



**THEMATIC STUDY**

**TENURE SECURITY**

# Tenure Security for Sustainable Livelihoods

Applying the Sustainable Livelihood Framework to strengthen pathways from land to livelihoods



Photo by Neil Sorensen (Land Portal)

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## ABSTRACT

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Land tenure security is a concept that informs land governance interventions. In short, the thinking is that tenure security will lead to positive economic, environmental and social impacts and hence to improved livelihoods for the land right holders. The evidence on the causality between strengthened tenure security and livelihoods is not conclusive. Findings are ambiguous regarding the effects on productivity, access to credit, land market functioning and climate resilience. Contextual changes, such as urbanisation, climate change and commercial pressure on land, but also violent conflicts and war, affect the access to, and use of land, and thus how this resource can contribute to, or threaten, livelihood strategies. Tenure security interventions are implemented in these contexts of societal change. These interventions themselves in turn affect the frameworks and structures within which rural populations build their livelihoods as visualised in the Sustainable Livelihoods Framework. Using this framework, the paper addresses five questions for tenure security to contribute to sustainable livelihoods, looking at sources of tenure insecurity, what rights are to be protected and by whom, how to use the land once secured and the role of local communities in these processes. It concludes that interdependencies between land and livelihoods remain complex in an ever-changing context. Sustaining tenure security and its contribution to people's livelihoods is therefore a continuous journey.

# 1 INTRODUCTION

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Land tenure security (LTS) is a concept that informs many programmes by international development agencies working on land governance, such as the World Bank (World Bank, 2023), USAID (USAID, n.d.) and GIZ (Wehrmann et al., 2023). The thinking behind these programmes, in short, is that land right holders are insecure in their land tenure, which prevents them from using their land sustainably and efficiently. Increasing their tenure security will allow for e.g. a reduction in conflicts over land, higher investment into the productive use of their land, and more sustainable land-use practices. Ultimately, LTS will lead to economic, environmental and social impacts and improved livelihoods for the land right holders. This reasoning also motivates the LAND-at-scale programme, funded by the Netherlands Ministry of Foreign Affairs and implemented by the Netherlands Enterprise Agency (RVO). According to its Theory of Change, the programme aims to achieve “improved livelihoods due to just, inclusive and sustainable land governance-related structural changes” (Netherlands Enterprise Agency, 2019).

Although the above argumentation has been used to motivate development programmes, the evidence on the causality between strengthened tenure security and improved livelihoods is not conclusive (Ghebru & Lambrecht, 2017; Higgins et al., 2018; Lawry et al., 2017). This gives reason to critically assess the validity of the assumptions underlying development interventions that implement strategies to strengthen tenure security with the objective to improve livelihoods. To this effect, a first study under the LAND-at-scale (LAS) knowledge management programme discussed land tenure security as a concept and policy objective (Zevenbergen & Van Westen, 2023). The authors stated that “While there is general support for the importance of land tenure security in fostering sustainable and just development, there is less unanimity on what it actually entails, or how it can and should be attained” (Zevenbergen & Van Westen, 2023, p. 1). They considered what knowledge is needed to enhance the effectiveness of tenure security, and to limit the risk of (un-) intended side-effects of interventions aimed to strengthen tenure security. Literature addressing common assumptions was summarised, providing an overview of the evidence supporting or refuting these notions (Hillenbrand, 2025). Sources from this literature review by Hillenbrand are also included in Section 3. A second step was the publication of a scoping study which explored the nexus between land governance and climate resilience (Sliuzas et al., 2023). It highlighted the many connections between these two, and recommends that the consequences of any land governance measure on climate resilience are considered in decision making and vice versa in order to prevent maladaptive strategies such as relocating people affected by climate-induced shocks to other vulnerable locations. Both studies focused on rural settings, aligning with the majority of interventions in the LAND-at-scale programme. Tenure security and livelihoods in urban settings are also largely outside the scope of this study.

This paper builds on this previous work by looking at the downstream effects of tenure security, and specifically at the concept of livelihoods. In many studies into the effects of tenure security on livelihoods, this concept is narrowly applied to economic aspects such as income or food security, with less emphasis on social aspects including conflict, or environmental outcomes on climate vulnerability such as land degradation and sustainable agricultural practices. The aim of this paper is to present a more holistic picture by applying an adapted version of the Sustainable Livelihood

Framework (SLF) conceptualised by Natarajan et al. (2022) to analyse and explain the ambiguous outcomes of tenure security interventions on different individuals and groups. It accommodates for the fluidity, diversification and multi-locality in livelihood strategies developed by rural populations, and the role land tenure security plays in these strategies.

The structure of the paper is as follows. The next section presents the updated Sustainable Livelihood Framework and how this addresses earlier critiques on this methodology. Section 3 describes a short literature review on the more ambiguous downstream outcomes of tenure security. This is illustrated and nuanced with insights from LAND-at-scale interventions. These insights are gained through interviews with LAS implementing partners combined with a review of (internal) LAS project documentation. Section 4 discusses how tenure security interventions can impact livelihoods by applying the SLF. The paper concludes with some critical questions.

## 2 SUSTAINABLE LIVELIHOODS FRAMEWORK

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Improved livelihoods are among the expected outcomes of land tenure interventions. To deeper understand the role of land tenure on livelihoods, it is important to understand the concept of livelihoods. This section presents the sustainable livelihood framework as tool for analysing the links between tenure security and livelihood outcomes. The sustainable livelihood approach was initially developed in the 1990s. It introduced a focus on individuals/households as agents who shape their own livelihoods. Chambers & Conway (1991) described this idea as follows in their pioneering work:

*“A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a living is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.” (Chambers & Conway, 1991, p. 6)*

This definition highlights the long-term concerns that households integrate in their decision-making, the trade-offs households make between potential risks and opportunities, and it places these actors in both local and global systems.

Despite the approach and framework being widely used, particularly in rural contexts in the Global South, the sustainable livelihood concept has also been critiqued (de Haan & Zoomers, 2005; Natarajan et al., 2022). Firstly, whereas prior to the Sustainable Livelihoods Approach (SLA) poverty was explained by structural determinants, ignoring the agency of the poor, the SLA paid too little attention to these wider processes. This extends to politics and power dynamics which were largely left out of the framework despite acknowledging the role of structures and processes in the SLF. Secondly, the narrow focus on the household as unit of analysis underestimates how local livelihoods are impacted by networks and relations beyond the local level, whilst at the same time overlooking differences within the household. Thirdly, the SLA has a strong emphasis on a current point in time, whereas livelihoods should be considered as reiterative pathways that develop and change over time. Rather, livelihoods are dynamic, multi-dimensional and multi-local (de Haan &

Zoomers, 2005). A last form of critique addresses how the concept of development is formulated from a colonial and capitalist viewpoint, ignoring local knowledge systems towards building livelihoods in which land plays a non-capitalist role (Natarajan et al., 2022).

Since the launch of the SLA, trends in global development thinking have also shifted. Rural communities have increasingly been incorporated into global, capitalist systems. Global agrarian systems are penetrating deeper into previously traditional rural areas, high rates of urbanisation change livelihood strategies and urban-rural relationships, the introduction of microfinancing further monetises rural resources, and changes in global climate systems increasingly have local impacts. These developments lead to more diversified livelihoods, both across multiple sectors and locations (Natarajan et al., 2022; Zoomers & Otsuki, 2017). The thinking on development has increasingly incorporated elements of political economy and power relations as constraining factors on livelihood opportunities. In this thinking poverty is (re-)produced through processes beyond the influence of individuals, who are trapped within wider networks of power. Livelihoods are “organised in arenas of conflicting or co-operating actors” (de Haan & Zoomers, 2005, p. 137), with individuals identifying themselves with multiple groups such as gender, clan or occupational, for different problems. This intersectionality adds further complexity to the way in which livelihoods are to be seen and understood.

To incorporate these critiques and new trends, Natarajan et al. (2022) have developed an updated sustainable livelihoods framework (Figure 1). This framework acknowledges wider influences at different levels that concern the structures and contexts within which livelihoods can be shaped (e.g. land policies or financialisation), as well as the manner in which individuals and groups are included or excluded from assets and decision-making. Presenting these as crosscutting element underlines the effects of the political economy in which people operate (Zoomers & Otsuki, 2017). Furthermore, it puts more emphasis on non-economic livelihood dynamics as reflected in relational power and climate/environmental relations that interconnect with socio-economic assets.



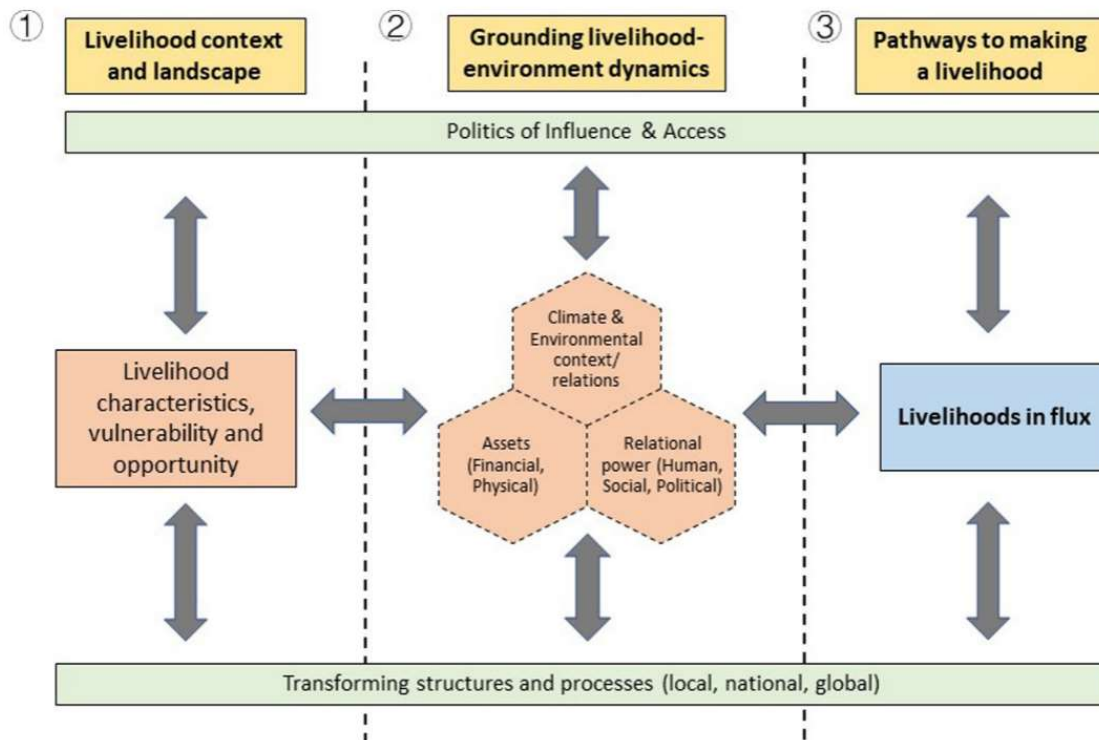


Figure 1: A sustainable livelihood framework for the 21st century  
 Source: (Natarajan et al., 2022, p. 12)

Land plays an important role in the livelihoods of the rural poor. Structural changes affect the access to, and use of land, and thus how this resource can contribute to, or threaten, livelihood strategies. Such developments include decentralisation of land governance as observed across the African continent (Alden Wily, 2003), rapid rates of urbanisation, climate change (Deininger & Goyal, 2024), and the continuing search for land by commercial investors for food production and energy transition (Lay et al., 2021; Owen et al., 2023). Tenure security interventions, such as certification of land rights and/or adaptation of conflict resolution mechanisms, are implemented in these contexts of societal change. They in turn affect the structures within which rural populations build their livelihoods. The next section will analyse how tenure security activities can affect livelihoods in terms of this renewed SLF, using literature review, supplemented with evidence from LAND-at-scale interventions.

### 3 TENURE SECURITY IN LIVELIHOOD PATHWAYS – A REVIEW ON DIVERGING OUTCOMES

Considering the important role of land in the livelihoods of the rural poor, the impact of tenure security has been the subject of a large number of studies. In this section, four earlier reviews form the basis to draw out the main findings on outcomes and the factors identified to influence the outcome. Lawry et al. (2014) published a systematic review on the impact of land property rights (particularly through land registration) on investment and agricultural productivity in developing countries. Holden & Ghebru (2016) conducted further analysis into the specific link between land



productivity and food security to identify the relationship between land tenure reforms, tenure security and food security in poor agrarian economies. Higgins et al. (2018) produced a systematic review of evidence on the impacts of increased rural land tenure security on rural communities. Finally, Singirankabo & Ertsen (2020) explored the effect of land registration on the relations between land tenure security and agricultural productivity. These four publications are complimented with more recent studies, to update the analysis with findings from interventions applying more recent methods such as Fit-for-purpose land administration. The evidence on the relationship between three economic elements in particular, namely agricultural production, access to credit, and land markets, that contribute to people's livelihoods and tenure security is ambiguous. This section reviews the contextual factors that impact how tenure security, as a transforming process, can affect livelihood trajectories. The last section presents an analysis of evidence on the effects of tenure security on climate resilience. For each of these elements, evidence has been validated through interviews with project partners in LAND-at-scale projects in Burundi, Colombia, Mozambique and Uganda, as well as on-the-ground research in Somalia and Burundi.

### 3.1 AGRICULTURAL PRODUCTION

A main motivation stated for land tenure interventions is to stimulate economic development of rural communities. Livelihoods are anticipated to improve as increased tenure security is expected to foster investment by smallholder farmers (partly through better access to credit), stimulate the land market, and eventually, to increase agricultural production. All four reviews included studies that did find strong evidence that tenure security is likely to have positive effects on investments. Such investments related to the increase of crop production, commercialisation opportunities (cash crops), and soil conservation methods. At the same time, the reviews found that other studies recorded a lack of impact on investments even in similar contexts. Furthermore, not only is there evidence that improved tenure security advances investment in land, several studies have observed the inverse: investments in land are made to claim rights and increase tenure security (Chimhowu & Woodhouse, 2006; Holden & Ghebru, 2016). Subsequently, the reviews found that the positive effect on investment is not necessarily reflected in increased production or income. Overall, the evidence on changes in agricultural production following improved tenure security is either mixed, or indicates no significant effect. This section lists the most important elements that play a role in the impact pathways from tenure security to livelihoods through agricultural production.

Barriers such as access to markets, financial institutions and education influence the ability of smallholders to use their land productively and sustainably, and to translate this production into income (Higgins et al., 2018). Aside from these more general influences three elements can be deduced from the literature that particularly influence the impact of land governance interventions on investment and productivity. The first factor that emerges from the literature review is that of perceived tenure security. In contexts where pre-existing tenure security is felt as strong, as can be the case under customary arrangements, the objective of increasing tenure security through the formalisation of land rights is less relevant. In such contexts, the "desirability" of land registration in the eyes of intended beneficiaries in the short term is low, reducing the

social and economic benefits (Abubakari et al., 2020). Effects of tenure security interventions on investments are stronger in contexts where customary rules and institutions are under pressure (Chimhowu, 2019). Furthermore, land right holders might have a retained lack of perceived tenure security following land formalisation. Particularly the State is regarded as a threat to communities' land rights after land registration (Cochrane & Hadis, 2019; Huntington et al., 2023).

The second factor that contributes to the heterogeneity of findings relates to the question who benefits? Land registration initiatives can pose social and financial barriers as local institutions tasked with implementing such interventions discriminate against in particular women and poor households (Higgins et al., 2018; Holden & Ghebru, 2016). Although the more recent so-called Fit-or-purpose approaches have lowered these barriers through stimulating participatory approaches (Enemark et al., 2016), obstacles remain for the more vulnerable groups without land ownership rights to register their secondary rights such as user rights, or seasonal rights (Lengoiboni et al., 2011; Mekking et al., 2021). Elite capture is mentioned in all four systematic reviews as a real risk of land tenure reform. Furthermore, lack of (access to) resources such as quality inputs, farming knowledge and machinery, restrict poor households and the youth to increase the productivity of their lands even if the rights to these lands have been strengthened (Lawry et al., 2017).

A third factor that influences the economic impact of land tenure interventions is that of supporting policies and institutional strengthening. Public investments in infrastructure, smallholder support and training, alignment of credit providers and capable land administration officers all contribute to higher investment in land and increased productivity by smallholder farmers.

In short, it can be deduced that the relations between land registration, tenure security and agricultural production are ambiguous and complex, in which "tenure security is an important but insufficient condition for the existence of conservation and investment incentives" (Holden & Ghebru, 2016, p. 25). This positive relationship seems to hold mostly for those who have access to land certificates. The more vulnerable households risk being excluded from their land rights and the livelihood opportunities captured in this asset (Lawry et al., 2017; Singirankabo & Ertsen, 2020).

### 3.2 CREDIT

Regarding the credit effect, both the analysis of quantitative studies by Lawry et al (2014), (Holden & Ghebru, 2016), and Higgins et al (2018) found no evidence of the link between (supposedly improved) land tenure security and increased access to credit. A number of qualitative studies on the other hand did indicate that land registration resulted in better access to credit, whereas others did not observe an increase in access to credit. Certificates of land rights are not only seen as instrument to increase credit accessibility through the use of land as collateral, they also reduce the costs of obtaining a loan (Long et al., 2024). From the ambiguous and thin evidence from the literature reviews it can be deduced that "supply of credit to smallholders is hindered by a host of factors unrelated to tenure" (Lawry et al., 2014, p. 62). Such factors include the small plot size and low income level of the households targeted by land registration programmes, the low bankability of these households for formal credit providers, and the general absence of credit institutions (Lawry et al., 2014; Singirankabo & Ertsen, 2020).

As the link between land registration and credit is ambiguous, so is the evidence on the impact of credit on livelihoods. Opening up the possibility to use land titles as collateral allows for the pursuit of activities with higher rewards, but also increases risks if title holders are unable to service their loans. Particularly smallholders in risky environments, for example with high levels of exposure to climate shocks or high rates of conflict, are likely to experience negative outcomes from mortgaging their land (Bateman, 2024; Holden & Ghebru, 2016).

Overall, the evidence does not seem to support the theory that certifying land rights allows the right holders to gain access to credit to improve their livelihoods. Credit is better accessible to larger, better-off farmers. Where smallholder farmers can obtain loans, these are often used to diversify their livelihoods away from agriculture, as a risk mitigation strategy. And the risk of land alienation is real, particularly to those most vulnerable and unable to service their debt.

**Box 1: Credit - Evidence from LAND-at-scale programme**

Evidence from LAND-at-scale projects is diverse and partly confirms the findings from the literature. In Uganda, the credit effect following certification seems fairly strong. Existing credit providers, including banks and micro finance institutions, consider the certificate of customary ownership in their decision to provide loans, but don't necessarily use this as collateral. Rather, community members stand guarantee for each other. Anecdotal evidence shows that land owners have used loan financing to invest in agricultural production which has resulted in higher income and food security. Others have invested in alternative livelihood strategies. In Burundi, evidence after earlier land certification interventions seems to indicate that these certificates are used as collateral to obtain credit but that this credit is used for non-agricultural income generating activities. In the area of the current LAS intervention new certificate holders expect to use these for credit purposes, but this has not yet materialised.

On the other hand, in Mozambique and Colombia the financing structures largely exclude smallholder farmers, with or without land certificate. In these contexts land certificates do not open up access to credit to invest in livelihoods, either in agriculture or other activities.

### 3.3 LAND MARKET

A third assumed economic impact pathway from land registration to increased livelihoods is through stimulation of a land market where plots can be rented or sold. The argument is that market mechanisms allow for a more efficient use of land with higher productivity, and also offer an alternative income stream for land owners unable to use their land (Chimhowu, 2019).

The literature reviews point to a slight positive effect of land certification on land market activity (Deininger & Goyal, 2024; Holden & Ghebru, 2016). The outcomes of more active land markets seem positive particularly when it concerns temporary transfer of rights. Land owners feel better protected against claims by renters, rentals provide a source of income for those who lack the resources to work the land themselves, and the rental market offers access to land for land poor households (Bizoza & Opio-Omoding, 2021; Deininger et al., 2008).

The evidence on an increase in land sales, and the effects of such permanent transfer of rights is more scarce and less positive. This is particularly the case where land pressure is high, such as in peri-urban areas. Whereas land owners benefit from increased sales prices for land under clear ownership, those without land can no longer afford land. In addition, although land right holders do mention that they consider a land certificate to give them better chances of fair compensation in case of expropriation (Manara & Pani, 2023; Zamchiya & Musa, 2023), communities often lack the power to stand up against investors and government to protect their rights, or their grievances are not taken seriously or ignored altogether (Knight, 2019). Market-led growth is not neutral, with a tendency to accumulation that benefits the rich and well-connected rather than the poor (Chamberlain, 2024; Fabbri, 2021; Otto, 2009). In events of crisis such as COVID-19 or climate-induced shocks, poor landowners who lack a safety net, do revert to distress land sale (Bélair et al., 2023; Guarín et al., 2024). They lose access to a resource with potentially long-term negative effects on their livelihood strategies.

One of the challenges which is reported in many countries, is the sustainability of land registers. (Cochrane & Hadis, 2019; Higgins et al., 2018; Persha & Taha, 2023). High numbers of land transactions are not being recorded, either because costs are too high, the process is cumbersome, or the right holders have little confidence in the administration offices. This has also been observed in Burundi (Veldman, 2020) and Uganda (internal project documentation). The result is that land registers quickly become outdated and are no longer a source to verify land ownership, to uphold *de-jure* land rights, and thus to improve tenure security through land administration.

The return to, or rather continuation of, informal transactions underlines that land markets operate without formal land certificates and administrative systems (German, 2022). Although an increase in land market activity is regarded as a potential impact pathway from tenure security to improved livelihoods, it needs to be stressed that formalisation of land rights is not a prerequisite for the operation of a land market. Indeed, so-called 'vernacular land markets' have operated for a long time offering a process that allows for *de facto* commoditisation of land, in which documents are used to give a resemblance of officialdom (Chimhowu & Woodhouse, 2006; Zamchiya & Musa, 2023). Neo-liberal land governance reforms, which includes land registration, have re-shaped customary tenure systems where rights have been more formalised and recognised in statutory systems and where power has shifted from traditional leaders to the political elite (Chimhowu, 2019). Whereas benefits might accrue to some segments of the community, the commodification of land that is streamlined under such 'new' customary systems at the same time undermines the social basis to claim land rights, with assets being threatened by more powerful actors (Chimhowu, 2019; German, 2022; Lawry et al., 2014). Whereas authors state that context matters, they remain unclear on how contextual elements have an effect on the impact that tenure security has on land markets, and subsequently on livelihoods.

### 3.4 CLIMATE RESILIENCE

Land governance is regarded as a critical component to enhance climate resilience for communities through securing tenure rights and effective land use planning (Mitchell & McEvoy, 2019). Tenure security is a potential condition for land right holders to increase their resilience

against further climate change. An often-used assumption is that tenure security allows for investment in strengthening adaptive capacity and reduction of their vulnerability to climate hazards (Holden & Ghebru, 2016; Murken & Gornott, 2022). Indeed, several studies have found positive effects of tenure security on the implementation of sustainable land use practices (Long et al, 2024; Beekman and Bulte, 2012; D.A. Ali et al, 2014; Deininger and Goyal, 2024).

Contextual elements to implement adaptation strategies that surface from the literature are the type of access to land, and availability of technical training and support. Secure, long-term tenure through ownership or inheritance allows farmers to apply long-term soil conservation strategies, investments to prevent erosion, and/or agro-forestry, whereas short-term leases prevent such strategies. Community forest rights have been a particularly successful instrument towards reduced deforestation and even enabling reforestation (Landesa, 2020), but it is important for the land holders to have access to alternative sources of livelihoods to compensate for conserving forest areas (Castella et al., 2006; Holland et al., 2017; Sliuzas et al., 2023).

In addition to tenure security, smallholder farmers need capital to be able to invest in trees, irrigation infrastructure and other long-term adaptation measures, which is an obstacle for many farmers despite having tenure security. Furthermore, technical training and knowledge on climate change and appropriate adaptation strategies seem to be more of a deciding factor than tenure security for farmers to adapt their farm and practices to climate risks (Schüller, 2023). Closely related to technical training are government policies on climate change adaptation, where governments aim to stimulate and facilitate farmers to implement adaptation strategies (Bizoza & Opio-Omoding, 2021).

Overall, researchers conclude that the findings on the relationship between land ownership and formal land tenure security on the implementation of adaptation measures remains inconclusive, albeit the evidence in general is positive (Bizoza & Opio-Omoding, 2021; Intergovernmental Panel on Climate Change, 2022; Murken & Gornott, 2022).

People without secure tenure rights are thus less likely to implement adaptation measures, at the same time, they are more vulnerable to the impact of climate change to begin with (Antwi-Agyei et al., 2015; Intergovernmental Panel on Climate Change, 2022; Mitchell & McEvoy, 2019). In the case of relocation due to sudden natural disasters (e.g. cyclones or floods), households without formal tenure documents risk losing their land, and relocated people suffer from lower levels of tenure security in host communities (Jacobs & Almeida, 2020; Murken & Gornott, 2022). Pastoralists, who access lands on a temporary basis without permanent rights, are faced with degrading rangelands and drought, resulting in smaller herd sizes threatening their livelihoods (Herrero et al., 2016). Tensions between pastoralists and sedentary farmers over access to land increase (Egal, 2022). Land tenure systems implemented to protect the property rights of sedentary farmers at the same time extinguish the temporary rights of migrating pastoralists, further increasing their vulnerability (Lengoiboni et al., 2011). Land governance systems that are weak or lack flexibility are insufficiently addressing the vulnerability of pastoralists in the face of increasing climate-related hazards. Lastly, tenure rights of forest dwellers, indigenous and tribal people, who are heavily reliant on the land and ecosystems, are often weak. Research has shown that the protection of tenure rights to indigenous reserves can reduce deforestation and enable

indigenous communities to restore their forests and land (Deininger & Goyal, 2024; Landesa, 2020). Furthermore, indigenous knowledge is increasingly regarded as an essential tool to increase adaptation (Intergovernmental Panel on Climate Change, 2022). Others point out that these indigenous knowledge systems and rights, and consequently the traditional livelihood strategies built on these systems, remain under threat due to existing power systems and economic pressures from outside actors who disregard legal tenure rights (Arango Vásquez, 2024; Gebara, 2018; Larson et al., 2023).

Tenure security thus impacts on people's vulnerability and ability to adapt in the face of climate change. Research has also illustrated an inverse relationship, where climate change itself impacts on (perceived) tenure security (Murken & Gornott, 2022). Climatic events have a physical impact as it reduces crop production, gradually or suddenly, weakening farmers' ability to secure their livelihoods through agricultural activities. Farmers on rental or sharecropping contracts, as well as land owners who have mortgaged their land to credit providers, become unable to service their financial obligations and can lose their land (Murken & Gornott, 2022). Climatic hazards cause temporary displacement following sudden onset events (Sliuzas et al., 2023). Others fear losing their land altogether to floods, sea level rise or other climatic hazards. Infrastructure development to address climate change impacts, such as sea walls and dikes in coastal areas, often lead to displacement of coastal communities (Shannon, 2021). As traditional networks erode when community members move away, cultural/psychological impact of climate change on tenure security is also observed (Murken & Gornott, 2022; Zoomers & Otsuki, 2017). Another pathway through which tenure security of people with vulnerable rights is threatened is through national policies and global processes related to energy transitions. Examples are the loss of access to forests dedicated to REDD+ (Hajjar et al., 2021) or conservation purposes (Spierenburg, 2021). Whereas investors driving the monetisation of natural resources promise to share financial gains with local communities, these communities tend to see a decline in their livelihood opportunities (Spierenburg, 2021).

## 4 TENURE SECURITY AND SUSTAINABLE LIVELIHOODS – FIVE QUESTIONS

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Land, and land tenure security, play a role in rural people's livelihood strategies, but evidence from the literature indicates that the relationship is complex and ambiguous. Using the revised SLF as developed by Natarajan et al. (2022), this section addresses five questions that are important in that they formulate entry points for land governance interventions to improve livelihoods through strengthened and sustained tenure security.

The first question that needs to be answered is *what are the current (perceived) sources of tenure insecurity?* This is a pertinent question as local systems and multi-local livelihoods are increasingly connected to, and operate within, national and global systems. Structural processes such as decentralisation of land governance, rapid urbanisation, and climate change affect the vulnerabilities of communities under which people shape their livelihoods. External actors shape the wider societal changes that leave rural communities in which LAS interventions are implemented more vulnerable. In Mozambique, commercial investors are searching for agricultural land, in the peri-urban areas of Colombia investors are looking for land for residential

purposes. In Somalia climate change and conflict trigger large movements of Internally Displaced People (IDPs) to the cities where their tenure situation is highly vulnerable, and where host communities feel that IDPs threaten their security. In other locations, communities are integrated in global processes of financialisation such as carbon trading markets that shape energy transitions. Particular attention needs to be paid to the role of the State who, in cases, insufficiently protects the interests of local communities and even increases these pressures. Government policies may support external investors to establish large-scale agriculture activities, politicians themselves acquire large tracts of land, and people fear losing their land to the State (Huntington et al., 2023; Knight, 2019; Zamchiya & Musa, 2023). Neo-liberalisation processes of customary tenure systems are leading to 'miniaturisation' of farm size of local farmers, together with a growth in medium-sized farms owned by external investors (Chimhowu, 2019). Equally important to consider are differences to tenure security within communities as insecurity also stems from intracommunity sources. In particular unclear or contested boundaries cause households to feel a lack of tenure security. People with secondary or temporary access/use rights, such as women, migrant farmers or pastoralists, experience different threats to their tenure. Lastly, research by LAS in Somalia and Burundi confirmed that for women and youth the livelihood vulnerability lies within their own household and family and is closely related to their access to land (Cavallaro, 2024; Niyonkuru, 2024). Land governance interventions can address the insecurities by taking into account all existing land rights.

Considering the different sources of tenure insecurity, the second question then is *What rights need to be protected?* Where threats to tenure security are at a community level (e.g. the indigenous reserves in Colombia), securing collective land rights might be suitable, whereas in contexts where individual land use is threatened (e.g. by urbanisation in peri-urban areas), individual approaches to tenure security might be more effective to secure land rights for livelihoods. Secondary and temporary land rights are vital for contexts characterised by for example pastoralism, high levels of land rental, or strong patriarchal societies. Land is not only used for economic purposes, but has conservation, spiritual and other livelihood functions. Such non-economic relations to the land equally deserve protection. The continuum of land rights as formulated by GLTN can assist in determining the particular rights and rightsholders (Lemmen et al., 2015). But, the reality is messy, with overlaps in rights over time and claims. Not all claims can be recognised, and not all rights can be protected to the same extent. As such, stakeholders should "search for acceptable, rather than optimal, solutions" (Almeida, 2021, p. 1).

Once it has been established what rights need to be secured, the third question to address is *Who will protect these rights?* Natarajan et al. (2022) identify the importance of power as crosscutting influence on livelihood contexts, environments and pathways. Localised intervention processes are supported because of their easy access and fit to the specific context. However, they do have caveats. Communities are not homogenous, consisting of more powerful and more vulnerable groups and individuals with different levels of power to access and transform local, and higher, structures and processes (Borras & Franco, 2013; Zoomers & Otsuki, 2017). Attention needs to be paid to the inclusion of marginalised groups in decision-making processes regarding land and resources. Groups such as pastoralists, labour migrants and IDPs have temporary access rights. These people cannot rely on local systems and procedures to protect their rights if they do not have access to, and influence, over them. But, fitting local procedures into district/national



structures is difficult. In many cases where LAS interventions are rolled out, activities are put in place to update, strengthen and improve higher structures such as national land administration systems, environmental planning, and climate resilience strategies. Furthermore pluralistic legal structures can undermine each other in absence of clear coordination mechanisms (Serwat, 2024). Traditional authorities and government institutions form complex intertwined structures vying for institutional power. If local practices are not well embedded in larger structures, activities to strengthen and protect tenure security are isolated. The value of, for example, a land certificate in such contexts is eroded. Embedding in wider structures is particularly relevant in contexts where threats to tenure security are posed by powerful actors from outside the communities. Land tenure interventions may mitigate the results of the often commercial pressure (often backed by government) on vulnerable communities. In Mozambique the LAS activities have worked towards increasing the social capital of communities through training of paralegals to provide legal support on community land rights. They consider themselves less vulnerable when dealing with outside investors interested in their land (Tamele et al., 2023). But, by themselves, communities are unlikely to be able to fully protect their land rights. Looking at the same context of Mozambique, Knight, p. (2019, p. 36) found that “communities – even at their most legally knowledgeable and empowered, and regardless of whether or not they have a document for their lands, how well they know their rights, or how strong their leadership is – rarely have the power to resist requests for their lands by government officials, international investors, and national elites”. There remains a clear necessity for stronger enforcement of due diligence and the defence of land and resource rights. Where this is not possible, the responsibility of these actors to provide viable and durable alternative livelihood options should be taken much more seriously. On the other hand, external actors can strengthen rights of vulnerable people. For example, emphasis by CSOs on the rights of women within the LAS programme is starting to have a positive effect on their tenure security, their position in the household, and anecdotal evidence indicates that this can indeed improve their livelihoods.

Once land rights have been secured/protected, the fourth question is *How to use the land to improve livelihoods?* This speaks to the objective of “active security” (Zevenbergen & Van Westen, 2023). According to the SLF contextual dimensions such as assets and knowledge are important. Tenure security approaches therefore combine multiple processes with new/adapted institutions. Analysis of the literature and the LAS projects confirms the cross-cutting nature of transforming structures and processes related to tenure security and its outcomes on livelihoods in the intervention localities. Highly localised processes, which include community mapping, dispute resolution, and collective land use planning can be designed according to, and adapt to, local livelihood landscapes and dynamics, as well as societal contexts that affect tenure security. Access barriers to these processes are supposedly relatively low, and with this bottom-up approach the LAS programme wants to foster a feeling of ownership and buy-in (Meij & Vintges, 2021). The combination of local structures and processes in which community members are involved contributes to building community capacity and knowledge, resulting in strengthened tenure security (Antonio et al., 2021; Asian NGO Coalition for Agrarian Reform and Rural Development (ANGOC) et al., 2021; Paradza et al., 2020). In Burundi it was the participatory approach to land use planning, rather than land tenure registration, that was important to build the social capital which has enabled community members to improve their livelihoods (Schüller, 2023). Project

partners in Uganda find similar positive effects of community mediation on tenure security, allowing land right holders to use land that was previously contested (internal project documentation). It is important to stress that land is not merely an asset to be used for economic production, but that land has different meanings and contributions towards livelihood building, such as cultural and social. There is also differentiation within local communities, with intra- and intercommunity complexities and dynamics impacting on how land is used and how individuals react to external (economic) pressures on land. (Borras & Franco, 2013; Zoomers & Otsuki, 2017).

A final consideration when it comes to improving livelihoods is the sustainability and scalability required to impact livelihoods over time and place. Local approaches are able to adjust to the highly localised contexts which affect livelihood strategies. Land governance programmes such as LAS therefore implement community-based interventions. The fifth question is *how much responsibility can we place on communities for sustained and scalable land and resource management?* Community-based activities on land governance can result in jointly addressing communal challenges at the local level that affect livelihood strategies. These can be temporary, for the duration of an intervention (e.g. community mapping), or can be more structural (e.g. the establishment of community wetland management committees). Short-term gains following such land tenure strengthening activities can initiate positive livelihood trajectories. For example, land right holders are able to increase production and accumulate assets that allow them to diversify their livelihoods. Or they can benefit from higher prices to sell their land. In such situations secure land rights can be seen as a stepping stone that contributes to building multi-local and diverse livelihoods. Plus tenure security interventions can start shifts in traditional thinking to foster more equal rights for vulnerable groups. However, a heavy burden is placed on community members for activities such as dispute resolution, land use planning and monitoring. This work is often done without (financial) compensation and with limited empowerment or exchange with similar activities in other communities. Furthermore, interventions tackle current issues but do not fully equip the community structures to cope with future challenges. Certificates bear the names of wife and daughters, but what actually happens when the male head of the household passes on? Is a name on a piece of paper sufficient to protect the rights (and livelihoods) of these women? A last challenge of community-based interventions is for actors to ground changes in the wider livelihood context and landscapes into local livelihood dynamics. Communities are embedded in broader government policy, but knowledge on aspects such as legal changes, or planning procedures at national level often goes beyond the capabilities of local actors. This can result in maladaptive livelihood strategies, particularly of the more vulnerable groups in a community who are less able to adapt to neo-liberal development drives (Ansoms et al., 2018). Similarly, broader societal changes like climate change and conflict affect local livelihood vulnerabilities. Broader structures are needed to allow for adjustments in local livelihood strategies. For local actors to anticipate and work with wider contextual developments requires continued efforts and integration into broader structures, where higher-level actors and communities have open communication in both directions. Land governance interventions need to anticipate on this.

## 5 CONCLUSION

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The links between tenure security and livelihoods are complex and often not immediately evident. Context is mentioned as a determining, but vague, factor when analysing the relationship. The revised sustainable livelihood framework identifies elements that contribute to how livelihoods are shaped and changed by individuals, households and the different networks in which they operate.

Communities operate within societal processes that affect their livelihoods, such as rapid urbanisation, climate change, violent conflict and financialisation of resources. Strengthened tenure security can reduce the vulnerability of land right holders, and even generate opportunities related to these processes. It is important to first of all understand how these processes threaten tenure security and livelihoods. Secondly, security depends not solely on having a document. Equally important are the structures to uphold these rights and the access to these structures. Thirdly, how land right holders can use their land as instrument in their livelihood strategy is affected by broader capabilities and developments including (financial) assets, knowledge and environmental changes. At the same time, these dynamics also apply to non-land related livelihood opportunities. Individuals, households and communities make trade-off decisions on how to use their land as part of a wider suite of livelihood tools. Livelihoods are affected by different factors, increasing vulnerability for some, offering opportunities to others. As such, tenure security should be regarded as a piece of a bigger, dynamic livelihood strategy.

Tenure security interventions are being designed to include bottom-up approaches to adapt to these different contexts. Whereas communities can have a certain level of agency in processes such as land mapping, dispute resolution and land use planning, they have not necessarily been consulted in whether they want such interventions in the first place. So-called Fit-for-purpose land administration approaches may use a bottom-up implementation but are largely top-down driven. Nevertheless, these local, participatory, processes themselves increase levels of tenure security as perceived by the rights holders. In the short term, they can also contribute to an upward trend in livelihoods. This can be in the form of economic asset accumulation, strengthened social cohesion and human capacity, or restoration of eco-systems, depending on the priorities of communities and their individual members.

The local processes operate within broader systems. For *de jure* tenure security, tenure rights need to be upheld and protected by national laws and policies, and administered in up-to-date information systems. Tenure rights, and livelihoods, are threatened by outsiders, both powerful such as commercial and political actors, or by more vulnerable groups such as pastoralists, migrant farmers, or IDPs. Climate-related events brings about changes beyond the communities' reach. Most community members are ill-positioned to deal with these higher-level and powerful dynamics. Whereas a local bottom-up approach can be made to fit specific contexts, and hence establish more direct links between tenure security and livelihoods, they leave communities vulnerable to the wider power dynamics and systems with whom they engage for shaping dynamic livelihoods. Linking local processes and stakeholders with higher level actors is important to build, continue, and scale improved livelihoods through tenure security. It is crucial to understand how

individuals treat their tenure rights and how they react to changes in their tenure security when shaping their own livelihood strategies in such changing realities.

In contexts of wider pressures on land coming from powerful actors looking for financial opportunities, the tenure of land for vulnerable people in particular needs to be secured. Cognisance should be taken of local meanings of land, beyond economic use. Land should thus be allowed to be left “unproductive”. At the same time, non land-based sources of livelihoods are to be developed. Flexible tenure options can be incorporated in dynamic livelihoods that fit current realities.

Overall, land plays a central role in the livelihood strategy of many people across the globe. Increasing tenure security has therefore been a land governance approach implemented by numerous donors and governments as part of development interventions. But in reality land rights are messy with overlaps in time and in claims. To add to the complexity, livelihood strategies are dynamic in nature, situated in open societies and interlinking networks. The interdependencies between land and livelihoods are complex, making tenure security a wicked problem (Rittel & Webber, 1973). The dominant, neo-liberal, vision for the future of agriculture among States and major development agents working on land (such as the World Bank) promotes ‘improvements’ through large-scale production models with high levels of efficiency and production. In a context of multiple, and increasing, pressures on land, it is important to stress that outcomes of land governance trajectories “should be defined not only in terms of agricultural output, land and labour productivity, and profit but also in terms of decent livelihoods for a wide range of people” (Peters, 2013, p. 553). Diverse stakeholder values inform both the formulation of the objective of tenure security, as well as the ‘solution’ in which tenure security is to improve livelihoods. Considering the wicked nature of the problem, it is important to realise that tenure security has no defined end-point, and neither is it true-or-false. Rather, sustained tenure security and its contribution to people’s livelihoods is a continuous journey.

## 6 INTERVIEWS

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11 April 2024: Alexandra ‘t Lam, Bertus Wennink, René-Claude Niyonkuru (LAS Burundi)

16 April 2024: Simon-Peter Mwesigye, Teddy Kitembo, Jordana Wamboga (LAS Uganda)

19 April 2024: Borges Chivambu, Simon Norfolk (LAS Mozambique)

23 April 2024: Mathilde Molendijk, Andrès Bernal, Nicolas Porras, Maria-Clara van der Hammen, Piet Spijkers (LAS Colombia)

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