (Hudson-Rod & Nyunt, 2001; Dusek, 2017). Although the British established property rights to inherit and sell land (by the 1876 Lower Burma Land and Revenue Act), the postindependent (since January 1948) Burmese Government aimed to reverse the increased landlordism (Mark, 2016, Scurrah et al., 2015). It was at the point of Burmese independence when the central majority-led Government signed with the ethnic groups (Kachin, Shan, and Chin) the 1947 Panlong Agreement on autonomy and natural resource rights; however, none of these rights materialized due to the 1947 Constitution, which stipulated the state to be the land "ultimate owner" (Mark, 2016, pp. 146-7). The state land ownership has been reaffirmed in the 1953 Land Nationalization Act, the 1963 Tenancy Law, and likewise in the 2008 Constitution (Article 37) that has been passed under the military regime (McCarthy, 2016, pp. 1-4; Mark, 2016, pp. 447-9). The "unfulfilled promises of autonomy [...] increasing subjugation to the Bamar ethnic majority," "repression of their cultural rights [including land cultivation] and religious freedoms," and the continuous land-grabbing induced militarization of the opposition in the ethnic states (Mark, 2016, p. 146, Kramer, 2015, p. 359). This led to the establishment of independent organizations across the ethnic states, and instability across the

To combat the repression of cultural rights, some ethnic organizations stepped in to protect the customary land rights. The Karen National Union (KNU) developed a local land policy (drafted in 1974 and adopted in 2016) and the Kachin Independence Organization (KIO) issued its procedures and rules (Kramer, 2015, pp. 360-1, Hong, 2017, pp. 230-1). As noted by Hong (2017) "[t]he history of semi-autonomous land law in Myanmar cannot be separated from the country's British colonial past or half a century of ongoing armed conflict between Myanmar's military and powerful ethnic armed organizations (EAOs) fighting for self-determination" (pp. 230-1). Nonetheless, the customary rights continue to be overlooked in the Government's legislation, making the ethnic minorities especially vulnerable to land grabbing.

2.3.3 ETHNIC POPULATIONS & CUSTOMARY RIGHTS

The literature suggests that the most vulnerable to the new legislations are the ethnic farmers due to their customary tenure practices and rights (McCarthy, 2016; Scurrah, 2015; Mark, 2016), and in particular the smallholder ones (McCarthy, 2016; Scurrah et al., 2015, Suhardiman, et al., 2019).

Due to the ethnic state practicing rotational swidden system (shifting cultivation), which are not recognized by the national laws, these lands are

"invisible to the state administrators and maps" (Scurrah et al., 2015; McCarthy, 2016, p. 3; San et al., 2018, pp. 6, 27; Lundsgaard et al., 2018, p.16). The ethnic customary practices make it easy to label such lands as "wasteland" or "vacant" and thus subject to state appropriation for "public purpose" in line with the still existing Land Acquisition Act of 1894 (Scurrah et al., 2015). The lands' redistribution has been re-affirmed in the 2012 VFV Land Law, allowing to allocate "supposedly unused land to investors and [for them to] register land ownership" in efforts to attract foreign investment to boost the country's development (Suhardiman et al., 2019, p. 369). The first time the customary land rights have been expanded upon in the 2016 National Land Use Policy, which has been heavily influenced by international donors, and local CSOs, and thus marked the "most significant step the Myanmar Government has taken towards customary land tenure reform" (Suhardiman et al., 2019; Dusek, 2017, p. 160). While it does not touch upon the issues of past injustices of land-grabbing and ongoing disputes, it "acknowledged the land use rights of the ethnic nationalities for the first time" (McCarthy, 2016, p. 6; McCarthy, 2018, p. 240). Furthermore, it has no legal binding as it is a policy, not a law. Nevertheless, there are hopes of the national policy to lead to "harmonized land law" (McCarthy, 2018, p. 240), which has been planned to be drafted in the upcoming years. The issue of un-harmonized laws, however, has been only one of the problems of the land administration.

2.3.4 OUTDATED MAPS AND INFORMATION GAPS

Another major problem related to land rights has been that land administration in Myanmar uses outdated cadastral maps and there is an unequal spread of legal knowledge.

Previous research points to this issue of the Government department of Settlement and Land Records, using "century-old cadastral maps" making "the size of the farm holdings and parcel boundaries (...) of dubious accuracy" (San et al., 2018, p. 28). This poses several challenges. Firstly, as mentioned, it allows the land to be seen as a "wasteland" and thus, based on the Government ownership of land, possible to allocate it to the private sector (Scurrah et al., 2015). Additionally, Faxon & Aung (2019) found that farmers having their land unregistered "had less chance of getting Form 7 [land use certificate for farmland], and reported longer wait[ing] times and more informal costs" as an outcome of "upland areas [being] rarely zoned as 'farmland'" in the Kachin State unlike the lowland (inhabited mainly by the Burmese majority) (p. 20). Additionally, shortly after the amendment was passed, unequal legal knowledge was found. While in the three ethnic states 94% of respondents never heard of the amendment and its substance, in the Burmese majority lowlands only 6% were in the same position (Par & Soe, 2019).

This lack of information adds to the problematic issue of mapping, in light of the possibility to label unregistered land as vacant, stemming from land administration "lack[ing] land resource inventories at the district level and digitized GIS-based mapping" (San et al., 2018). While UN-Habitat attempted to

update the maps, implementing small-scale projects, the projects have not been expanded upon (San et al., 2018). This essentially poses a question of whether the insufficient mapping is caused by a lack of willingness or capacities.

2.3.5 WEAK LAND ADMINISTRATION & CONFLICT OF INTREST

The land administration in Myanmar suffers from overlapping laws and conflict of interests among the members of the administrative bodies and those claiming their lands back.

Mark (2016) highlights the problem of stacked laws, meaning "multiple layers of revoked and active laws layered [...] over time, often creating conflicts and contradictions in the legal framework" (p. 445). Until the issuing of the 2012 new land laws, there were "seventy-three laws and regulations related to land governance" (p. 446). A tension, for example, exists between the 1964 Executive Order 1/64 that defines land rights when there is a farming activity taking place for more than five years, with no official documents needed, which contradicts the new 2012 laws, which require the respective land use certificates (p. 446). Furthermore, the 2018 VFV Land Amendment adds the threat of eviction and a penalty of up to two years of imprisonment and/or a fine for those residing VFV land without VFV land certificate (Par & Soe, 2019, p. 2). These overlaps and gray zones in the laws enable those with monetary resources and political ties to "ensure that the law works in their favor" (Mark, 2016, p. 450). This has marked the unequal structure of land ownership and has been fueling unequal wealth and income distribution (McCarthy, 2016). Moreover, not only do the laws overlap but also the definitions differ among the active old laws and those new ones, creating an additional "institutional overlap of administrating different types of the land" (Scurrah et al., 2015, p. 11). Similarly, an institutional overlap exists between the Myanmar Investment Committee and the Central Committee for Management of Vacant, Fallow and Virgin Land (CCVFV) as both can grant the land to foreign investors (p. 11). Nonetheless, this overlap creates not only confusion but also a conflict of interests and lack of independence for the CCVFV, as some of its members are also part of the FAB, who are the focal points for Form 7 applications (p. 11). Therefore, not only the overlapping laws and institutional structures create a legal gray zone that allows for strengthening inequality, already existing in the land ownership.

To summarize, the land has been playing a very important role in Myanmar's history as a source of power and peacebuilding but also having a socio-cultural role. However, land administration is also facing several setbacks. Few studies pointed out that the Myanmar communities do not see the land only as an item with monetary value, but also as having "social, cultural, spiritual and historical value" (Mark, 2016, p. 444; James & Paton, 2015). This means that losing the land may not represent only an economic loss, but also a loss of ancestral ties, making one's land hardly replaceable. To the present day, the *stacked laws*, lack

of customary land use, overlapping administrative structures, and outdated maps continue to threaten ethnic communities and their tenure security.

2.4 FILLING THE GAP

As presented in the global context several studies attempt to discuss the relationship between tenure insecurity and vulnerability to natural disasters, however, similar studies were not identified for the case of Myanmar.

While some studies explicitly target this relationship, others connect it rather to a wider discussion on informal tenure, and land administration. The found case studies are mainly focusing on the Philippines (Fitzpatrick & Compton, 2014; Usamah et al., 2014; Walch, 2018), some examples from the Pacific Islands (Mitchell 2009 and 2014), the Caribbean (Griffith-Charles et al., 2014) or southern Africa (Chagutah, 2013). Nonetheless, while land tenure rights are a complex and historically sensitive topic in Myanmar, it has not translated into the disaster preparedness literature.

Thus, this thesis adds to the literature in several aspects. Firstly, it aims to do so by bringing into the discussion a new case study of 1) a disaster-prone country, 2) committed to Sendai DRR efforts, and 3) with a history of land tenure problems and ambiguous land tenure laws. Moreover, Myanmar is a highly ethnically diverse recent democracy with on-going conflicts and unsettled national ceasefire between the Government and some of the ethnic states. This expands the discussion on disaster risk reduction and land rights into more complex settings of conflict-affected states and to a possibility to assess the complexities of DRR in highly politicized context, where it may be misused to consolidate central governance. On the other hand, both literature strains often lack a clear theoretical framing of the problem; by contrast, I suggest using Sen's capability approach to enrich the discussion. While Sen's approach focuses on constrains in achieving development, it is deemed useful to apply similar logic to barriers in building disaster resilience. Thus, this work will assess how the land rights and the tenure (in)security, affect the capabilities of ethnic communities to build resilience to natural hazards.

3 METHODS

The selected methods and theoretical framework discussed in this chapter intend to guide the researcher to answer the research question. The research question aims to understand the impact of land rights, in light of the new laws, on tenure and disaster-vulnerability of ethnic minorities in Myanmar. In doing so, the two strains of literature on land rights and DRR are merged to guide the interviews, which are the main empirical data source. Nonetheless, given the novel context, the interview data will be triangulated with reports and newspaper articles. Furthermore, a thematic analysis is carried out to highlight the over-reaching topics that the respondents raised in connection to the effects of land rights on the ethnic minority's tenure and so capabilities to decrease their disaster-vulnerability. Consequently, this section starts by describing the theory and its application, then moves to methodology, project design, and closes with a short discussion of the methodological limitations and their potential mitigation.

3.1 THE THEORETICAL LENS: CAPABILITY APPROACH

3.1.1 CAPABILITY APPROACH

The capability approach, developed by Amartya Sen in his book Development as Freedom, highlights the importance of freedom on the path towards and the achievement of development.

To achieve development six different forms of freedoms are seen as the interlinked means and end of the process, extending a classical perspective that places income at the center - the "political freedom," "economic facilities," "social opportunities," "transparency" and "protective security" (Sen, 1999, pp. 18, 90). Hence, freedoms enable a person to work towards the improvement of their situation, however, their existence is not sufficient.

To attain a positive outcome, one needs the possibility to use the freedoms. This is because freedoms embody the "processes of decision making as well as opportunities to achieve valued outcomes" (p. 291). Hence, first, there needs to be the opportunity of having a choice, as well as the possibility of making the use of having the choice. Thus, exercising political freedom is not only about having the right to participate in public discussion but also about having the ability to participate (p. 242). This is very much dependent on the individual (age, gender,

disabilities), as well as the social circumstances. To illustrate this better, Sen points to the difference between Gandhi's fasting and a person suffering from famine. In the latter case, the person does not have the choice to eat, which creates the "unfreedom" that limits the person's freedom to live (p. 292). In other words, the capability approach focuses on "both the process that allow[s] freedom of actions and decisions, and the actual opportunities that people have, given their personal and social circumstances" (p. 17). Consequently, the process of making decisions needs to be accompanied by the freedom of choice, and 'adequate' opportunities. The approach puts a strong emphasis on the individual agency while considering the influence of the social context in which people live. It thus includes into the analysis "the way different kinds of rights, [social, political and economic] opportunities, and entitlements" contribute or limit the "expansion of human freedom in general, and thus [limit the possibility of] promoting development" (pp. xi/xii, 37). The individual's agency lies in the conscious decisions made about "the life a person has a reason to desire" and value (pp. 19, 133).

In this light, it is important to discuss the role of the individual agency and the role of the structure in which the people live. Sen connects the freedoms also with the discussion on human rights. The analogy works the same way as there is a difference between having such rights, which may not be fulfilled, and not having them at all (pp. 230-1). Nonetheless, the difference between freedoms and rights is that rights require a duty-bearer to be enforceable (p. 228). While land rights are not considered to be human rights, they have been directly seen as means to human rights – such as health (Carmalt, 2014), food (Mitchell, 2011), and shelter (Mitchell, 2015). Thus, land rights have been viewed as an essential aspect of building the capacity to reduce disaster-vulnerability.

3.1.2 CAPABILITY APPROACH APPLIED

Linking this theoretical discussion of the capability approach to land rights lies in the assumption that having secured land rights leads to the freedom of choice to act in a manner to decrease disaster-vulnerability.

To illustrate the assumption, the reoccurring themes in the literature can be translated into the freedom language. When people have secured rights to land, by having the LUCs, and are not threatened to lose the land, they have the freedom of choice to invest into the land to make it more resilient as that investment is secured; they have the freedom to choose to leave their property as they will be able to reclaim their land, and they have the freedom to choose to take credit to start the rebuilding process. However, it does not imply that having such freedom necessarily leads to the expected outcome of decreased-vulnerability (or improved resilience). It depends on the people's choice if they will choose to make use of the opportunities.

Therefore, the important aspects are the existence of rights (freedoms), the possibility to make a choice, and the ability to make use of the rights. In this light, it is expected that in the absence of/threat to land rights caused by the structural

barriers (social circumstances) the land tenure insecurity is induced and thus peoples' capabilities to decrease disaster-vulnerability, or to build resilience.

3.2 METHODS & ANALYTICAL APPROACH

Case studies and interviews are two typical methods used in the field of global DRR and Myanmar land rights literature. This work conducts a qualitative study, using a single case study research method and semi-structured interviews to collect primary data. Furthermore, thematic analysis is used as an analytical approach to assess the data. Hence, this section explains the methods and reasons for their selection.

3.2.1 A SINGLE CASE STUDY

A single case study of Myanmar was selected as appropriate to enable a deeper understanding of the land rights, in light of the laws, on tenure and so disaster-vulnerability.

In the two strains of literature types of case study method varies, while some rather draw on general tendencies. Studies are using single cases - e.g. of the Philippines by Walch (2018), of Northern Zimbabwe by Mavhura (2019), of the Kachin state by Faxon & Aung (2019), while others use multiple or comparative case studies - e.g. comparison of Samoa and Fiji by Mitchel (2014), or three villages in Tanintharyi Region of Myanmar by Lundsgaard-Hansen et al. (2018). The literature also draws on global tendencies (e.g. Mitchell, 2011 and Unger et al., 2017) or regional patterns (e.g. Mitchel (2009) focusing mainly on the Asia Pacific). The reason for choosing a single case study of Myanmar as it allows for a more nuanced understanding of the interplay between land laws, land tenure, disaster vulnerability, and factor of conflict between the ethnic states and the central Government. In doing so, unlike quantitative methods, it maintains indepth insights into the context specificities, which are highly important, especially for Myanmar. Consequently, a quantitative study would have overlooked the context specificities, meaning the structural/social circumstances and barriers faced by the ethnic communities. A case study allows for causal questions to be under scrutiny while enabling "descriptive-interpretive elements" and a depth of analysis (Blatter, 2008, pp. 68-6). This is considered more valuable for understanding the effects of the criminalizing 2018 amendment on the residents' tenure security and their disaster-vulnerability.

For this reason, a single case study was chosen as the method to frame this study.

3.2.2 SEMI-STRUCTURED INTERVIEWS

Semi-structured interviews were used as they produce comparable data while allowing for flexibility and details.

In the literature, interviews are widely used along with a tendency to combine them with focus group discussions (e.g. Mavhura, 2019; Usamah et al 2014). Semi-structured interviews, unlike surveys, provide more flexibility for respondents to add-in, if they would feel some aspects are omitted or wrongly understood, but also for the interviewer to ask further and clarify the answers (May 2001, p. 123; O'Reilly, 2009, pp. 126,129). While, the weakness, in comparison to structured interviews, may lay in the interview's individual discussion nature, causing them to fluctuate within the framework, space for the interviewee to provide details and context specifies is valued more. As the study does not aim to conduct quantitative, semi-structured interviews are more suitable then surveys or structured interviews. At the same time, unlike unstructured interviews, semi-structured interviews maintain some consistency in the discussion, allowing existent themes to be verified as well as new ones to be explored. Lastly, while adding-in focused group discussions, as dominating in the literature, may have been beneficial. Given the situation and the need to conduct the interviews online, they were ruled out as rather problematic.

Thus, individual semi-structured interviews are considered a sufficient data source to develop an understanding of the relationship between land rights and disaster-vulnerability.

3.2.3 ANALYTICAL APPROACH: THEMATIC ANALYSIS

The thematic analysis was chosen as it allows finding out the re-occurring effects of the land rights on the ethnic communities' disaster-vulnerability while allowing to pay attention to the details, and connections between the findings.

The thematic analysis represents a systematic approach to finding re-occurring topics within the qualitative data set. In other words, the data, usually textual, "are segmented, categorized, summarized, and reconstructed in a way that captures the important concepts within the data set." (Ayres, 2008, p. 867). Text passages are categorized by using unique codes to label text parts discussing the same idea/reason/cause. The coding can be based upon already known themes, stemming from the literature. Likewise, they may arise from the respondents' answers as re-occurring topics not identified in the literature review, or expected to arise (Ayres, 2008, p. 867). The output of the analysis is merely just a list of themes with their description, it includes the relationship between them as well as the overall context and patterns (Ayres, 2008, p. 868). The analytical tool aims at "seeking commonalities, relationships, overarching patterns, theoretical constructs, or explanatory principles" (Lapadat, 2010, p. 925-6). Unlike context analysis, the thematic analysis looks for and describes the patterns between the themes (Ayres, 2008, p. 867).

While thematic analysis is a generally widely used tool, it has its critiques from both sides of the theoretical spectrum. Positivists see problematic that the analysis does not adhere to a rigid process and it allows for "creative insight" and so researcher influence to identify the themes and patterns (Lapadat, 2010, p. 927). On the other hand, constructivists see the tool as not sufficient to hold the context, since it "fractures the coherence and contextuality of narratives" (p. 927). Nonetheless, the main advantage and reason for choosing the thematic analysis is the possibility of assessing larger sets of qualitative data, while maintaining the context. To mitigate the positivist critique, the analysis approach and process aims to be very transparent, to enable replicability, and both are described in the section below.

3.3 PROJECT DESIGN

The project design explains the choice of the case study of Myanmar, and why it is reasonable to expect the ethnic states to be most affected by the amendment, the time-frame, the themes, means and criteria for selecting interviewees, the additional material used for triangulation, and methodological limitations.

3.3.1 CASE STUDY: MYANMAR

Myanmar as a whole country is largely prone to natural hazards, the additional conditions make ethnic states more vulnerable to the amendment, and to losing means to decrease disaster-vulnerability.

As suggested by Map 1, Myanmar is quite prone to all hazards. The choice of floods has been influenced by being widely discussed in the DRR literature on Myanmar. While the case selection has been Myanmar, the literature suggests ethnic communities to be more endangered by the laws as they do not recognize their customary rights (McCarthy, 2016; Scurrah, 2015; Mark, 2016) and due to the outdated maps, leading to the wrong classification of "vacant" lands, where ethnic farmers farm (Scurrah et al., 2015; San et al. 2018). It has been reported that 75% of all the land the Government classifies as VFV land is found in the seven ethnic states respectively in – Kachin, Kayah, Karen, Chin, Mon, Rakhine, and Shan states (San et al., 2018, p. 28). The most of VFV land in acres is found in the Shan and Kachin states, most VFV land as a percentage covering the states land is found in the Chin (48%), Kachin (43%), Rakhine (42%), Karen and Shan (41%) (p. 28). Specifically, Kachin state has disproportionately the highest number of VFV land granted by the Government to business (San, et al, 2018).

Consequently, the ethnic states have been selected as the focus of this case study, representing the most vulnerable populations to the new legislation, which allows their land to be considered vacant and thus subject to reallocation to investors or others. Thus, putting at risk their land as a source for livelihoods and food security necessary for decreasing disaster-vulnerability.

3.3.2 TIMEFRAME

The timeframe of this study is September 2018 – April 2020. The start-date is connected to the release of the VFV amendment, which sets the deadline on March 11, 2019, to apply for the LUCs. Additionally, it allows potential reflection in light of the floods that occurred in 2018 and 2019 during the monsoon season (end of May to October in both years), which heavily affected most of the country. The end-date is marked by the month of interviews being conducted.

3.3.3 INTERVIEW THEMES

The interview questions were guided by themes found in the two strains of the literature, and similar themes were identified through the interviews. Consequently, the interviews aimed to collect relevant data to examine the relationship between land rights and disaster-vulnerability of ethnic communities.

Firstly, they address the effect of the current laws, framing the rights, on the population, and tenure security, seeking to understand whether ethnic populations are most vulnerable to the laws and if yes, why. The second area of questions focused on the interaction between ethnic states' land regulations and the national, union, ones to see to understand the relationship between the Government and ethnic administration. If they may secure their ethnic populations' rights when customary tenure is not protected by the state. And lastly, to understand how land use certificate ownership, or rather the absence thereof, affect the communities in preparation, anticipation, and recovery stages from natural hazard induced by monsoon seasons – floods.

The data collected from the interviews were transcribed and coded into reoccurring themes to understand the relationship between land rights (laws), and disaster-vulnerability. An interview guide is provided in Appendix 1.

3.3.4 PRIMARY MATERIAL: INTERVIEWS

Collected primary data interviews with five practitioners in Myanmar were conducted. The interview took one hour and took place from April 6th to 25th 2020 via Skype, and WhatsApp, including some written follow-up clarifications. To adhere to ethical guidelines interviewees signed consent forms to ensure their voluntary and informed participation. Likewise, their identity is maintained anonymous and so their names are substituted by "Respondent" and numbered 1-5.

The reason for selecting INGO workers and researchers working in Myanmar was based on their unique knowledge of the area they possess as outsiders to the problem, while at the same time being very much involved with the impacts of the legislation, disaster preparedness, and the realities on the ground. The practitioners represent a good compromise replacing interviews with the actual

stakeholders – smallholder farmers, as in light of COVID-19 traveling to Myanmar or reaching particularly the farmers turned out to be unrealistic and unfeasible.

This means establishing certain criteria for the respondents (O'Reilly, 2009, pp. 196-7). These criteria were bound to the INGO/NGO the respondents belonged to and/or to their knowledge. The selection of the INGOs/researchers was based upon their presence in Myanmar and area of focus – land rights/laws, and natural disaster relief. The organizations that agreed to participate were FAO (focusing broadly on food security), Landesa (focusing on land rights), and People in Need (having projects focusing on land rights as well as assisting flood-affected populations). Concerning, the interviewees' expertise, they were required to possess knowledge in either land laws and their impact on tenure security or the disaster risks in the ethnic states, preferably in both.

The number of interviewees was aimed to be at least five. While the adequate number of respondents in qualitative research is ranging, mostly depending on data saturation, there seems to be agreement among the scholars that the minimum is five respondents for in-depth interviews (Dworkin, 2012, p. 1319). This minimum was reached and five responds agreed to participate. They were consultants, program managers, and independent researchers. Although able to reach only the minimum, it was possible to see some degree of data saturation, particularly in the laws impact-related data, though less in data on disaster-vulnerability. However, it was possible to infer the impact of land rights on tenure and the consequent disaster-vulnerability in Myanmar, as also accompanied by INGO reports.

3.3.5 CONTEXTUAL/SUPPORTIVE MATERIAL

The primary sources used to contextualize and illuminate the interview analysis are INGOs reports and the related laws.

The laws that are briefly discussed on their content are the 2012 Farmland Law, the 2012 VFV Law, and its 2018 amendment to compare the essence between the two main laws, while the 2018 amendment adds the criminalization aspect. Also, the 2013 Natural Disaster Management Law and 2017 Action Plan on DRR are touched upon to discuss the Government's legal commitment to DRR. To better understand the laws and to complement interviews INGO reports. Such material includes reports published post-2015, as that marked the Sendai Framework approach. These reports are Namati, REACH, EMReF, and GRET, among others. These reports were intended to fill in the insights into the experiences of the ethnic minorities. EMReF surveys communities in Kachin in readers with LUCS, and the effects of the new legislation on the tenure security; Namati compares levels of knowledge of these laws between few ethnic states and the lowlands. REACH rather focuses on the disaster preparedness and response in the Northern Rakhine States. The reports and laws enable data triangulation with

the interviews and thus filling in potential gaps as well as increase the reliability of the interview findings.

3.3.6 METHODOLOGICAL LIMITATIONS

The potential limitations of the study are two-fold. The first important consideration is the choice of interviewees, and the uneven knowledge and data available.

The major limitation that may be considered is the predominant absence of the views of the actual ethnic communities. Thus, while ethnographic fieldwork and interviews with the smallholder farmers would have been ideal to understand their situation and views, it was not possible given the COVID-19 related travel restrictions at the time of data collection. For the same reason, despite having access to INGOs, given the restrictions, it was unrealistic for the INGOs staff to mediated interviews with the farmers. On the other hand, the rather broader practice-based perspective of the practitioners allows for understanding the wider picture, and the possibilities to observe the effects from the outside perspective. To mitigate the absence of local voices in the data, INGO reports containing surveys were used to compensate and verify the interview data.

The second limitation relates to little data to focus on one ethnic state. While the research initially aimed to focus specifically on the Kachin state, it encountered an essential lack of data. This was in part due to the KIO land regulations not being translated to English, but mainly due to the on-going, though low-intensity, conflict. As an outcome, many INGOs do not have active programs there thus lacking Kachin-specific expertise. Likewise, given the fact that there are seven ethnic states and the knowledge of the interviewees scatters among all, it was not feasible to select another one ethnic state to focus on. This creates an issue of various examples from various states, whose context details vary. While these limitations exist, it was possible to draw on general tendencies based on the interviews that were combined with INGOs reports. Essentially, it is important to note the restrictive conditions of the COVID-19 pandemic and the fact that this thesis attempted to establish a relationship between land rights and disaster-vulnerability in a novel context of Myanmar. The research is seen as a first step from which more specific ethnic-states-based knowledge can be expanded upon.

4 FINDINGS

The data collected from the semi-structured interviews are centered around three larger topics aiming to answer the research question on the relationship between land rights and disaster-vulnerability.

The first topic seeks to understand whether and why ethnic communities are at risk and would be impacted by the land laws, particularly the 2018 amendment. The literature review suggested that there are issues of outdated cadastral maps, lack of customary rights recognition, and lack of legal knowledge. Quite similarly, the interviewees perceived these barriers for ethnic farmers to use their land rights to secure their tenure through the LUC, also adding newly found, or more extended, the theme of complex registration.

The second area focuses on how the amendment impacts specifically their tenure security in light of the amendment. While academic literature was not found to deal with the degree of impact, the interviewees discussed the extent and the reasons behind, in their view, the limited impact.

Lastly, while DRR literature extensively covers investment (dis)incentives, increased exposure, accessibility to credit and prolonged recovery, the interviewees refer mainly to the post-disaster recovery and credit-accessibility.

4.1 "AT RISK": MAPS, CUSTOMARY PRACTICES, AND KNOWLEDGE

The respondents identified most "at-risk" populations to be those residing in the ethnic states because of several factors, such as poor mapping of land use in these states, ambiguity of the legislation, as well as lack of legal knowledge and procedures among these communities. Some of the respondents mentioned the ethnic states directly, while others indirectly. In the end, it is the additional structural barriers that make ethnic farmers struggle to acquire the LUCs for their farmlands to secure their tenure.

4.1.1 POOR MAPPING

Given the fact that the 2018 amendment targets VFV land, all respondents with one exception identified as most endangered, by the amendment, those residing on this land.

As mentioned by Respondent 3, the amendment implies "anyone who farms on the VFV land had to register or be criminalized" as of March 11, 2019. The

issue with the VFV land has been particularly highlighted by Respondent 1, who noted it brings back "the problematic concept" of wasteland introduced during the colonial period. Consequently, the lack of maps endangers those occupying areas where "no significant mapping or access to some of the areas exist" because "where the Government does not have maps, or [...] access, they assume the lands are vacant by default" (Respondent 1, 2020). Respondent 3 pointed out that around 75% of the VFV land is located in the ethnic states. From an opposite angle the respondent 2, discusses this issue, saying that "in the central regions [...] you have a coverage of 90% of the land that is eligible to be certified [as farmland]" while in "Chin state, Shan state and then Kachin this coverage is much lower, ranging from 30-50% in these states." This can be concluded by the statement of Respondent 1 that in central Myanmar (mostly populated by Bamar majority) these laws are "not so controversial. Quite simply because [...] the majority of the land is mapped." This is because a "very rapid administration process" took place in 2012 in the Government-controlled areas, and the Government knows "who is where" and likewise the people possess the knowledge about the registration process (Respondent 1). The reason for the lack of mapping in the ethnic areas has been connected to the fact of being conflictaffected, and not under the central government administration.

Consequently, the amendment represents a real threat to the ethnic populations because they are identified to be residing in greater numbers on this type of land, where to secure land tenure one needs to apply for the LUCs. Without the possession of the certificate, they can be labeled as illegal squatters on their land. This has been the main change from previous laws, where one could become a trespasser only on land owned by somebody else, while now this is possible even when it's not allocated to anyone and is "just sitting there, as state land" (Respondent 4). Nonetheless, the laws mention the possibility of exceptions based on practicing customary practices.

4.1.2 CUSTOMARY PRACTICES & LACK OF DEFINED PROCEDURES

All the respondents draw attention to problems related to the writing of the laws. This ties to the fact that while the 2018 amendment recognizes the customary practices, and the Farmland Law acknowledges the practice of shifting cultivation, none provide for any mechanisms to address this.

It has been noted as a positive development that the 2018 amendment "is the first piece of legislation that officially recognizes the existence of customary tenure" (Respondent 2; also touched upon by Respondent 5), however, the respondents draw attention to numerous problematic issues. While the law claims to exempt "land over which customary tenure systems are being practiced" (Respondent 2; 4, and 1), it does not define what is meant by customary practices — "what land actually falls under the provision," "what are the exact provisions where people could see exemption" and how they can be exempted (Respondent 1, 5). This means there are no "administrative procedures on how to implement

the laws", resulting in "no way to operationalize it, and the weakness attached to it can also be abused" (Respondent 1, similarly noted by Respondent 4). On the other hand, Respondent 5 also contextualizes the potential difficulty of defining customary practices, as Myanmar has more than 135 different ethnic groups, altering the details of such practice.

Respondent 4 states that this VFV registration requirement creates "a false dichotomy, where they are asked to register VFV land use when actually, they should be allowed to register entirely different forms of land." The problem with VFV registration is not that the residents of VFV land cannot acquire a land certificate at all, they can; however, the VFV certificate (Form 11 or 12, as clarified by Respondent 5) has far fewer benefits. In contrast to VFV land, classified 'farmland', based on the Farmland Law, allows to get a different certificate – Form 7 – which embodies "more flexibility, more opportunity, more right(s) because they can sell, (...) mortgage, (...) transform [transfer] and especially they can sell" (Respondent 5). In comparison, the VFV land use certificate disallows selling the land and is limited to 30 years, after which it needs to be renewed (Respondent 4).

Although the Farmland Law acknowledges shifting cultivation, also used by ethnic farmers, in practice, this acknowledgment becomes problematic in light of ethnic community practices. Respondent 2 points out that the law "doesn't even make reference to ... not even once to customary tenure rights." However, it recognizes the existence of shifting cultivation, which is mainly practiced by the ethnic minorities, though not exclusively, because for instance in the Bago region [where the Bamar majority resides] and other regions (...), [in] parts of those (...) you have shifting cultivation" (Respondent 2). The actual labeling of the land, over which shifting cultivation is practiced, is complicated. As Respondent 3 and 5 highlighted, it is difficult because the land is being, in many cases, communally owned, "so [they] can't apply for individual household plot titles, because it's not used that way." Likewise, while Form 7 provides more rights, it also restricts "on how long you can fallow your land and whether you should shift your crops" and each crop change should be registered, which is time-wise and financially burdening, especially for smallholders (Respondent 2). Essentially, this makes the recognition of shifting cultivation insufficient, as more nuanced accommodation of the question of communal farming is missing.

Consequently, ethnic communities were identified to be more endangered by the laws due to insufficient inclusion in the law of ethnic customary practices, and a missing mechanism to be exempted from the VFV amendment requirements, when claiming customary tenure. As noted by Respondent 3 "without any customary land laws protecting these lands [...] these VFV laws continue to be a huge threat to these ethnic states." Also, with their land being classified as VFV, they are only allowed to apply for the relevant certificate, which embodies fewer benefits and is time-limited. While there is a possibility to reclassify the land, it is not an easy process, requiring knowledge and financial means.

4.1.3 LACK OF KNOWLEDGE

Lack of knowledge was mentioned on several occasions. Respondents connected it specifically to legal knowledge, classification of one's land, and the registration procedures. This has created further barriers in acquiring LUCs by the ethnic communities.

As pointed out by Respondents 4 and 5, the issue with poor mapping is that the communities themselves do not know what type of land they occupy. Respondent 4 further noted that the administration is rather skeptical of this lack of knowledge; no publicly accessible 'comprehensive map' exists, which means that to find out how their land is mapped people need to personally visit the Ministry. Likewise, Respondent 5 estimates that "more than 50%, especially in rural areas, are not familiar with the existence of current law," which he connects also to low education levels in the areas. Almost all the respondents note that for this reason, since the amendment, a lot of programs let by CSOs and NGOs were implemented to increase public awareness (Respondent 2, 3, 4, 5). Essentially, the lack of knowledge about the laws and their application leaves ethnic communities without the possibility to act to register. Even if they are aware of this requirement, the actual process is highly complex.

4.1.4 COMPLEX REGISTRATION

Some of the respondents draw attention to the possibility of reclassifying land pointing, however, to the needed knowledge, and administrative burdens and inconsistencies.

Although the residents of the VFV land may apply for reclassifying their land as farmland, the process is complex and time-demanding. The entire process starts with knowing or needing to finding out what land they reside on. As Respondent 4 explains, it is demanding as the farmer needs to commute to visit the Department of Agriculture Land Management and Statistics (thereafter DALMS) to seek their land classification. Likewise, in case they are told their land is registered as non-agricultural land – but as woodland for example (which can be common in the ethnic uplands), the officials would only say that it is not registered as VFV or farmland. However, "they won't send them to the department of forest [...] they [farmers] have to figure that out on their own." Thus, there are costs of travel and time. Then, the reclassification application starts with receiving permission to grow on the VFV land, applying for Form 10, and to "stabilize" their plantation/crops (Respondent 5). This means that to be able to reclassify a land, within 4 years there needs to be "demonstrated use" and ongoing farming activity (Respondent 4, 3). After this, they may aim to apply for the actual reclassification, which is done/can be followed by applying for Form 7. On top of that, the application forms are not available in the ethnic nationality language (Respondent 4). All of this represents a long process, requiring time, knowledge, and financial means. As a result, "[m]any people end up giving up because of the difficulties" and so "hardly anyone in these ethnic states has been able [to reclassify]," as stated by Respondent 3.

Additionally, there are a lot of administrative inconsistencies coming to the surface, making the process even more confusing. Respondent 4 recalls farmers sharing the inside view that "there are a lot of farmland Forms 7 floating around." Thus, some of the farmers have multiple Forms 7, leading to "conflicts of boundaries" (Respondent 4). On the other hand, Respondent 4 mentions that "the VFV rules section 50, maybe, (...) that says if you are a smallholder getting less than the 10 acres of land that it only needs to be approved by the regional government as opposed to the Union Government." This makes possible the decisions to "better fit smallholder farmers" (Respondent 4). However, this may also cause inconsistencies in following the legal principles. Respondent 4 further elaborates that where a farmer is seen as a "legitimate farmer," he may apply directly for the Form 7, despite residing in VFV land, which "shows (...) the failure at land administration [in] following legal principles."

To contextualize this problem a little, while some respondents attribute this to the lack of willingness to assist given the troubled history, others point to the administrative setbacks. Two of the respondents highlight that the "Government is not great at assisting in the registration of land rights" (Respondent 4, but also 3). Respondent 3 explains that this lack of willingness has been connected to the fact that "many of these areas were in conflict, (...) and so the Government was distant (...) and then, biased." While Respondents 2 and 5 stress the improvement in the sense of the recognition of customary practices, they at the same time point to the path-dependent way of thinking and remind that the administration officers have thought "in a certain direction for the last 50 - 60 years" (Respondent 2). Likewise, Respondent 5 contextualizes this problem by noting that the land administration is structurally complex - there are 20 land types, more than 40 laws related to land, or land management (some dating to colonial times like the Land Acquisition Law of 1896, and are still possible to use), involving 20 different administrative departments. This is troublesome as the respondents indicated poor communication between these ministries, and the lack of a central land management body to coordinate the departments (Respondent 5 and 4). While this may be subject to speculations, Respondent 1 concludes:

"given improper administrative practices a lot of the problems that these laws have can be averted by simply good administration (...) [However,] the case for administration cannot be often made in the short-medium term. But finally, even if you address administrative problems, you still have the fact that the laws are themselves problematic."

To summarize, the new legislation, while acknowledging the existence of ethnic communities' agricultural practices, does not provide a mechanism to except their lands from the danger the 2018 VFV amendment impends. Furthermore, the process of acquiring the desired Form 7 is hampered by highly complex procedures, financial costs of traveling, and payments to be made at the registration, as well as the need of possessing good knowledge of these

procedures, which has been hinted on to be lacking., Despite some improvements, it remains difficult for ethnic minorities to secure land tenure on their lands by acquiring Form 7. While farmers can still register for VFV LUCs, they represent inappropriate and week security. Thus, the complexities of registration and application for Form 7 in the ethnic states, expose the ethnic farmers, in particular, to the impact of the amendment.

4.2 IMPACT

Many respondents referred to the legitimate and strong criticism by the civil society, I/NGOs, and donors about the impact of the criminalizing clause in the VFV amendment. However, quite uniformly they admit that their/these worries have not materialized in practice. The reason for such a twist in expectations has been mainly attributed by the respondents to the novelty of the law, and the weak capacities of the land administration. Likewise, some pointed at the implementation sensitivity given the ongoing ceasefires and agreements made as part of the peace processes between the ethnic states and the central Government.

4.2.1 RISK & THREAT: TOO EARLY TO SAY?

The respondents distinguish between the legal impact, and the reality on the ground, which to this point has not reflected their worries. As all mention, on a legal basis, all of those residing on VFV land can be evicted/imprisoned, or in the milder case be fined. Nonetheless, in practice, this has not been happening at a large scale as feared.

Respondent 4 states that the "changes in 2018 – honestly were a more (...) threat of changes than reality. [...] but the fact that it is still on the books means that [they] could. And that's a huge risk." Respondent 2 explains "my conclusion is that so far, the impact on rural populations, and especially the ones [...] who are informally occupying VFV land, [...] has been minimal. [...] [However,] the risk is there and it's a major risk." Nevertheless, while the law has minimal impact, there are some cases. Respondent 1 states that "some people were already charged under the VFV amendment. [...] [Though,] I think it's safe to say it's not as widespread as people assumed it could be." However, they note the "just because a law gets legislated [...] does not necessarily mean there is both willingness or administrative capacity to implement them immediately." Similarly, Respondent 2, admitted to "very few cases that I know about that refer to the [...] implementation of the amended VFV land law."

Essentially, the respondents point out that the fear of the amendment has not, perhaps yet, materialized. However, it represents a threat/risk, which is not so intangible as few cases have been known. As Respondent 1 concludes "it still sets a precedent with power abuse by either politically connected people [...] or [...] part of the administration." And so, in words of Respondent 4, this leaves the

ethnic farmers in "a lot of uncertainty about trespassing on VFV land, [and] whether or not they have the right to be there." In the end, the thin line between threat and reality, as foreshadowed, lies in the willingness and capacity of the Government to implement it.

4.2.2 WILLINGNESS VS CAPACITIES

The minimal impact has been connected to lack of administrative capacities, as well as several other factors potentially impacting the willingness to implement the VFV amendment in its entirety, particularly in light of the ceasefire agreement.

Some respondents connect the potential lack of implementation to contextsensitivity. This has been drawn on the example of the Kachin ethnic armed organization – KIO, which has not yet signed the ceasefire. Here is how Respondent 1 explains the risk of implementing the amendment:

"implementing any [...] laws [...] requires feet on the ground, but this type of administrative process does require a certainly stable context. [...] [W]hile [in] Kachin, [...] certain areas are still controlled by the KIO, and they are even though rare, there are still occasional flashes. And any type of attempt from the Myanmar administrative system to further encroach to hard-reach areas in Kachin, may [make the] KIO to retaliate."

This sensitivity of encroaching into the administration of the EAOs is not only relevant for Kachin, where no ceasefire has been yet reached. It is also relevant for other EAO's administration, the Kareni, as the recognition of their administration remains problematic.

The Karen ethnic group is the only ethnic state having their land administration in place, nonetheless, their LUCs are questionably recognized. The Karen ethnic armed organization – KNU has its land policy and land use certificates distributed starting in 2012 (Respondent 3). While Kachin and Mon are aiming to progress to the same, Karen is the only ethnic state having some degree of land administration. In ethnic states' areas administrated by the central Government, the LUC would fall under the Farmland Law and thus be "not much different [...] than they are in Burmese heartland" (Respondent 1). However, where it gets problematic are the areas of mixed administration. As Respondent 4 says, where KNU is issuing LUC, it "lead[s] to areas of mixed administration or sole [...] KNU administration, and that's been an interesting issue because there isn't technically any Government recognition of that." Likewise, Respondent 2 notes that these LUCs are "not acknowledged by the central Government of any kind." Their conclusion on unrecognized KNU LUCs, however, contrasts with the ceasefire negotiations. Respondent 3 explains:

"Before the ceasefire of 2015, there were a lot of times when people, who had their land ownership recognized by the armed group, were not recognized by the Government. So, there [are] many cases where people were forced out, even though they had titles from the armed group. So, as a

part of the peace agreement, (...) the Government had to accept that these armed groups have given out some titles to people."

However, this did not translate into full recognition. Respondent 3 refers to their research, while "the Government kind of accept it but they, in their mind, will not say it's the same as their laws [land certificates]." Respondent 1 notes that it's been "difficult for systems like these to coexist." And so, the degree of the KNU LUCs' protection remains questionable. While Respondent 3 thinks that "it has protected people, especially since the current peace agreement, [as] the Government said they would recognize that system." It seems not to be guaranteeing anything, as Respondents 3 and 4 refer to farmers in the mixed areas rather trying to have both the Government and the KNU certificates. This is "to minimize the risk of losing their land," (Respondent 3), or due to the perception by some "that the Government document is more helpful [...], probably because that gives them access to loans that they will not otherwise be able to get from the Government."

Nonetheless, there are couple of other reasons potentially influencing the Government's ability to implement the amendment. Respondent 1 draws attention to the strong discouragement "by most international and local civil society to proceed with implementing the amendment." And although they proceeded, it caused "a big backlash across Myanmar's civil society" (Respondent 4). Likewise, the potential issue/challenge lies in balancing the interest of the Government to attract foreign investors to the agricultural sector (mainly the Chinese) (Respondents 3 and 5), and further progress on the recognition of ethnic practices mentioned earlier. On the other hand, the marginal impact has been peripherally connected to lack of capacities. As mentioned previously, there is no central land administrative body but a large number of responsible departments, which may impact the possibility of implementation. Moreover, the main agricultural administrative body - the DALMS suffers from being "extremely under-resourced, [and] underfunded" limiting the capacities in combination with a lack of "very clear directives [...] from the central Government" (respondent 1). While it is open to speculation whether this is more a matter of low capacities or political unwillingness, it is quite clear that it creates uncertain tenure security.

Consequently, the 2018 amendment represents a serious "risk" or "threat": that of enabling the administration to remove ownership from lots classified as VFV land, creating uncertainty of tenure among ethnic populations. In the end, there seems to be a consensus that legally speaking LUCs, if granted by the Central Government or even by the KNU, should lessen the likelihood of land confiscation; this, however, is not clear either. Ultimately, it makes LUCs a tool for representing a source of liquidity and compensation, rather than actual land-ownership protection.

4.3 LAND CERTIFICATES & DISASTER-VULNERABILITY

The effect of the land rights in light of natural disasters prepared is discussed by the respondents mostly indirectly because of the amendment's novelty and a lack of assessment. Nonetheless, the LUCs were mostly reflected in the post-disaster context as a means to loans and compensations.

4.3.1 LOANS

Almost all respondents linked the land use certificates to the ability to get access to the agricultural loans, almost unanimously significant in the recovery stage.

The advantage of possessing Form 7 lies in the possibility to get access to "cheap loans" (Respondent 2). This is because the Government bank – Myanmar Cultural Development Bank - provides a "low-interest-rate" unlike private providers, called "middle man", who charge higher rates (Respondent 4). This gives the farmers the "ability to invest in what they need to" (Respondent 4). In the post-disaster case, there is a possibility to "access seeds and other things that would be needed to be able to replant after that have been washed away" (Respondent 4). Nonetheless, as noted by Respondent 2, this also applies to any situation in which the farmers would like to use the loan, e.g. for seasonal cropping. However, as highlighted by Respondent 2, the land rights (and acquisition of LUCs) are conditioned by "type of land use, so you cannot do whatever you want." This becomes an issue for those farmers, who would like to change the type of crop fast to adapt to new realities brought by the natural hazard (Respondent 2). Therefore, the role of loans has been mostly connected to the ability to recover as it allows getting cheap loans to re-establish livelihoods linked to agriculture. However, this benefit is always conditioned by possessing knowledge of these rights, as described earlier.

4.3.2 RECOVERY – RESETTLEMENT & COMPENSATION

On three occasions the themes of resettlement and compensation were noted.

Respondent 1 states "it is not necessarily the truth that it would be easier (...) to confiscate the land, but statistically, it's a lot easier for people, who get the land confiscated to get compensation, if they have for the confiscated land support documentation." On this note, also Respondent 5 highlights that in light of resettlement or compensation LUC represents a document stating the size of the land, which the farmer would have the right to regain. However, Respondent 2

also recalls their experience from a village, where people did possess the LUCs, nonetheless "they were resettled without any compensation. So, [the farmers] conclude that even having a land use certificate doesn't guarantee anything." Interestingly, the respondents compare to northern Mozambique, where oral prof of the local leader "would satisfy land administration to recognize land rights," while in Myanmar even official LUCs are not sufficient in many cases. In any case, it is always better to "have something in hand that proves ownership" (Respondent 2), as it may increase the likelihood of some compensation.

4.3.3 POST-DISASTER RETURNS

While many respondents pointed at the impact of LUCs on the ability to claim one's land back, only a few were able to draw on experiences from Myanmar.

Respondent 1 alludes to the conflict-related displacement, in which people are usually "less willing to leave and if they left, they are [...] more willing to return [...] as they are afraid to lose their property if they stay in displacement for too long." The factor of time has been also brought up by Respondent 3, who distinguished post-disaster from conflict-related displacement by noting that it is usually "shorter [periods of time after which] [...] people can go back after the water recedes." They highlight three factors influencing the ability to reclaim land a) possession of LUC, b) duration of displacement, and c) external demand for their land. Although ownership of LUC is not a guarantee, it can still lead to having fewer problems reclaiming the land (Respondent 3). The interesting point brought up, however, was the demand for land linked to natural resources and infrastructure. This made Kachin state the most vulnerable for having a developed infrastructure and a lot of natural resources, attracting neighboring Chinese investors; by contrast, the Chin state that has almost 50% of its land classified as VFV does not have good infrastructure and natural resources. While returns have not been much discussed by the respondents in the context of Myanmar, three important variables were mentioned – LUC, time, and demand for land, which determine the likelihood of returning to ones' land.

4.3.4 NO EFFECT ON AID

All respondents unanimously explained that relief aid is not bound to the possession of the LUCs.

This has been essential, given the fact that the ethnic communities largely do not possess the LUCs. Conditioning aid on this basis would be irrational as, after a natural hazard/disaster occurs, the Government aims to relieve the affected communities (Respondent 5), not pose extra burdens on them. Respondent 4 explains that Government officials "are coming to specific villages and they are having their public meetings [...] either giving advice or giving out provisions." Some respondents have indicated as potentially more important IDs (Respondent

4), which are also problematic. Nevertheless, LUCs seem rather irrelevant for relief provision.

4.3.5 PREPARATION – NO PLAN, NO KNOWLEDGE

Two respondents allude to the fact that there seems to be little preparation for natural hazards – like monsoons – in general.

Respondent 3 wonders "I don't think there is much preparation, actually, for natural disasters that are developed even in Yangon. Yangon being supposedly the most developed city, but there is generally very little natural disaster preparation in the country." However, Respondent 2 points out that there are some efforts in the Chin state to prepare for landslides rather than floods – the main problem caused by the monsoon seasons – by making some infrastructure developments, i.e. "conservation works to contain those lands." Nevertheless, as Respondents 3 and 5 state, there is no or little preparation among the ethnic communities, stating as an example Kachin state. They connect the lack of preparation to the lack of knowledge e.g. about the severity of upcoming monsoons, as well as rights connected to the legal obligation of the state to protect (provide shelter), and the possibilities of getting loans if having the LUCs. Similarly, Respondent 2 makes an interesting point of not being sure whether the people are informed about the consequences of not having a LUC in connection to disaster, as their/many NGO campaigns have focused on land-grabbing" but focused rather on the conflict context than on natural disasters. Likewise, Respondent 5 notes that many people living in the flood-prone areas are not "afraid" because they are "quite familiar with, what we call hazard or disaster." On a similar note, Respondent 2 points out that people, who build their livelihoods in the flood-prone areas seem to knowingly "take the risk" as the lands are most fertile there.

4.4 SUMMARY ON DATA

To summarize, the rural population in the ethnic states were indicated to be most endangered by the 2012 laws, and the 2018 amendment. The reasons for being most at risk are due to the numerous barriers to acquire Form 7 caused by complex intertwining of several factors such as poor mapping, poor legal knowledge, and the ambiguity of the laws. Nonetheless, the laws' impact has not resulted in large land-grabs, even though it has created uncertainty around tenure security. Likewise, several other factors led to this result, such as weak capacities of the land administration, potentially the amendment's novelty, and past relations of conflict with the central administration. Regarding the natural disasters' preparedness and recovery, the land use certificates represent enablers to acquire loans and compensations. Nevertheless, uncertainty remains. As Respondent 5 concludes "if you don't have it [LUC] [...] you are in a bad position. But even if you own land use certificate, it is no guarantee whatsoever."

5 DISCUSSION

The discussion uses the interview findings and complements them with INGO reports and newspapers to contextualize and add nuances to the interview data. Additionally, it compares the data with academic literature, challenging or confirming certain views. Likewise, the discussion uses Sen's approach to analyze the data. In doing so, it will first assess the structural barriers, which causes unfreedoms limiting the farmers' agency to apply for the LUCs. Secondly, the impact of laws on farmers' tenure and capabilities to decrease disaster-vulnerability is explained, extending the discussion to the role of the duty-bearer, the Government, to protect the ethnic farmers' land rights. Lastly, the LUC is evaluated as a means to enhancing farmers' capabilities to decrease disaster-vulnerability. Therefore, in light of Sen's capability approach, the discussion will be framed around the structural barriers and legal ambiguity preventing the freedom to make choice and act to apply for the LUC; the troublesome role of a duty-bearer; and the role of LUCs to enable the farmers to enhance their capability to decrease disaster-vulnerability.

5.1 STRUCTURAL BARRIERS TO THE FREEDOM TO APPLY

For the farmers to make use of their land rights, and so exempt from or apply for the LUCs they need to possess the knowledge and opportunities to achieve the aim of receiving the LUC, if they choose to do so. While there is a lack of mechanisms to exempt from the amendment, the freedom or possibilities to decide are first and foremost limited by lack of knowledge, and complex processes, enhancing inequality of opportunities to acquire the LUC. The lacking mechanism and poor awareness represent the issue of the ability and/or willingness of the duty-bearer to protect the rights to land for the ethnic communities.

Ethnic farmers' knowledge gaps on the obligatory application, the deadline, and the registration processes hamper their freedom of choosing and their ability to apply for the LUC. Sen stresses the importance of having the possibilities to make any kind of decision, even if it would be abstaining from applying. However, decision-making requires relevant knowledge. Respondents, as well as several studies, reported that small-holder farmers residing on the VFV land, predominantly in the ethnic states, do not know their land has been classified as VFV or about the legal LUC requirement. To complement the respondents' answers, NAMATI, a local NGO, conducted a survey shortly after the deadline, in Shan, Rakhine, and Karen states. It found out that 94% "never heard of it," 64%

had some knowledge and 0% were considering themselves as "knowledgeable" of the 2018 amendment (Par & Soe, 2019, p. 7). Similarly, the specific knowledge on the substance of the law was limited: only 32% knew about the 6-month deadline to register, 4% knew that customary land is excluded and 1% that it is not defined in the law (p. 8). A study by Faxon & Aung (2019) in Kachin state found similarly scarce knowledge of VFV law or the required application. However, the farmers not only lack knowledge of the laws, but likewise are not aware of their land official classification.

Another problem is when the farmers do not know what land they use in regards to required registration but also to succeed in it. As mentioned by the respondents and wider literature, the lack of mapping in hard-to-reach areas and uplands in the ethnic states could "by default" turn all uncategorized and unmapped land into VFV land (Allaverdian, 2019). The respondents indicated many farmers are not aware of their land being classified as VFV land, as they perceive it as farmland, and thus logically assuming direct right to apply for Form 7. This has been confirmed by Faxon & Aung (2019) survey showing farmers confiscating farmland and VFV registration, when they were "for example [wrongly] explaining that they had to register all their farmland within 6 months, a reference to a deadline in the amended VFV law" (p. 18). Therefore, those having a lack of legal knowledge, including the deadline, and their land classification creates unfreedom of choice as they cannot make an informed decision. Nevertheless, the lack of knowledge in combination with poor mapping creates further issues during the registration process. This is because farmers, whose lands were excluded from the cadastral maps, were found to have "less chance of getting Form 7, and they reported longer waiting times and more informal costs"; in cases where there was a mismatch between application and Government register, it led to "completely stalled registration" (p. 20). Furthermore, this waiting time for Form 7 was found to be possibly lasting "over a year, and in cases of conflicting or confusing claims farmers were often left waiting indefinitely" (p. 20). This time gap may create heightened risks of losing the rights to one's land. Therefore, the lack of knowledge on land classification and on the legal LUC time-bounded requirement and law content disables the ethnic farmers to secure their tenure, as it removes, or severely hampers, their possibility to choose to secure their tenancy rights. Additionally, the knowledge gaps create further issues during the registration process itself.

As farmers cannot exempt from the amendment, the complexity of registration requires further knowledge to undergo the process. Respondents pointed to the complexity of the registration process, which if not having proper knowledge of, becomes lengthy and results in many farmers giving up altogether. Faxon's & Aung's study, confirms that "no villagers were able to explain the registration process, though some noted that it was very complicated" (p. 18). Further, as pointed out by Alleverdian, "[u]nequal access to information on the ground creates a substantial gap between well-connected business people who are already applying for VFV lands, and current farmers who are cultivating VFV lands" (2019, p. 3). Similarly, as noted before, the lack of knowledge on several levels creates barriers to the farmers' capabilities to secure their land rights by applying

for the LUCs. Nevertheless, it is not only the unequal knowledge that puts farmers into a disadvantaged position but also the financial burden.

The complexities and costs for registration and traveling may create a further barrier to registration. The respondents indicated the complexity of the process, in addition to the financial burdens of traveling (Respondent 4). Faxon and Aung (2019) in their study in Kachin found issues with distance, as the registration offices were considered to be far away and "the land survey staff were few, difficult to work with, and needed to be paid for their petrol costs and time" (p. 20). In light of what has been discussed of the knowledge gap of the type of land one uses, it is not unrealistic to imagine that it will be more than one trip to apply for LUCs, particularly if the land is classified as VFV. The issue of corruption was only once mentioned in the interviews, and not directly stated in the literature; however, Transparency International identifies corruption as being widespread in land management, among other areas (Bak, 2019). Essentially, these informal costs, add extra financial burden upon the already existent ones related to registration and commuting. It was pointed out by several CSOs "while large business people can navigate the new VFV application procedure, it is too complex and costly for small farmers to create and implement the mandated management plan, and its format does not match with customary agricultural practices" (Faxon & Aung, 2019, pp. 17-8). This issue of unequal means (information and finances) is highlighted by Alleverdian (2019), who concludes "[m]any farmers will never be able to access, afford or know how to apply to VFV land management committees. In cases of competing applications, business people will most likely win over smallholders' applications" (p. 3). The financial burdens of applying for LUC coexist with the economic unfreedom farmers face, given their tight economies.

To summarize ethnic farmers due to the prevailing lack of knowledge on the laws, their land's classification and the application process are facing *unfreedoms* to choose to apply or be able to go through the process. This for many thus removes or seriously hinders, the possibility of acquiring the LUC and so securing their tenancy rights. Nevertheless, even if farmers have some degree of legal knowledge, there are further structural barriers (social circumstances) that make it harder for ethnic farmers to apply, exposing them more to the amendment's legal punishment.

5.2 IMPLEMENTATION, IMPACT & THE DUTY-BEARER

The barriers ethnic farmers face and how that makes them more exposed to the threat the amendment represents to strip them from their land rights were discussed. Nonetheless, the implementation has faced several barriers, and so possibly limiting the impact of the amendment. While the reasons for passing the

amendment are subject to speculations, the question under scrutiny should be the role of the Government as a duty-bearer.

The limited implementation of the criminalizing clause of the amendment has been suggested to be connected to the sensitivity of the peace process, sparked opposition, and lack of capacities of the land administration. While the respondents do not directly connect the CSOs' opposition to the scarce cases, nor do the reports or newspapers, but it seems to be one of the major influencing factors, apart from the sensitivity of the peace process. It was noted that around 346 CSOs endorsed opposition campaigns by two large CSO-networks in Myanmar to halt the implementation (Htoo & Scott, 2018, p. 41). Similarly, the United Nationalities Alliance, including 15 political parties and its partner organizations, released a statement for the need to recognize and protect the customary land tenure right (Gelbort, 2018). Furthermore, what has been discussed mainly by Respondent 3 is the role of the peace talks.

The contradiction of the amendment to the promised recognition of ethnic governance as part of the interim arrangements chapter of the national ceasefire agreement (NCA) has been likewise widely discussed. Nonetheless, to nuance the respondents' answer, it should be noted that, as an outcome of the amendment release, the two "largest signatories" of NCA, the KNU and the Restoration Council of Shan State, have decided "to temporarily pause their participation in formal NCA-related meetings" (Gelbort, 2018). This essentially negatively impacts the NCA itself, but also the prospects of the National League for Democracy party (NLD), which build its campaign in 2015 on addressing land issues, to be re-elected in the 2020 upcoming elections (Gelbort, 2018). Although, it is clear that all the strong opposition has not discouraged the Government to pass the amendment in September 2018, however, it remains rather unclear whether this opposition and/or the peace talk development were the reasons for the limited implementation. Nonetheless, the discussion on poor administration capacities has been rather left out from the reports and news articles, although suggested by the respondents. In any case, the impact of land expropriation seems moderate.

The actual impact of causing legal cases, or land loss, on the bases of the amendment, has been rather scarce, the impacts on land tenure extend further impact on the capabilities of the farmers. As respondents indicated, and newspapers have not suggested differently, that there are only a few cases known. While some farmers in the Tanintharyi region (mostly inhabited by the majority and mixed ethnic groups) did not apply for the certificate, as they were not aware of it, others did but their applications were rejected (Chau, 2019). Another article, released in August 2019, mentions that the Karenni State Farmer Union has reported 27 farmers to be in prison and/or in lawsuit over their lands (Wansai, 2019). Although it is hard to assess actual total numbers, as they may be unreported, there seem to be rather few of them. Nonetheless, what is more, worrisome is the fact that in several cases the Government has used the application rejection option, foreseen in the amendment's Section 8. The use of the rejection option adds to the whole problematics because it shows that it is not only a matter of formality to legalize/formalize the land ownership, but shows the

Government's leverage to deny the ownership rights. Nonetheless, as there are still cases of people being able to apply for LUCs it important to bring back to the discussion the two types of LUCs.

To discuss the impact of the amendment on the tenure security, it is also important to discuss the two types of LUCs and their ability to secure tenure, given the two types of land – VFV and farmland. Respondents suggested the two LUCs differ in their protection they represent, noting the desired Form 7 by the farmers. While the farmers residing on VFV land may apply for the VFV certificate, Form 7 legally represents greater security. VFV certificate should act as security for tenure for 30 years (VFV Land Law 2012, Chapter IV, Section 11a, i); however, 4 years after the issuing of the certificate the land needs to be proved to be used. While there is a possibility of extension, there is no guarantee this will be granted (Respondent 4). Contrarily, Form 7 once granted has no time limit, unless there is a breach of conditions (Farmland Law, 2012, Chapter IV, Section 9d), which according to the 2008 Constitution maintains the state as the ultimate owner of the land (as also noted by Respondent 1). Likewise, Form 7 grants a right to compensation if the land is confiscated and ownership rights (to sell, mortgage, lease, exchange, and gift), none of which is granted by the VFV certificate. Nonetheless, as the respondents reflect, having the LUCs is better, as compensations are more likely to be received, but does not ensure anything. This holds to Form 7 alike; Faxon and Aung report that farmers with Form 7 felt "more secure renting land multiple years," and "believe they can use Form 7 to defend their land against encroachment from other people, but not necessarily companies or the state. They believe having Form 7 makes it more likely they will receive compensation if the land is seized (p. 27). Therefore, the role of the Government as a duty-bearer seems rather pale, even if the exact reasons why this remains so are unclear.

The Government, as duty-bearer, is responsible to protect the land rights, which should start with providing mechanisms to enable ethnic farmers to exempt from the law, but also to raise awareness on the laws. The fact that the laws mention the customary practices and shifting cultivation, the Government as a duty-bearer should act to protect these customary rights. As Sen states, rights require a duty-barer to protect them. This turned out to be problematic as reflected in the ambiguity of laws, but also in not ensuring that the population is being informed and enabled to register. While customary practices are recognized, which should make it possible on these bases to protect against the amendment, the Government failed to provide such mechanisms and further guidance. Some respondents noted the full recognition of customary rights is in process, and thus in this sense requires more time to materialize, others suggested the inability or unwillingness of the Government to provide support and protection. The respondents have rather a more balanced view on the Government, suggesting progress and remaining issues. Contrary, the literature points to unwillingness, path-dependent discrimination, and conflict of interest within the Government structures. Some authors thus paint the picture rather negatively by saying that the government "is further entrenching the power of the Myanmar Government, including the Tatmadaw's [Government's military], and the private sector's as

they connive to strip farmers of their land and livelihoods" (Htoo & Scott, 2018, p. 39). While the intention of the Government remains subject to speculation, the fact that it "has not set up any support for farmers in this process in terms of awareness, means, institutions, and procedures, for transparency and objection," remains (Allaverdian, 2019, p. 3). This essentially indicates rather a failure of the duty-bearing role. On the other hand, nor the implementation of the criminalization clause has been carried out to its feared potential. In any case, given the lack of mechanisms for exemption and proper information, the ethnic farmers struggle to be able to secure their tenancy rights by acquiring the LUCs. However, it has proven not impossible also thanks to substitution to provide guidance by the NGOs and CSOs.

To close the discussion, the land rights impact, in light of the laws, on the land tenure, has been negative given the structural barriers to the freedoms to exempt from the VFV amendment and/or to apply for the LUCs. For Sen, the discussion lies in whether the rights are being unfulfilled or non-existent, given the circumstances. In the case of Myanmar, it seems that the land rights for ethnic farmers are rather non-existent due to the lack of further mechanisms for exemption. As mechanisms lack, additional structural barriers such as "lack of access to information and clear data" prevents informed decisions, leading to "millions of farmers at risk of dispossession" (Allaverdian, 2019, p. 3). However, it is important to state that while registration is difficult, there has been "an overall increase in registration" although, "registration rates remain lower in the study villages [in Kachin – as an example from the ethnic states] than those in lowland areas" (Faxon & Aung, 2019, p. 21). Nevertheless, for farmers to be able to make use of the LUCs to decrease their disaster-vulnerability, they need to possess Form 7.

5.3 LUCs AND DISASTER-VULNERABILITY

In theory, the LUCs represent the ability to secure land tenure and thus enable investment for preparedness and ensures resources for faster recovery. Nonetheless, it needs to be clarified that as the new land legislation focuses on the farmland tenure, it frames the discussion to connect the land rights (acquiring the LUCs) to livelihoods and financial liquidity, rather than to exposure or fear of leaving the households as discussed in the DRR literature. Although some respondents drew on the latter point in a general context, it is more relevant to discuss disaster-vulnerability in the post-disaster stages. All respondents viewed the LUCs as a representation of the ability to secure financial means to increase capabilities to recover. Therefore, the farming certificates remain essential for mainly post-disaster recovery, and in general for resilience building.

The preparatory stage, while highly important in light of the Sendai Framework for DRR, colludes with a lack of knowledge reported by respondents and the REACH survey. The 2013 Disaster Management Law stipulates clearly on several occasions the duty of the National Committee, and others holding the

responsibility to educate and inform the public "to participate in natural disaster management" (Chapter III, Section 5t) to raise "awareness of knowledge of the natural disaster, keeping the early warning systems, training for search and rescue and making rehearsal" (Chapter VI, Section 15b). While this states nothing on knowledge on how to protect/behave in the wake of a natural disaster, the Action Plan stipulates public awareness as one of the priorities, although it comes as a last one. As stated, the priority is action to "[c]reate mass awareness on do's and don'ts related to disasters among communities, with a focus on people at most risk including PWDs [persons with disabilities], their family and neighbor" (2017, p. 37). However, some of the respondents hesitated to say if there is any national preparedness plan, while others pointed to a lack of knowledge of LUC rights in connection to disasters (unlike in connection to land grabbing).

One of the respondents pointed out the issue of predictability and the fact that communities are familiar with the hazards. However, although people may know the hazards, there should be some minimum standards as the action plan seems to suggest "do's and don'ts" to guide communities on what to do to reduce the casualties and damages of a disaster. Although the respondents' answers were surprising, the REACH survey in the Rakhine state confirms the fact that people are aware of the hazards; however, they do lack resources and knowledge to "prepare for and respond to these disasters effectively when the time comes" (2015, p. 5). As mentioned, one of the issues is the language barrier caused by technical terms and not sufficiently contextualized spoken languages across the diverse communities. Nonetheless, only 50% of those surveyed responded not having any kind of structured early-warning systems, and 83% reported not receiving any kind of "education or training about natural disasters" – only 17% indicated receiving "some form of education from one or more sources," which has been radio and NGOs and only 1% referred to DRR education at school (pp. 21-2). Consequently, there seems to be a discrepancy in governmental plans and actions; the reasons for this are, however, beyond the scope of this work. Nonetheless, what is essential is the role of LUCs as a source for financial means.

The essential role of Form 7 is that it conditions the right to apply for loans. While both VFV and Farmland law mention the possibility of obtaining loans, getting the "cheap loan" from the Myanmar Agricultural Development Bank (MADB), is since 2018 possible only with Form 7, while earlier a tax declaration was sufficient (Faxon & Aung, 2019, p. 23). The advantage lies in lower interest rates of 0.8% to other sources ranging from 3-5% to 20%, nonetheless limiting amount up to 1.5 lakhs/acre for a maximum of 10 acres (p. 22). What is especially important in the context of disasters, is the possibility to use the loan beyond direct farming expenses, such as for emergency expenses. As Faxon and Aung state "[t]hese loans can help them survive through farming difficulties and other emergencies" (p. 22). However, Respondent 5 pointed to the lack of knowledge of the existence of this right. While Faxon and Aung found one case of a remote village proving this, "[f]armers in [their] study frequently stated that the ability to get a loan from the [...] MADB was their major motivation for registering farmland" (p. 22). Although they state that "the credit available is too small for major livelihood improvements," (p. 24) it may be of great help for faster

livelihoods recovery, or covering other essential needs at least partially. Nonetheless, like any loan, it requires to be repaid, but on more 'friendly' terms, when needed/possible. In any case, Form 7 represents the possibility for the farmers to increase their capabilities to recover from hazard occurrence. However, given the repeated lack of knowledge on DRR one may speculate that although the farmer may use the financial means accessible through Form 7 for recovery. It is hard to access if it will lead to resilience building and not just faster recovery without building back stronger to enhance preparedness for another hazard occurrence.

5.4 CONCLUSION ON DISCUSSED FINDINGS

In conclusion, to answer the research question, the impact of land rights on land tenure and disaster-vulnerability was discussed in light of the new land laws in Myanmar. The impact was assessed in light of conditions created by the 2018 amendment, which builds on the 2012 VFV and Farmland laws, and was framed through the Sen's capability approach.

The research found that ethnic minorities and their tenure are most at risk due to their customary practices, lack of knowledge, and other structural barriers. While the existence of the customary land practices is recognized, there are no mechanisms enabling the ethnic farmers to exempt from the amendment on these bases. The absence of the mechanisms forces them to undergo a complex process of application for VFV LUC, and even more complex for the preferred Form 7. Thus, the farmers' capabilities to secure their land rights, by applying for the certificates, were found to be hindered due to unfreedoms stemming from the structural barriers, including lack of knowledge, added costs, and complex application process. In this light, the amendment increases the tenure insecurity as in combination with poor mapping, classifying unregistered land as VFV that is predominantly used by the ethnic farmers, forces them to go through the highly complex process underlined by inequality of possibilities. The inequality lies in the unfreedoms the ethnic farmers face, decreasing their ability, or fully disabling them to use the possibility and to decide to apply for the certificates. Furthermore, while VFV certificate may grant some tenure security, it is generally weaker than the Form 7, given the time-bound expiration and fewer rights it embodies.

Nonetheless, Form 7 represents possibilities to enable farmers to reduce their disaster-vulnerability, as it is the only means to acquire the "cheap "agricultural loan. However, for many ethnic farmers, the *unfreedoms* given the structural barriers to attain the Form 7 disable them to have this choice. While it was not possible to find out, whether farmers use the loan to invest in preparedness measures or for faster post-disaster recovery, the identified knowledge gaps on disaster preparedness point to more likely use for the recovery stage only.

Consequently, legally speaking, the possibilities to use Form 7 to decrease disaster-vulnerability exist. However, given the lack of exemption mechanisms and additional structural barriers, the ethnic farmers are disabled to decide and/or make use of Form 7 to decrease their disaster-vulnerability. Hence, land rights, in the light of the new land laws, negatively impact tenure security, which in turn negatively effects disaster-vulnerability.

6 CONCLUSION

The research has been initiated based on the discrepancy between Myanmar being the Sendai Framework signatory and passing the 2018 VFV amendment that endangers tenure security essential for DRR efforts.

The thesis aimed to provide an understanding of how land rights, in light of the legislation, impact tenure security of ethnic farmers and thus their disaster-vulnerability. Hence, it contributed to the DRR literature gap in the Myanmar context. The choice of Myanmar was made based on the noted discrepancy, and also on being one of the most ethnically diverse countries, where land and land rights have been historically important. The research employed Sen's capability approach for the analysis. It opened for discussion on the role of structural barriers to the freedoms of choices to use existing opportunities, or their absence causing unfreedoms to decision-making, impacting farmers' capability to decrease their disaster-vulnerability. Likewise, allowing to touch upon the role of government as duty-bearer.

It was found that the lack of protection of customary land practices puts the ethnic farmers through a highly complex process. Additionally, given the mentioned barriers (lack of knowledge, additional costs, poor mapping) the farmers are more likely to struggle to apply and receive the LUC, particularly Form 7. Form 7 was found to represent possibilities to decrease disaster-vulnerability as it provides the right to apply for a "cheap" loan. Hence, a source of financial means for faster recovery. The conclusion made is that land rights, in light of the VFV amendment, increase the tenure insecurity given the lack of customary rights protection and structural barriers, creating *unfreedoms* to secure the tenure by the LUCs, particularly Form 7. Consequently, given the *unfreedoms* hindering the capabilities to secure tenure, the freedom of choice, and opportunities to decrease the disaster-vulnerability by the loans are rather scarce.

While the sequenced negative impact was expected, confirming thus general tendencies in the DRR literature, the research found a deeper understanding behind the negative impact. It found that lack of knowledge is the main barrier to the capabilities to ensure tenure security and to decrease disaster-vulnerability. This finding is essential for development work, as it is hard to combat prevailing structural barriers. However, it is possible to raise awareness on the existing land rights to use them to secure tenure and enhance capabilities to build disaster resilience. Nonetheless, more studies are needed to nuance the findings across the ethnic states in Myanmar.

The fragile inference on the tenure insecurity, in light of the laws, on the disaster-vulnerability was expected given the novelty of the context, and research on the impacts done relatively shortly after the amendment was passed. However, the research has found some important insights and tendencies that may be

expanded upon to further contribute to the literature gap. The areas that require further insights are particularly linking Form 7, and the absence thereof, to disaster-vulnerability. Meaning, whether farmers will use the loan for faster recovery but also for better preparedness, and resilience-building. Furthermore, similar surveys with farmers, as conducted by Faxon and Aung (2019) and REACH (2015), will be needed to contextualize the findings in each of the ethnic states to understand the specificities of existing barriers in different states. Moreover, it will be essential to study disaster-vulnerability of people, who were unable to apply or had their applications rejected; also, to understand coping mechanisms in the absence of government upholding its duty-bearing role. Once ethnic states-based case studies are conducted, a more nuanced national analysis may be synthesized. Nonetheless, the National Land Use Policy of 2016 providing better recognition of customary rights, is being prepared to be used as a base for the upcoming National Land Law. Given the high hopes, it will be especially interesting to see whether the customary rights will be better protected and how that will impact land tenure, and disaster-vulnerability. The new National Land Law may represent a positive breaking point for ethnic minorities and the peace process in Myanmar.

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8 APPENDIX

8.1 INTERVIEW GUIDE

This section presents the guide of questions that will be followed in each interview.

Introduction

- 1. Which organization do you work for? Where is it based? What does it do?
- 2. How long have you worked for this organization? What is the content of your work? Where are you based?
- 3. What experience do you have from working in the field in Myanmar / working with locals / with government officials?

Warm-up Questions

- 4. What do you know about the Vacant, Fallow, and Virgin (VFV) Land Law, its 2018 amendment, and Farmland Law? How in your mind has it affected the population of Myanmar as a whole?
- 5. Has it affected specific states more than others?
- 6. Have you observed any difference regarding land tenure over the past **year**? (approach, practices)

Move to questions particularly focusing on the ethnic state

- 7. What do you know about ethnic states' local regulations/policies regarding land, and the land use certificates (*Kachin*, *Karen*)? How has this worked in practice in the past? Recently?
- 8. How, in your mind, do the national policies and ethnic policies/laws/regulations on land tenure interact? (*land use certificates*)
- 9. The 2018 amendment to the Vacant, Fallow, and Virgin land law requires land tenants to acquire LUC/Form 7, which should grant land security, and the deadline for applying for such form was March 2019. How had this form and deadline impacted land tenure security in the ethnic states?

10. Have these effects been observed equally across the ethnic states, and within them? If not, why?

(differences between the government-controlled areas and those controlled by the KIO/A)

Link to natural disasters

- 11. What do you know about the last two monsoon seasons (2018 and 2019)? How do they compare with older monsoons, in terms of human and economic costs?
- 12. Has the land rights situation (e.g. lack of land use certificates) affected the ethnic population's ability to *prepare* for the monsoons/natural hazards? If yes, in what way?
- a. <u>Follow-up</u>: Do you observe a different set of behavior *in anticipation of* natural hazards (floods) between **those who possess** the LUC and those who don't?
- b. Has the behavior changed in the two years 2018 and 2019?
- 13. Has the land rights situation affected the population's ability to *react to* the floods? If yes, in what way?
- a. <u>Follow-up</u>: Do you see a different behavior *during* the natural hazard in seeking shelter between those owning the LUC and those who don't?
- b. Has the behavior changed during the floods of 2019 in comparison to the previous year?
- 14. Has the land rights situation affected the population's ability to *recover after* the floods? If yes, in what way?
- a. Has there been a change in the ability of the people **to return after the floods to** one's land since the recent amendment has been passed?
- b. Has the new requirement of LUC affected **their ability to access relief** provided by the government or other organizations?
- 15. What is/are your overall assessment/reflections regarding the floods in 2018 and 2019 and, specifically, their impact on individuals with land rights (LUC) and those without?

Closure

16. Do you have something to add or comment upon in relation to the land tenure legislation / its effect on the vulnerability of the ethnic minority to natural disasters / other aspects that come to your mind?

8.2 CONSENT FORM



Informed Consent for Participants in Research Projects Involving Human Subjects
Project title: Land Rights and Vulnerability to Natural Disasters in
Myanmar

I. Purpose of this research

This project aims to find out how does the land rights affect the vulnerability of ethnic minorities to natural disasters.

The specific objectives are: to understand the effects of the Farmland Law and the Virgin, Fallow, and Vacant Land Law, including the 2018 amendment, on the tenure security of the ethnic minorities. And how this, in turn, affects their vulnerability to natural hazards (e.g. floods or landslides).

II. Procedures

You are invited to a single meeting/interview. A range of themes and topics for discussion will be provided by the researcher at the meeting, although the conversations can be very fluid and develop parallel topics on the participants' experience with land laws and rights and the disaster risks in the ethnic states (knowledge on Kachin State is appreciated). Conversations will be audio-recorded for subsequent transcription and analysis.

III. Extent of Anonymity and Confidentiality

Your name will not be connected with the analysis and publication/presentation outputs derived from this research. Written reflections, transcripts, and audio recordings will be stored on a password-accessed computer and will not be labelled with your name. Passages from the reflections and transcripts may be used in scholarly publications and presentations. All efforts will be made to protect your confidentiality as an informant of this research project. Any documents labelled with your name or personally-identifying information will be stored in a locked office.

IV. Freedom to Withdraw

You are free to withdraw from the study or refuse to participate in any part of the study at any time.

V. Permission

I have read the Consent Form and co	onditions of this project. I have had opportunity to discuss the consent
form with the researcher. Any question	ons I have about this research have been answered to my satisfaction.
I hereby acknowledge the above and	give my voluntary consent:
Name	
Signature	Date
If you have any further questions about	ut this study, please contact:

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