

AMERICAN UNIVERSITY OF BEIRUT

SUSTAINABLE LAND DEVELOPMENT AND  
MANAGEMENT IN RURAL AREAS: THE CASE OF KAFRA,  
SOUTH LEBANON

by  
SAMAR MOSTAFA FARHAT

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for the degree of Master of Urban Planning and Policy  
to the Department of Architecture and Design  
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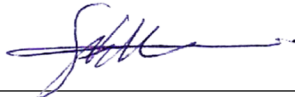
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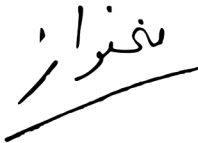


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## ABSTRACT OF THE THESIS OF

Samar Mostafa Farhat for Master of Urban Planning & Policy  
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Title: Sustainable Land Development and Management in Rural Areas: The Case of Kafra, South Lebanon

Land represents an essential natural resource for humanity and its survival. While land conservation is essential, increasing pressure on land resources may result from an over-emphasis on land's role as an asset to store wealth, which reduces the ability of communities to use land for shared and communal functions, including agriculture.

In Lebanon, the social values of land and the possibility of managing and using land as a collective resource is threatened for decades by such trends. Indeed, many challenges face the productive use of land, such as the economic model favoring land as an asset subject to market exchange and discouraging the use of land for agriculture. Furthermore, numerous well-meaning planning strategies have undermined agriculture, such as the development of roads leading to sprawl along, the reliance on informal licenses for construction, and a national master plan allowing for construction anywhere within a village/ town with no zoning. In addition, recent processes of land surveys that were adopted to protect public land have often led to its loss due to corrupt practices.

This thesis investigates how planners can intervene to protect and enhance the social value of rural land. The thesis begins by documenting the breakdown of the social value of rural lands in the village of Kafra. The thesis argues that the management of rural land, as organized through land surveys, road development, and land use planning, as well as the national approach to land as a real-estate asset, have undermined the social value of rural land. The model of management has further led to the illegal privatization of public land through irregularities in the survey, in addition to the abandonment of agricultural land, at the expense of the role that agriculture can play to support communal subsistence needs. The thesis concludes by providing recommendations to mitigate these challenges.

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# CHAPTER 1

## INTRODUCTION

### **1.1. Intro**

Land represents an essential natural resource for humanity, for its survival and prosperity, and for maintaining the terrestrial ecosystems (FAO/UNEP, 1999). While limits on land resources are finite, human demands on these lands are not (FAO/UNEP, 1999). The increase in pressure on land resources affects negatively human sustainability and leads to the degradation of both land quality and quantity (FAO/UNEP, 1999). Land degradation includes processes diminishing the capacity of land resources to meet essential functions and services in the ecosystem, such as soil degradation, loss of biodiversity, disturbance of water cycles, and deforestation (Hurni & al, 2010). Increased pressure on land resources may also be the result of an over-emphasis on its role as an asset to store wealth, which reduces the ability of communities to use land for shared and common functions, including subsistence agriculture.

In Lebanon, the social values of land and its ability to be managed and used as a collective resource has come under threat over the past decades. Indeed, even efforts to improve resource management such as the development of land cadasters or land-use zoning projects have backfired (Fawaz, 2016).

This thesis is concerned with the protection of land as a common or shared resource in the village of Kafra, in South Lebanon.

### ***1.1.1. Challenges Affecting the Activation of the Social Value of Rural Land in Lebanon***

Studies on land protection have identified several challenges that face the productive use of land in rural Lebanon and threaten its role as a valuable natural resource. These include how humans abuse land through:

- Deforestation, due to overharvesting and misuse of land cleared for urban use resulted in vast reserves of forest being degraded (FAO/UNEP, 1996).
- Overgrazing, due to the declination of rangelands' productivity, led to increasing pressure on forests and farmland as a source for feed (FAO/UNEP, 1996).
- Seeking fuelwood, due to rural people removing vegetation from erosion-prone areas, led to more exposure of land to degradation (FAO/UNEP, 1996).
- Industry and urbanization, where urban growth, road development, and industry are causing land degradation and leading to the loss of agricultural lands (FAO/UNEP, 1996).

Accordingly, it is imperative to re-examine how land is managed in rural areas in Lebanon and how this management can be improved to support collective functions. I begin the thesis by pointing to the main challenges discussed about land use in the literature.

Planning scholars have further pointed to the factors that generate these challenges, effectively undermining rural development when it comes to the management of lands. These factors are:

- **Inequitable development across the Lebanese territories**

In the modern history of Lebanon, critical inequalities distinguished rural and urban regions (Labaki, 1999). Indeed, the State of Lebanon notoriously neglected the development of rural areas since the early years of Independence and focused on the development of the economic and service infrastructures, especially in the capital Beirut and other cities, leading to the marginalization of rural communities (Makhzoumi, 2010). Despite several efforts (e.g., IRFED, a mission assigned by President Chehab during the 1960s), polarization remained (Verdeil, 2003) and there were no solid investments in rural areas and the protection of their lands. Neglect of rural areas was translated into a substantial rural to urban migration, which undermined further the possibility for the development of a rural economy.

- **The Economic Model**

The liberal economy has created an unsuitable pattern for the development of the agricultural sector (Baalbaki, 1985), as it encouraged urban services and tourism at the expense of agriculture and other productive rural services. Moreover, globalization encouraged cheaper food imports at the expense of locally produced food (Weber, 2018). This led to a marginalized role played by the agricultural sector in the economy of Lebanon since its Independence, and a loss in the agricultural value, with a decrease in the area of cultivated lands (Rahhal, 2018). A comparison of land cover in Lebanon between 2000 and 2010 conducted by FAO showed that 308-kilometer squares were lost to urban expansion (Weber, 2018).

- **Conflicts and Wars**

Violent military conflicts in South Lebanon, due to the repeated Israeli aggressions, invasions, and occupation affected both the physical and human resources

for more than three decades (Makhzoumi, 2010), and caused additional population displacement, occurring from rural to urban areas, internally (towards the Capital and other cities), and externally (towards the US and Africa). This resulted in undermining historical and sustainable rural practices, and deserting lands, especially agricultural lands.

- **Sprawl and Unplanned Urban Growth**

Planning lacked being implemented in all rural areas, as a result, construction was allowed as per the law anywhere within a village with no zoning. Moreover, with roads creating the starting point for new development, the urban growth spread horizontally along implemented roads in the form of ribbons, and leapfrog development in both natural and agricultural areas rather than in a balanced way, causing sprawl, and irreversible damages to the natural landscapes (MOE/UNHCR/UNICEF/UNDP, 2020). Furthermore, the growth of villages was also occurring around their traditional centers, affecting primarily the fertile agricultural lands surrounding the core of the village (Zurayk, 2018).

- **Land as Asset**

Since land represents both wealth and power, it is considered a financial asset, a store of value, and a “factor of production” (Fraser, 2012), and not a public good, in a country as scarce of land as Lebanon due to its small size (MoE/UNDP/ECODIT, 2011). Although it is a basis for social life, it was treated as an ordinary commodity and was subjected to market exchange (Fraser, 2012). Moreover, the public nature of the land and its communal or societal value have been stressed due to the prevalent adoption of property ownership in land registries, along with high rates of remittances.

- **Incomplete Cadaster and Tenure Conflicts**

Furthermore, the lack of a complete land registry and cadastral system resulted in large areas of the Lebanese territories being outside the cadaster. Land surveying and delimitation activities have been accompanied by several controversies due to the prevalence of real estate speculation (AFD, 2020). Moreover, land has been at the center of conflicts, related to tenure. Thus, with an absence of just and effective frameworks for resolving conflicts over tenure and protecting public lands, disputes occurring over the borders between adjacent villages and encroachments over public and common lands throughout the survey process led to the loss of these lands.

In sum, several factors have contributed to the unproductive use of land in rural areas and undermined the activation of the social value of these rural lands. As a result, it becomes important to focus on better management of land.

### ***1.1.2. Land Management***

What is land management? Land management has been described as “the work related to the use of land resources within current policy guidelines taking into consideration the legal framework for a specific land area” (Mattson et al, 2017, p.18). Several tasks fall under the label “land management” including (i) adequate resource management schemes that help in the adoption of sustainable land-use policies (Dixon-Gough, 1999), as well as (ii) the effective, sustainable, and socially adequate distribution of land rights and land use (De Vries, 2018). Thus, the management of land is linked to the adopted model of land tenure and the distribution of land ownership (MOE/UNHCR/UNICEF/UNDP, 2020). This requires adequate land administration schemes, such as schemes that balance the multiple values of land, secure land development, define the rules that guide land uses, and make land tenure operational



(Acquaye, 1984). The function of land administration thus includes land registration, land use planning, land management, and property taxation (UNECE, 1996). These functions represent the basis for promoting sustainable development, setting restrictions and responsibilities concerning people, places, and policies, and conceptualizing rights (FAO, 2002).

Land policies determine various aspects of land management, setting the benchmark of acquisition or disposal of land, social and legal tenure regimes, distribution structure, regulations and forms of land use and management, administration systems, and adjudication of land disputes (ECA, 2004). Land policies are translated into social, economic, and legal guiding principles, and rules governing the ownership and use of land resources. Land policies are executed by governments and represent the strategy for economic development and a guide for the best economic use of lands in a nation (Acquaye, 1984), and seek to achieve objectives linked to land rights security, land distribution, access, use, and management (EU, 2004).

Planners are directly involved in land use planning since planning regulations can encourage better land use through zoning, thus securing the protection of ecological areas, defining urban development, and introducing irrigation projects. Indirectly, planners can also help provide better conditions for private development as tenure security (Hanstad, 1998).

## **1.2. Thesis position**

### ***1.2.1. Problem Statement***

Land represents a major asset for communities in rural contexts, particularly communities that rely on agriculture for livelihood (Chileshe, 2005). However, the management of land in Lebanon's rural areas has severely undermined its social

functions. By social functions, I point to the two critical roles played by land in rural areas. First, I point to communal lands as shared areas where the residents of the same village or region can accomplish shared functions. Second, I point to agriculture as a traditional form of collective practice which supports the subsistence of rural communities.

At a moment where multiple crises overlap to undermine the livelihoods of Lebanese communities, such as the financial crisis where Lebanon undergoes one of the worst economic crises of the last century<sup>1</sup> with poverty rates raising to unprecedented levels; the pandemic (COVID 19); the impact of an adjacent Syrian war with the influx of refugees; as well as climate change and various environmental problems and global conflicts (e.g., the Russian Invasion to Ukraine<sup>2</sup>), the thesis seeks to investigate how planners can intervene to protect and enhance the social value of rural lands.

### ***1.2.2. Thesis Questions and Argument***

My thesis explores the challenges facing agricultural and public lands, and the social function of these lands, especially in a rural context, taking the village of Kafra in South Lebanon as a case study.

The research raises the following question:

How have the past three decades of rural land management affected the ability of land to serve as a communal asset in the village of Kafra in South Lebanon, and what can planners do to protect this threatened value?

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<sup>1</sup> The World Bank considered that it could rank among the world's three worst since the mid-1800s in terms of its effect on living standards, as the currency has lost more than 90% of its value and the unemployment rate has been skyrocketing (Hubberd, 2021)

<sup>2</sup> Commentators have openly worried that the escalating conflict may trigger World War III (Rosenfield, 2022). This war is negatively impacting the world in general, and the Middle East in particular, specifically fragile countries such as Lebanon, having a non-productive economy. More than 80% of the wheat in Lebanon has been imported from Ukraine, and 14% from Russia (Geukjian, 2022).

This research question is addressed through several subquestions:

- *What type of spatial developments have occurred over the past three decades in Kafra and how have they affected the village?*
- *How have recent land surveys addressed public land, and have they been able to protect it?*
- *How have planning practices affected agricultural lands and the shared functions of land in the village of Kafra?*
- *What can planners do to protect some of the remaining social functions of land, particularly its communal agrarian practices?*

The thesis argues that land management in Kafra, as effectively organized through land surveys, road development, and land use planning, as well as the national approach to land as a real-estate asset, has undermined the social value of rural land. More specifically, the model of management has led to the illegal privatization of public land through irregularities in the survey. It has also led to the abandonment of agricultural land and/or its building, at the expense of the role that agriculture can play to support communal subsistence needs. The thesis provides recommendations that can mitigate these challenges, and possibly turn the tides.

### ***1.2.3. Thesis Objectives and Significance***

This thesis aims to document the breakdown of the social value of the rural lands in the village of Kafra. It is important to note that the current economic model failed to secure livelihoods for rural communities. Moreover, the current way of using and managing land is threatening its sustainability, being under the burden of encroachments due to land tenure and survey and delimitation processes, and also due

to urban encroachments. Thus, the thesis also contributes to an ongoing reflection on how to activate the social value of land, in contexts of conflict and crises, particularly rural lands which are rarely studied.

### 1.3. Thesis Methodology

This thesis adopts mixed tools of inquiry, quantitative and qualitative. The starting point of the thesis was a planning workshop conducted in 2018/2019, in which I participated as a student enrolled in the diploma entitled “Urban Engineering for Sustainable Cities in Lebanon”<sup>3</sup>. The workshop explored the rehabilitation and revitalization of the old village of Kafra, along with providing general guidelines for the urban growth and direction for future expansion of the village. The thesis builds on the data collected during the workshop, particularly the demographic and economic diagnosis.

To complement the data, I relied on **quantitative tools** such as mapping and visualizations:

- The analysis of urban growth and sprawl in the village was done by using the Lebanese Army Map of 1962, Google Maps of 2005, 2015, and 2021, in addition to data provided by the municipality for the last ten years related to construction permits and residential building licenses.
- The analysis of the natural landscape was done by mapping the topography of the village and doing slope analysis, using Geographic Information Systems (GIS) through ArcMap.

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<sup>3</sup> The diploma was held at ISSAE-CNAM, Lebanon in 2018/2019, in collaboration with CNAM, Paris. The workshop including a group of 5 engineers, Architects Bachir Samer, Malaeb Marwan, Ghareeb May, and Farhat Samar, and topograph Hamadeh Ghadeer, was under the supervision of Professors Jerome Bouissou and Maxime Schirrer.

- The analysis of land ownership, tenure and plot areas was done through GIS, using the information provided by the municipality in 2019.
- The analysis of land use and land cover was based on Google Map of 2021.
- The analysis of land prices was done based on prices used in 2019, as provided by a real estate expert in the village.

The thesis further relied on three kinds of **qualitative tools**. **First, a desk review of available databases and records, statistics and maps, and documents**. The review included annual reports of international and national organizations related to agriculture, land use and natural resources planning, and environmental sustainability (e.g., FAO, DGU, SDATL, CNRS, and the State of the Environment and Future Outlook: Turning the Crises into Opportunities by MOE, UNHCR, UNICEF, and UNDP).

**Second**, the thesis used **in-depth semi-structured interviews** with farmers and experts. In-depth interviews encourage an expanded narrative, engaging the interviewer with the place and local culture (Makhzoumi, 2009). Thus, five semi-structured interviews were conducted between November 2021 and January 2022, on-site for a more casual setting, with the few remaining farmers in the village. Narrations from the farmers provided an overview of the challenges facing agriculture, the practices, and the past/ present relation toward land. These interviews also helped in identifying the different modes of planting, and the types of crops that currently exist in the village.

In addition, **ten open-ended interviews with public officials and experts** were also conducted between November 2021 and January 2022, face to face, online, or by phone, to understand the topic of lands from an administrative and planning perspective, and the challenges facing land management, whether institutionally, socially,

economically, developmentally, and environmentally. People interviewed included urban planning experts; the Head of General Directorate of Urbanism (DGU) in Bint Jbeil; the Head of Final Drawings at the Directorate General of Land Registry and Cadaster (DGLRC); the Office of the General Financial Deputy being in charge for all Court cases related to land registry and referred by the Cadaster and State Land Management; a sworn expert assigned by the Real Estate Judge to investigate real estate and lot ownerships disputes; the Head of the office of the president of Union of Al-Qalaa to which Kafra belongs; the mayor of Kafra; the mayor of Ainata; the Head of Roads and Water Department of the Green Project, Beirut, and the Head of the Department in Nabatiyeh.

Moreover, the thesis used **four walking interviews** between November 2021 and January 2022. The interviews were in the company of a consultant for the municipality, who is also an architect practicing in Kafra, a previous member of the municipality, and a seasonal resident. Given Kafra's topography, walking interviews helped in exploring the evolution or degradation of lands, whether due to occupation or due to urban sprawl, and the transformation that affected agricultural lands. This data was informed by the landscapes where walking took place, emphasizing the importance of environmental features and the multi-sensory dimensions of the surrounding environment. Walking has been considered a more intimate way to engage with the landscape that can offer privileged insights and knowledge into place (Evans & Jones, 2011). When designing walking interviews, determining a set route in advance has the advantage of focusing the interview on specific places that are relevant to the goals of the research (Evans & Jones, 2011).

The third qualitative tool was **participant observations** which included descriptive observation of people, settings, activities, and events (Gilham, 2000). Gradually, focusing on the elements particularly related to my research, observations included land use and agricultural lands. Photographs and videos were also key tools of observation.

I faced limitations and constraints during data collection, due to multiple crises, such as COVID and the fuel crisis, which limited my access to the village, in addition to obstacles when reaching out to the public officers, as the economic crisis limited working days working hours within public institutions due to electricity shortage. Additional constraints faced were related to the sensitivity of the issue of delimitation of public land, as it is associated with corruption.

#### **1.4. Thesis Structure**

The thesis structure is organized into seven chapters. Chapter 2 covers the literature review, outlining the social value of land, land tenure, and agriculture and land. Chapter 3 provides an in-depth review of the case profile in terms of location, landscape, and socio-economic and political situation. The three chapters 4, 5, and 6 review planning strategies, land surveys and management, and the economic model affecting land use. Chapter 4 provides a review of the development of the built environment and the sprawl in the village. Chapter 5 reviews the process of survey and delimitation of land in the village, focusing on public lands. Chapter 6 explores the intersection between the management of land and the collective good through the lens of agriculture. The thesis ends with chapter 7 which includes thesis findings, recommendations, and a conclusion.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1. Introduction

“It seems that human development can only lead to ever greater degradation of the land all of us depend on. We urgently need a strategy that will permit both development and conservation. The starting point of that strategy is the land itself” (FAO/ UNEP, 1996, p.16,17).

Rural livelihoods largely depend on access to land and natural resources (Quan, 1998). Land, along with its natural resources, is closely linked to rural communities’ socio-economic interests (Acquaye, 1984). West (1982) stresses the importance of land to human livelihoods:

“Directly or indirectly, countries remain heavily dependent on the land for the element needs for survival, for habitation, subsistence cropping, or foreign exchange earnings; their socio-political structures have frequently been determined by access to and control over land resources” (West, 1982, p.1).

A large proportion of the Sustainable Development Goals SDG echoes this prioritization of land (De Vries, 2018), which makes the adequate management of this resource indispensable.

To investigate the relation between planning, land management, and the common good, this literature review covers several entry points: the social value of land, land tenure, and the relation between agriculture and land. The application of the tenure system in Lebanon is reviewed in Chapter 5 of this thesis.



## **2.2. Land Rights: Tenure Model and the Social Value of Land**

The social value of land refers to the function played by land to improve people's quality of life, secure their right to shelter, or even protect their socio-spatial identity (De Vries, 2018). Accordingly, land is treated as a critical ingredient of human life (El Nour et al, 2015), and should not be considered like any other commodity for sale (Fraser, 2012).

In western societies, the value system stresses competition and economic growth, thus, considerations are given to competition in a market-driven property rights structure (Ezigbalike, 1996). As a result, land and its uses are often associated with economic growth. Conversely, in other societies including many African rural communities, the importance of land is linked to the social needs of these communities rather than to economic growth (Ezigbalike, 1996). Claims to lands are claims of use of this land (Whitehead and Tsikata, 2003). These claims occur at the social level, and out of relations between people, rather than property relations between people and land (Whitehead and Tsikata, 2003).

Since the turn of the 20<sup>th</sup> century, most land management and development schemes have prioritized individual freehold as the model of land ownership. As a result, these schemes have supported a predominant reliance on private property and market forces (De Schutter & Rolnik, 2014). Accordingly, the 'public' nature of land, its communal or 'societal' value, has come under severe strain due to the common adoption of the property "ownership model" in modern land registries worldwide (BUL, 2020).

One of the most critical factors for determining how the various functions of land are balanced are models of tenure. In the next section, I turn to these models.

### 2.3. Land Tenure

What is land tenure? Chadwick (2008) perceived "tenure" as the best umbrella when describing the relationship between people and land, as it is about social relations engaging with nature, land, and landscape, as well as the relationship between people themselves and land (Mientjes & Pluciennik, 2013). Land tenure defines access to land and its resources, including the right of ownership<sup>4</sup> and the modes of utilization. Sometimes described as a "bundle of rights" (Bruce, 1993) (including the rights to use<sup>5</sup>, sell, and inherit, easements, mortgages, insurances, leases, long-term leases, and sale promises), land tenure ultimately defines the relationship between people, society, and land in specific contexts (Payne, 2002). This relationship is buttressed by a system of institutions (e.g., social relations) that defines and monitors the rights governing access to land and the resources attached to it (Maxwell & Wiebe, 1999).

Tenure rights can be defined through formal (statutory) or informal (social, customary) systems, and they can rely on legal state institutions or social customary institutions for their implementation, control, and maintenance (Al-Khatib, 2013). Thus, FAO points to the legal or customary modes through which land tenure is defined:

"The relationship, whether legally or customarily defined, among people, as individuals or as groups, concerning land and associated natural resources" (FAO, 2002, p.2).

Various forces affect tenure systems, such as population growth, industrialization, urbanization, and accelerating exploitation of natural resources, in

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<sup>4</sup> Ownership of what is above and below land, accordingly, the owner can cultivate it, build on it, excavate it, and extracts what the land can produce following the systems of laws and regulations (Judicial Laws, 2015).

<sup>5</sup> The right to use a given land, enjoying, and behaving over it as per the systems of laws and regulations, including cultivation, construction, excavation, and extraction of building materials, exploiting natural resources (Judicial Laws, 2015).

addition to external influences such as the imposition of new legal systems by colonial power (UN-Habitat, 2014).

Land tenure regimes/ systems reflect income and consequently power distribution arrangements in relation to land (Sadr, 1972). Land tenure regimes set who can hold the rights, how to exercise the rights, and regulate and distribute them (Eaton, 2005). The nature of land tenure regimes is linked to the balance between individuals and communal interests (Eaton, 2005). Bruce (1993a) considers that to understand a land tenure regime or system, one should locate this system in the economic, political, and social frameworks where it was produced, noting that these frameworks change over time (West, 1982; Basset, 1993).

### ***2.3.1. Forms of Land Tenure***

Although freehold is dominant as a model, communities have historically adopted numerous other forms of holding property. In this section, I show some of the main considerations that need to be accounted for when thinking about models of land tenure and how they affect social and communal practices. I specifically review models that unbundle ownership and use rights, and communal models of landholding, and look at how these forms have changed in Lebanon's subsequent registries.

#### **2.3.1.1. Unbundling Ownership and Use Rights**

Scholars have explored modalities through which land rights have separated ownership from use rights. Historically, societies rarely ascribed ownership to land (Barrett, 2013). Peters (1998) considered that property connotation was affected by several transformations, where it represented initially the right to exclude others from the use of land, and accordingly the right in the exploitation of the land. It was only

when the freehold model was widely adopted that property was associated with the exclusive right of use to landowners (Peters, 1998). Thus, land is recognized as a thing that can be possessed, while anthropologists, historians, and archeologists would rather link it to the social relations between people (Hann, 1998).

Today, despite this association, many customary tenure laws distinguish between ownership on the one hand and 'use-rights' (e.g., occupancy, field roads, pasture, water, or else) on the other. Furthermore, such use rights can be individual, kin-based, collective, or communal (Mientjes & Pluciennik, 2013). They can also extend over different temporalities, with some being temporary or for a specified duration, or extend longer –becoming even heritable. They can also be passed on and alienable or inalienable, and user rights can be subject to services, taxes, or shares in resources or products (Mientjes & Pluciennik, 2013). Thus, while land ownership indicates legal property relations, they can exist without a necessary overlap with land exploitation, which can be obtained through use rights (Mientjes & Pluciennik, 2013).

#### 2.3.1.2. Private Property and Rights to Land

Scholars have disagreed on whether land can be owned. Indeed, the question of rights to private property, whether land or other natural resources, has been at the core of the philosophical analysis of land tenure (Eaton, 2005). Historically, critics denounced the possibility of owning land. This can be read in Rousseau's staunch criticism of the institution of private property:

"The first man, who having enclosed a piece of land, thought of saying 'this is mine' and found people simple enough to believe him, was the true founder of civil society. How many crimes, wars, murders, how much misery and horror the human race would have been spared if someone had pulled up the stakes and cried out to his fellow men 'beware of listening to the impostor. You are lost if you forget the fruits of the earth belong to everyone and the earth itself to no one!" (Rousseau, 1750, p.109).

Other radical thinkers had similar positions towards private property, as George expressed "historically and ethically, private property in land is robbery, there is no such thing in nature as a fee simple" (George, 1880, p. 240). Proudhon (1840), the French anarchist philosopher, argues as well in his work, 'What is Property' that all property is theft.

Conversely, other scholars have defended private property as necessary. In his well-known proposition, "The Tragedy of the Commons", Hardin (1968) considered that the rise of private landed property at the expense of common use rights was an irreversible process, driven by individual aspirations seeking to maximize economic profit through establishing this private ownership of land (Dalglish, 2003; Pluciennik, 2005; Tarlow, 2007). Others have argued that private ownership is necessary to protect the security of tenure for those who work the land, and improve it, justifying hence the necessity to acquire property rights (Eaton, 2005). How does one acquire land? In pioneer societies, titles are issued to the first occupiers and developing land, reflecting the principle of social justice in supporting the argument of "the land to the tiller" (Eaton, 2005). Similarly, the liberal philosopher Locke (1690) argued that first occupancy and labor are the basis of the property right, where the property is transferred from the common realm to the individual one.

"As much land as man tills, plants, improves, cultivates, and can use the product of, so much is property. he by his labor does, as it was, enclose it from the common... God and his reason commanded him to subdue the earth...subduing or cultivating the earth and having dominion, we see, are joined together. The one gave a title to the other" (Locke, 1690, p.32).

This argument can be destructive to natural resources, and linked to non-sustainable land uses, as in the case of Amazon forests in Brazil, where land policies gave titles to settlers to clear the Amazonian forests with soil unsuitable for permanent cultivation (Monbiot, 1993).

Elsewhere, the motto of "improvement" was used as a justification for private appropriation of previously communally used land, during the eighteenth and nineteenth centuries (Dalglish, 2003; Pluciennik, 2005; Tarlow, 2007).

### 2.3.1.3. Communal Modes of Land Tenure

Land ownership can also be tied to shared or communal claims, linking individual land claims to common property arrangements and collective strategies, and reflecting larger social relationships (Souvatzi, 2013). Customary tenure systems represent an integral part of the social structure and culture of a group, resulting in an attachment between community and land, providing identity and continuity to a group, and also providing security and means of subsistence. Communal lands also include common areas for the whole group, such as sacred places, graveyards, and communal areas, in addition to forests and uncultivated areas, where hunting and other activities are considered common rights (Eaton, 2005).

The idea that societies can manage the "common properties" adequately has been questioned by Hardin (1968) who argued in "Tragedy of the Commons" that "freedoms in commons bring ruin to all" (Hardin, 1968, p.1244), as men rush to pursue their own best interest in societies believing in the freedom of commons. Conversely, Bromley (1992) considered that there are no common property resources, but resources managed as common property, defined by Shackleton et al. (1998a) as:

“Any resource that is subject to individual or group use but not to individual ownership and is used under some arrangement of community or group management” (Shackleton et al., 1998a, p.7).

Thus, studies started investigating factors, conditions, and criteria behind common property resource management success (Lane & Moorehead, 1995; Shackleton, 1998a). Empirical evidence and theory show that when local producers have the opportunity and resources to develop their management institutions, they do so effectively (Lane & Moorehead, 1995).

In many developing countries, new forms of tenures imposed by colonial powers replaced the customary land tenure and rights, where the control over areas considered common property was taken by the State (Eaton, 2005). This requires ensuring that changes should occur in a way that minimizes harmful social and environmental impacts, along with equitable distribution of development's benefits (Eaton, 2005). As for land policies, it affects land and resource use. While various land tenure systems were introduced by colonial powers, the latter had great influence over traditional land tenure (Eaton, 2005). Accordingly, land legislation was introduced to enable the State to acquire land that was considered waste, vacant, or ownerless (Eaton, 2005).

### ***2.3.2. Land Registration***

Land registration is the process through which modes or forms of land claim are recorded. In modern times, registration is associated with the development of an official registry or cadaster where multiple claims are recorded, with a comprehensive survey of property boundaries (Hanstad, 1998).

Historically, official records for ownership of lands dated back to 3000 B.C. in Ancient Egypt, and they were associated with the purposes of taxation (Hanstad, 1998).

Similarly, the Romans established a cadaster for purposes of land taxation. Conversely, in China, surveying was conducted for designing irrigation systems (Hanstad, 1998).

In recent decades, development advocates have claimed that the absence of a registry creates uncertainties over land interests' nature and ill-defined boundaries create a major cause of disputes in developing countries (Hanstad, 1998).

Nevertheless, oppositions can face the establishment of a registration system, as a rural population can fear the enforcement of land tax by the government (Hanstad, 1998). While land registration contributes to solving problems of production, credit, and else, it does not address problems of landlessness, or most fundamental problems, nevertheless, it should be considered within the strategy to improve rural poor's conditions (Hanstad, 1998).

Although this is a technical matter, land registration also has critical social implications since it allows individuals to claim access and exclude others (Singirankabo, 2020). Historically, registration helped in achieving greater tenure security and protection of rights for those who could secure property, along with facilitating issues linked to land and the investment in land, through reducing disputes, and providing good support for governments in land administration, taxation, and planning (Eaton, 2005). The lack of documentation and marked boundaries created constraints in defining ownership and delimiting areas involved, but it is important to note that throughout the registration process, threats of loss of communal rights and control over common property exist (Eaton, 2005).

#### **2.4. Agriculture and Land**

This section looks at land tenure systems from several angles. First, I outline the implication of land tenure security on agriculture, Second, I outline the links between



modes of land tenure and rural livelihood, and the links between land tenure and rural development.

#### ***2.4.1. Land Tenure Security and its implication on agricultural uses***

The literature on economic development places great importance to the notion of security of tenure. This literature specifically points to the importance of protecting access to the means to produce food or generate income for communities to meet basic needs (ECA, 2004). As a result, access to land is critical, and security of tenure becomes a static determinant of development, particularly in agrarian communities, since it determines land uses and access to land resources (Maxwell and Wiebe, 1999; ECA, 2004).

In addition, ownership of land is often associated with capital formation in rural areas (Sadr, 1972) since access to land can allow farmers to reap the benefits of their work. Accordingly, access to land and land rights for farmers can improve social equity and consequently secure basic human needs and decent livelihoods (Sharma & Jha, 2016). Conversely, researchers have shown that inequality in access to land stands in the path of development (Sharma & Jha, 2016).

Land tenure can nonetheless also be secured when modes of land acquisition are regulated by defining rental rates, interest rates, wages, price stabilization, or provision for marketing and credit facilities (Timmons, 1965; Sadr, 1972).

All in all, scholars believe that higher tenure security increases farmers' demand for land improvement and increases the supply of credits through tradable collateral, it also increases the interest of tenants to improve the land (Sadr, 1972). They further argue that the insecure status of tenants, along with the power monopoly of the landlords, negatively affects land productivity and farm income. Consequently, changes

in land tenure can increase the land to be cultivated, by transferring control of land from persons with a lack of interest in using it, to persons with more incentives to do so (Sadr, 1972).

#### ***2.4.2. Land Tenure and Rural Livelihood***

Many social scientists consider the nature of tangible and intangible assets of rural people concerning their livelihood, and what they have rather than what they lack. Thus, the analysis of livelihood considers strengths and opportunities rather than needs, building on people's inherent potential (Carney, 1998). Ellis (2000) defines livelihood:

“A livelihood comprises the assets (natural, physical, financial and social capital)<sup>6</sup>, the activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by an individual or household”. (Ellis, 2000, p.10).

Concerns related to the increasing pressure on land and rural livelihoods occur since land plays an essential social and cultural function and is not just an economic asset or commodity (De Schutter & Rolnik, 2014). Through ‘the community, tenure and natural resource analytical schema’, Freudemberger (1994) suggests how to analyze land tenure and natural resource data. It links the community, the tenure system, and natural resources where land is a base upon which the community depends for its production and livelihoods (Freudemberger, 1994). When considering the characteristics of the community, the focus is on people and the nature of livelihood and production systems, the social structure of the community, and the political,

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<sup>6</sup> Natural capital consists of natural resources including land, water, and biological resources, used by people in pursuing their livelihoods. Physical capital refers to producer goods, basic physical infrastructure and production equipment enabling people to undertake their livelihood activities. Financial capital includes people's financial resources such as savings, supplies of credit, remittances (Carney, 1988). Human capital refers to labor available for the household (Carney, 1998). Social capital refers to formal and informal social resources or social relationship of people, such as family networks (Scoones, 1998).

geographical, and economic context (Freudenberg, 1994). While the tenure system deals with the rules when managing land. As for the land itself, the focus is on its characteristics, the status of these resources (in abundance or scarcity), and the degradation or improvement of these resources (Freudenberg, 1994).

#### ***2.4.3. Land Tenure and Rural Development***

Land tenure arrangements are linked to social relations in rural areas, distribution of income, and power relations (El Ghonemy, 1993). Different forms of tenure affect socio-economic, political, and material conditions since landholding determines access to land, its uses, control, and the relative power and influence of various actors (Shipton and Goheen, 1992).

Important factors should be considered when analyzing the role of land tenure in rural development, such as the rights and responsibilities of "who owns the land, who operates it, and who manages its use". These property rights can be represented through the use rights (rights to use the land for grazing, growing crops, and gathering forestry products...); the control rights (as rights to making decisions on how the land should be used); the transfer rights (as rights to sell, mortgage, convey land, transmit it through inheritance to heirs, and to reallocate use and control rights) (FAO, 2002).

Land ownership is related to land-based power in society. Moreover, it is the set of institutions and policies determining locally how to access lands and their resources, who can use these resources, for how long, and which conditions to be used under (Bruce et al., 2010). It also includes institutional arrangements of leasing-out, inheritance, and taxation (El Ghonemy, 1993).

Land tenure reforms have a major impact on the whole rural community. Land and natural resources are not assets to be managed based on considerations linked to assessed costs and benefits (Peters, 2002). Rather, land and natural resources are the basis for ways of life embedded in particular histories and networks of social relations of power and matrices of meaning (Peters, 2002).

## **2.5. Conclusion**

In conclusion, a new path in dealing with land is required, by going beyond the market and providing a sustainable livelihood for the rural people (Lahiff, & al, 2007). There is a need to catalyze an ongoing countermovement for the protection of rural societies, since these societies cannot be considered commodities, and cannot allow the market to be the sole director of the fate of human beings and their natural environment (Fraser, 2012). Incentives, such as the right to land, economic incentives, and improved infrastructure, are to be produced, while other factors such as security of tenure, and people's participation are to be considered (Sharma & Jha, 2016).

## CHAPTER 3

### CASE STUDY PROFILE

This chapter profiles the village of Kafra, which is the case study of the thesis. It presents the natural, social, historical, and economic characteristics of the village.

#### 3.1. Location of the area under study

Kafra, a village in South Lebanon, is located in the Caza of Bint Jbeil, along the main artery linking the city of Tyre to the village of Bint-Jbeil. The village is part of the Union of Al Qalaa, a coalition of municipalities formed over a decade ago. Kafra is situated 103 km away from Beirut, 21 km away from Tyre, and 14 km away from the center of the Caza in Bint-Jbeil (Figure 1). Surrounded by several villages<sup>7</sup>, the village has a total area of 11.63 km<sup>2</sup>. The Syriac origin of the name Kafra, signifies village, farm, and field.

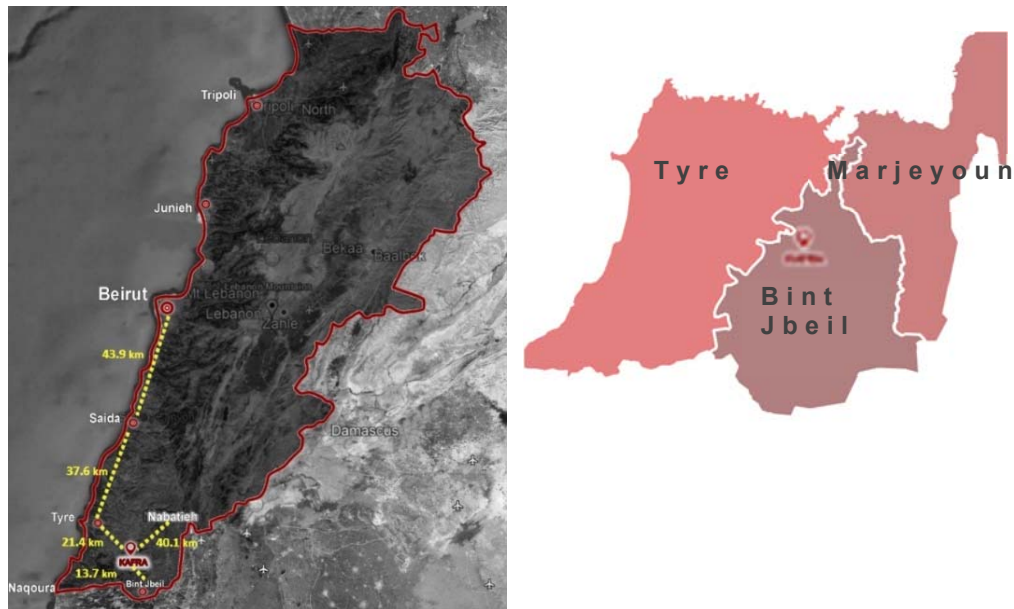


Figure 1: Location of Kafra (Author, 2019)

<sup>7</sup> Villages are Mazraat-Mechref, Deir-Ntar, Haris, Srobbine, Yater, Saddiquine, Rechknanieh, and Deir Ames.

### 3.2. Landscape of Kafra

Kafra is a picturesque village, overlooking the sea, with a remarkable topography consisting of twenty-three hills (Figure 2), and a natural reserve. Only eight hills out of the twenty-three are still intact, with some of them being woodlands (mainly oaks), and with an abundance of natural caves, while urban sprawl expanded over the remaining ones (Figure 3). Prior to the Israeli occupation in 1982, Kafra's entrance was formed through a remarkable row of trees that marked the path from the nearby village of Qana, with oak, pine, and ononis trees. The Israeli army however cut the trees and used the highest hill in Kafra, known as Al-Hakban, as a central military site from which the army overlooked several villages and the main artery linking Tyre to Bint Jbeil.

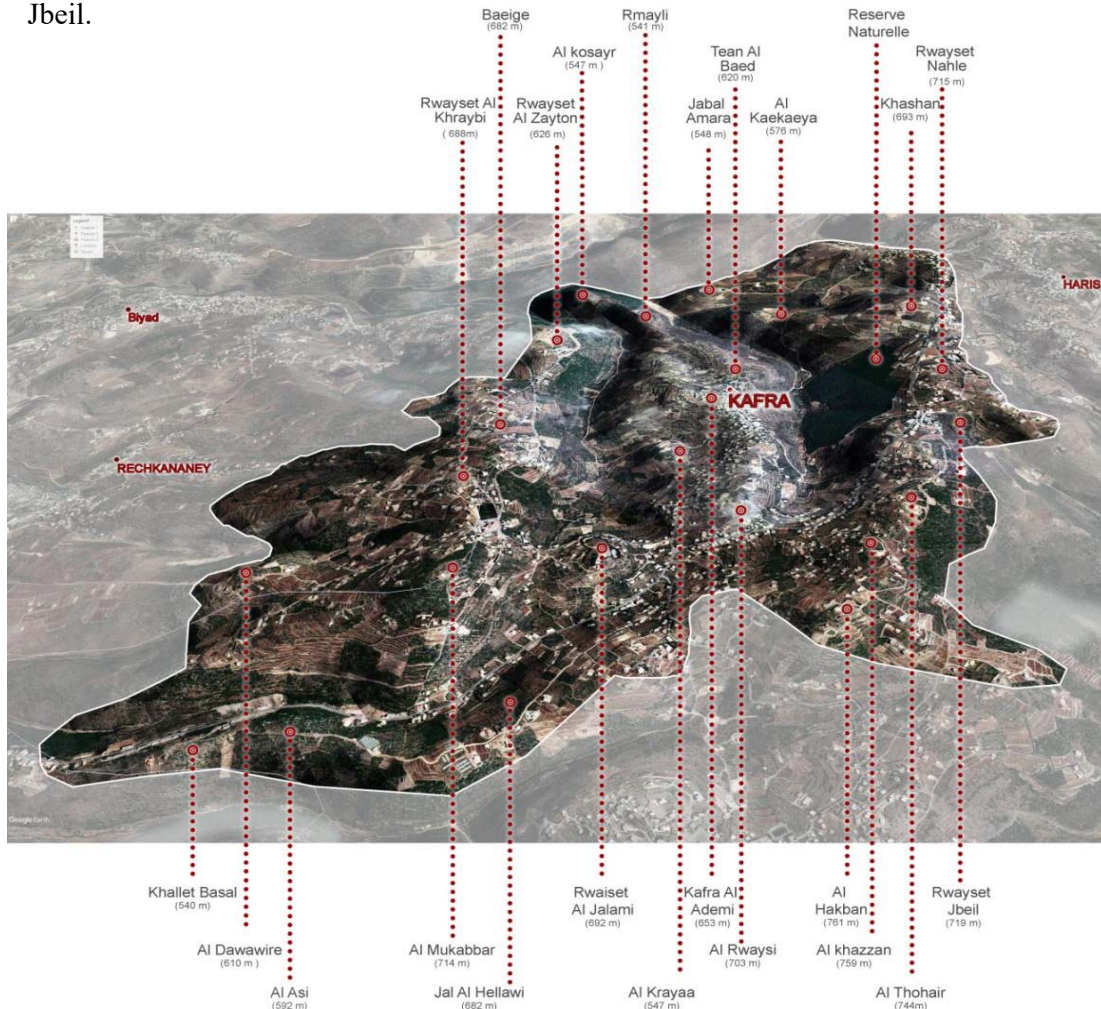


Figure 2: Picture from Google Map showing the different hills in Kafra (Author, 2019)

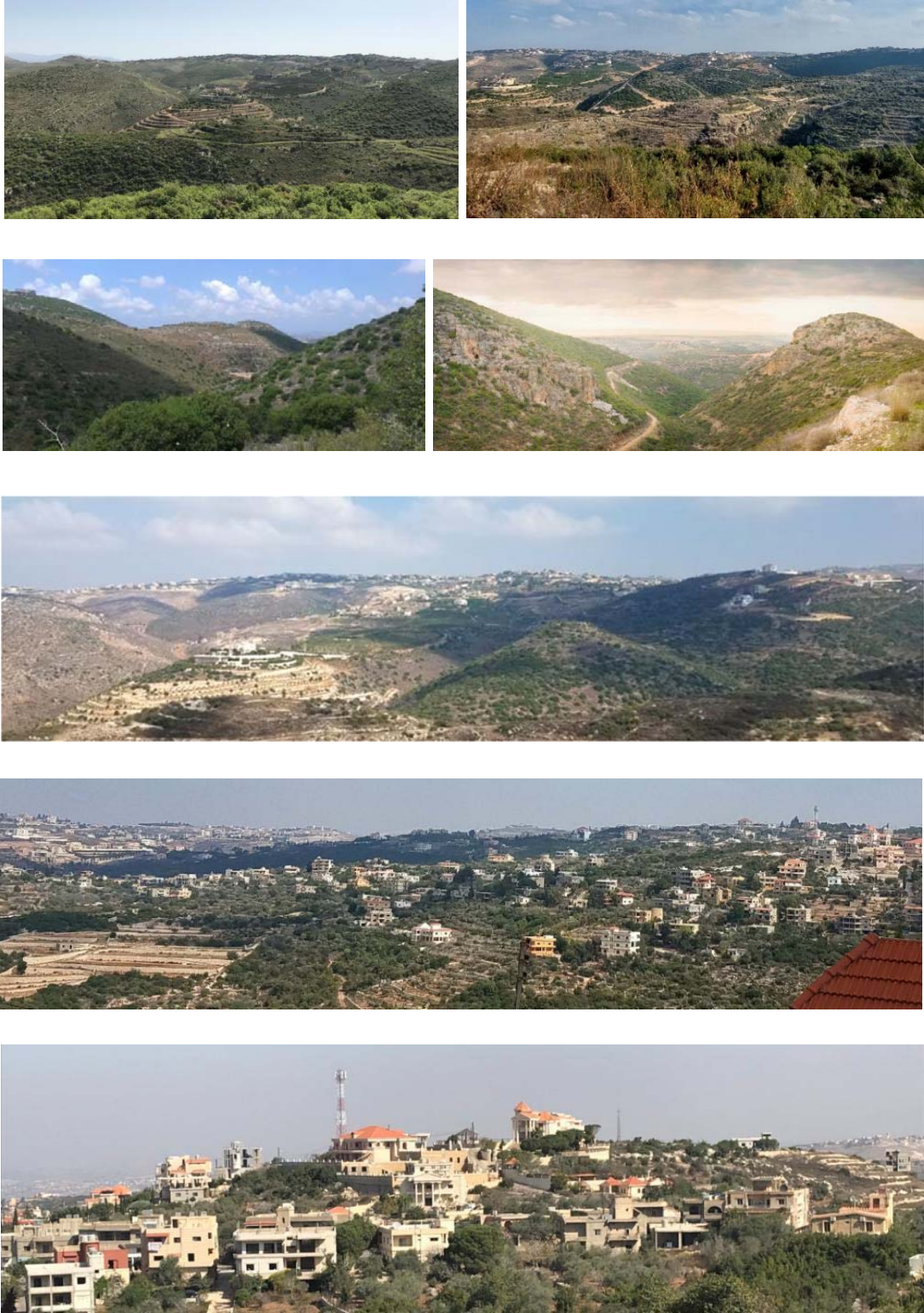


Figure 3: Pictures showing intact and inhabited hills in Kafra (Author, 2022)

### ***3.2.1. Topography***

Topography is an immutable and inevitable feature of the Lebanese territories (NPMPLT, 2005). The mountains shaped the climate, water resources, landscape, and biodiversity (NPMPLT, 2005). The physical features of the terrains, along with the quality of the soil and the availability of water affected agricultural practices, the types of crops, and the practices used. This topography also resulted in a rich landscape, such as mountains, hills, valleys, plains, cliffs, and peaks (NPMPLT, 2005).

Figure 4 shows the interesting topography of Kafra, including a total number of twenty-three hills varying in altitude between 540 m and 760 m above sea level, While Figure 5 shows the slopes in the village, as they represent an essential element related to construction, agriculture, and other natural land-based activities. It is important to highlight that the majority of the areas with higher values of slope varying between 50 to 90%, are located towards the border of the village, and these are mainly woodlands.



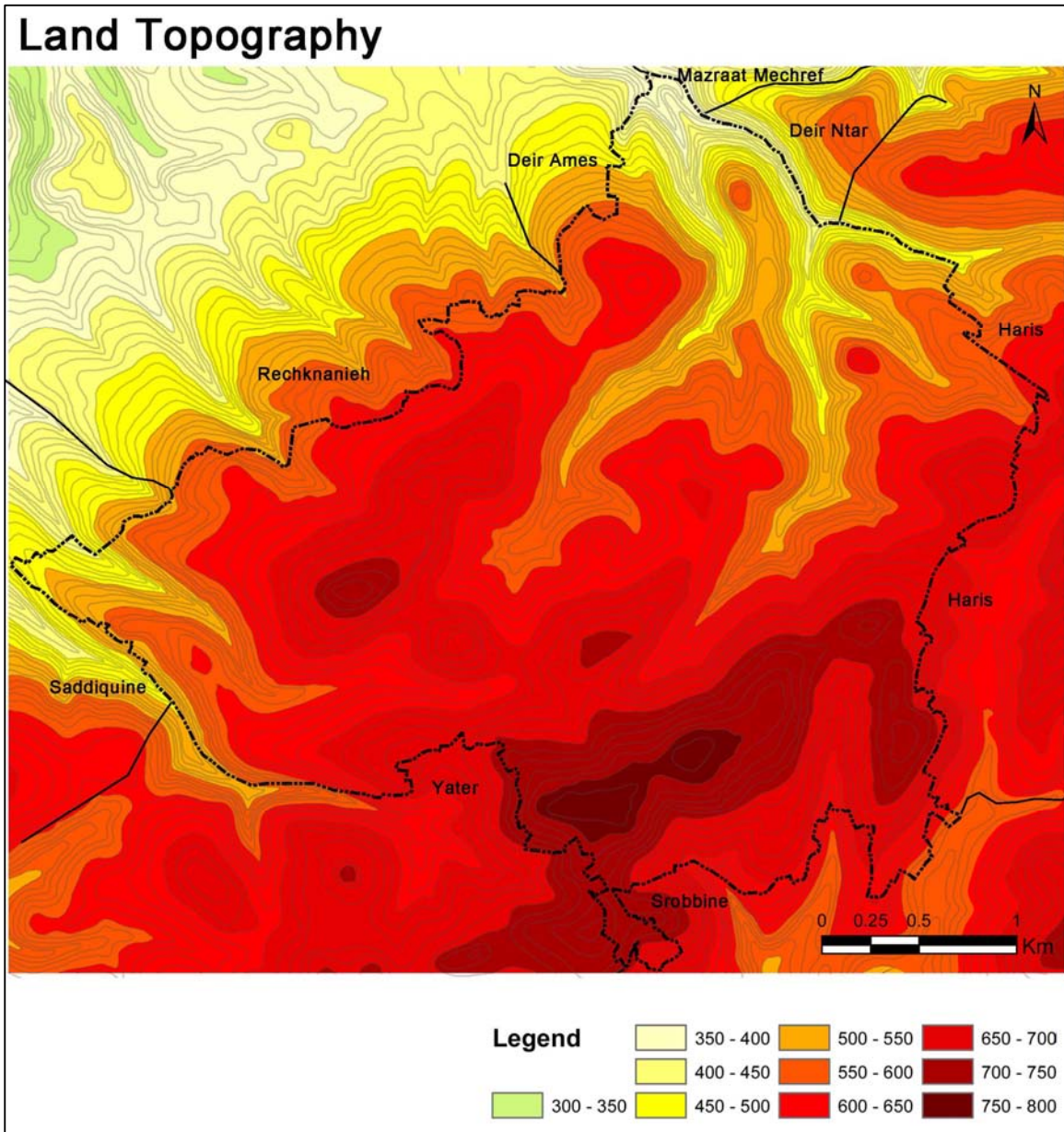


Figure 4: Land Topography, featured through GIS (Author, 2022)

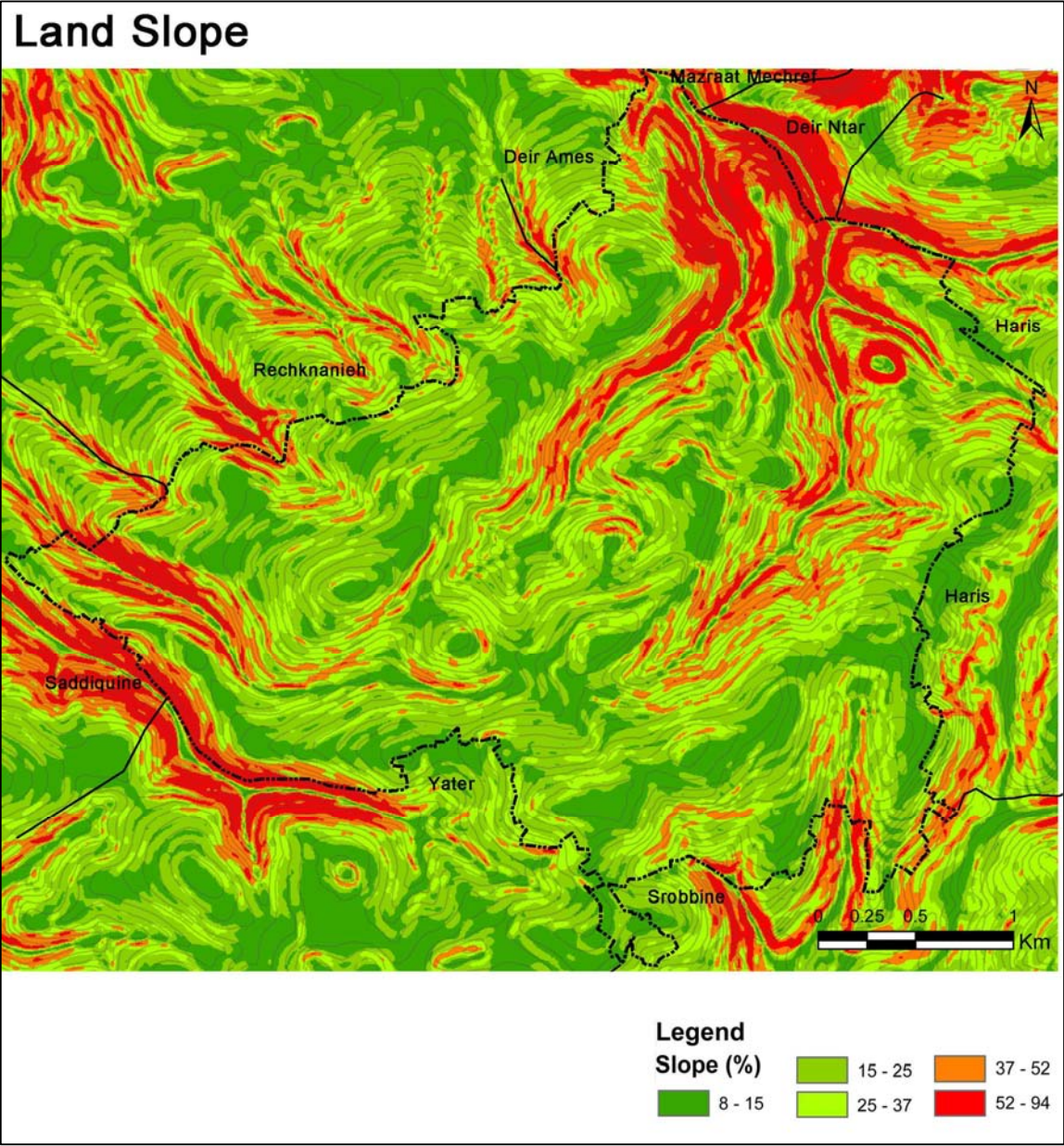


Figure 5: Land Slope, featured through GIS (Author, 2022)

### 3.2.2. Natural Sites

A wooded land in Kafra, with a total area of 339,582 m<sup>2</sup>, is located over Khallet Obeid, with an altitude varying between 550m and 680m above sea level and covered with oak trees (Figure 6). To protect this land from various encroachments occurring like grazing and hunting, the residents of Kafra, represented by their mayor, attempted in 2010 to classify this land as a natural reserve. In 2011, the area was decreed a “Natural Reserve”<sup>8</sup> in Kafra, in caza Bint Jbeil” under Law no. 198. The objectives were to conserve biodiversity, natural environment, and natural resources. Moreover, activities such as tree-cutting, hunting, camping, and lighting fires were prohibited. Currently, there is no management plan for the reserve, nor a committee entity. As for planning, no buffer zone surrounds the reserve to protect it from threats of fire.



Figure 6: The natural reserve in Kafra (Author, 2019)

<sup>8</sup> The conservation of natural sites started in Lebanon in 1992 under the classification of nature reserve ratifying the first two nature reserves by Law 121/1992 (MOE/UNHCR/UNICEF/UNDP, 2020). To improve natural conservation, Law 130/2019 was issued classifying protected areas into four categories: natural reserves, natural sites, *hima*, and natural parks, along with outlining management and financial processes and procedures, while Law 130 strengthened reserve management through considering nature reserve committees, legal entities with independence on the financial and administrative levels (MOE/UNHCR/UNICEF/UNDP, 2020).

### 3.2.3. Rural Cultural Landscape

The landscape represents a tangible expression of the rural culture, and a rich medium of heritage and identity construction (Makhzoumi, 2009). While the youth consider the identity is linked to the environment and nature conservation, elderly dwellers consider that the village's identity and heritage are rooted in the agricultural landscape, linking their valuation with productivity and usefulness (Makhzoumi, 2009). The rural landscape can be characterized through five themes: functional<sup>9</sup>, environmental<sup>10</sup>, aesthetic<sup>11</sup>, spatial<sup>12</sup>, and identity and village heritage<sup>13</sup> (Makhzoumi, 2009). Landscapes are an important factor in the quality of life in Lebanon, as they represent an economic and social asset (NPMPLT, 2005). When examining the cultural landscape in Kafra, terraces represent a major agricultural practice, especially due to the steep topography, necessitating the protection of soil from erosion. Current existing terraces in the villages can be classified as decaying and nonfunctional due to lack of maintenance, old but still functioning, or newly implemented (Figure 7).



Figure 7: Pictures showing old and new terraces (Author, 2022)

<sup>9</sup> Where the landscape is considered a source of livelihood, and landscape productivity is the basis for this rural livelihood (Makhzoumi, 2009).

<sup>10</sup> Where landscape refers to nature and is valued regarding the healthy environment and the natural scenery, with a need to protect the natural landscape being heritage and cultural one (Makhzoumi, 2009).

<sup>11</sup> Where the landscape is regarded as a source of pleasure and entertainment, including a place for promenade, various activities, the scenery, and the seasonal festive (Makhzoumi, 2009).

<sup>12</sup> Where the landscape is linked to a specific place linked to historical, sacred, and traditional settings.

<sup>13</sup> Linking the place to traditional rural practices and social customs, through continuing local traditions and keeping alive inherited memories of the place (Makhzoumi, 2009).

### **3.3. Socio-Economic Situation and Politics**

#### **3.3.1. Main Actors**

Several actors play a role in the organization of service delivery in the village.

#### **Public Actors:**

**The Municipality:** The first municipality in Kafra was elected in 1963. However, the elected council resigned a few months later, and no other municipal council was elected until 1998. The current municipal council consists of fifteen members, and these members mostly represent two political parties, Amal and Hezbollah, who share leadership and divide the years at the head of the council equally with three years for each party. The municipality has been active in implementing several development projects that serve the village and its surrounding<sup>14</sup>, mostly being built over public lands. Mr. Fawaz, the head of the office of the Union, confirmed that the municipality of Kafra offered to host a sorting center over public land, with an area of around 15,000 m<sup>2</sup>, located towards Deir Ames, and serving the Union. This project is expected to be executed in the coming couple of years.

As for municipal services, some basic services are provided, similarly to all other local authorities in Lebanon with limited financial capacities, including mainly road maintenance and solid waste collection. The main infrastructure networks available in the village are potable water and electricity, while private septic tanks are used for sewage.

**The Union:** The Municipality of Kafra is a founding member of the Union of Municipalities of Al-Qalaa consisting of twelve municipalities<sup>15</sup>.

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<sup>14</sup> As the football court and the secondary school.

<sup>15</sup> Tebnine, Kfardounine, Deir Ntar, Kafra, Qalawey, Safad El Bateekh, Jmeijmeh, Haris, Aita El Jabal, Yatar, Ramya, El Sultanieh.

Other public actors include official actors, such as the various ministries (Ministry of Public Works, Ministry of Energy and Water) and Al-Janoub Council.

**Religious Actors:**

Shiite Waqf is present in Kafra. The local waqf committee is responsible for maintaining waqf lands including cemeteries, and religious buildings such as mosques and *husseyniyyas*. Waqf receives donations mainly from expats to be able to cover these tasks.

**Expats:**

Expats, through their remittances, represent an important pillar of the economy of the village, even before the economic crisis. This happens through two main channels, the direct transfer to families and relatives, and the construction of private houses (Villas) that maintains the vitality of the construction sector in the village. Moreover, funding of mosques, cultural centers such as *husseyniyya*<sup>16</sup>, educational centers, and others, contributes to the local economy as well.

**NGOs:**

Two non-governmental organizations are active in the village. *Sanabel-El-Kheir*, managed by Sheikh Hassan Issa, organizes annual exhibits to secure markets for local agricultural provisions or *Mouneh*<sup>17</sup>, in addition to art exhibitions. But these activities were suspended during the last two years due to Covid restrictions. While *Al-Qualb-Kafra*, another local organization, focuses mainly on cultural and entertainment activities, including the opening of a small library (hosting various cultural events and traditional evenings) and the equipment of the village's public spaces/ squares with adequate urban furniture. As for local environmental initiatives, composting started as

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<sup>16</sup> Muslim Shiite community halls.

<sup>17</sup> It includes olive products, such as olive crops and olive oils, olive waste compost, jams...

an individual initiative before it had a relative spread among residents. Unfortunately, this activity was to be later put on hold due to Covid considerations.

### ***3.3.2. Permanent Residents and Everyday Life***

Kafra's residents originate either from Kafra or from the surrounding villages<sup>18</sup>. In the latter case, these residents have moved to Kafra attracted by the environmental qualities of the village as well as its active municipality in implementing development projects. The demography diagnosis in Kafra reveals the complexity and diversity of the village at the social level. The electoral registry includes permanent and seasonal residents, expats, and additional residents living permanently outside Kafra. Around 3,000 persons<sup>19</sup>, mainly Shiites, reside in Kafra permanently, while between 6,000 to 7,000 persons inhabit it seasonally (during summertime and including emigrants). This population includes 8,000 registered in Kafra and 2,000 registered outside Kafra. Table 1 and figure 8 show population distribution based on age and gender, while table 2 and figure 9 show the percentage of population distribution based on age.

As for mobility, Kafra lacks any type of public transportation and is relying exclusively on private cars.

While concerning the educational sector, the village has two main schools, one public (a newly built school replacing an existing one), and the second is private (le Lycée Kafra). Referring to the administration offices of both schools in 2019, a percentage of 30% of the students reside in Kafra, while 70% reside in the surrounding villages. The students relying on buses represent 90%, whereas 5% rely on private cars, and the remaining 5% rely on walking.

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<sup>18</sup> Surrounding villages as Haris, Deir Ames, Saddiqine, Hadetha and Rchef.

<sup>19</sup> These data and figures were provided by the municipality of Kafra in 2019.

Year	G	0-21	22-40	41-64	65-75	76+	Total Population	
2010	M	1595	535	1089	151	199	3569	6492
	F	1378	421	742	215	167	2923	
2015	M	1513	1185	948	124	111	3881	7562
	F	1468	979	954	149	131	3681	
2018	M	1714	1120	954	117	98	4003	8000
	F	1718	1074	941	144	120	3997	

Table 1: Population distribution based on age and gender (Author, 2019)

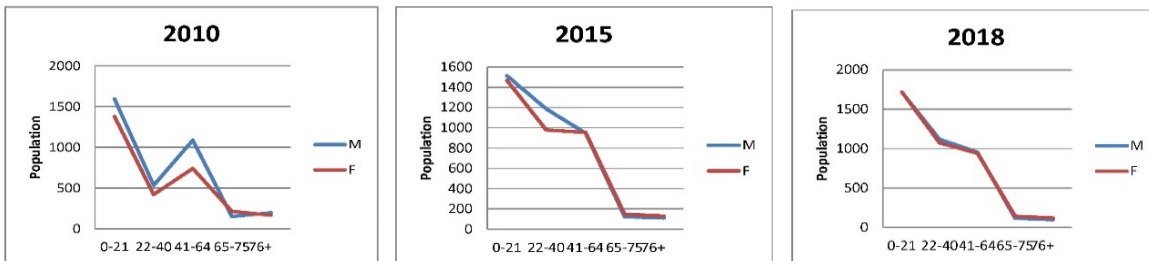


Figure 8: Population distribution based on age and gender (Author, 2019)

Year	0-21	22-40	41-64	65-75	76+	Total Population
2010	2973	956	1831	366	366	6492
	45.8%	14.7%	28.2%	5.6%	5.6%	
2015	2981	2164	1902	273	242	7562
	39.4%	28.6%	25.2%	3.6%	3.2%	
2018	3432	2194	1895	261	218	8000
	42.9%	27.4%	23.7%	3.3%	2.7%	

Table 2: Percentage of population based on age (Author, 2019)

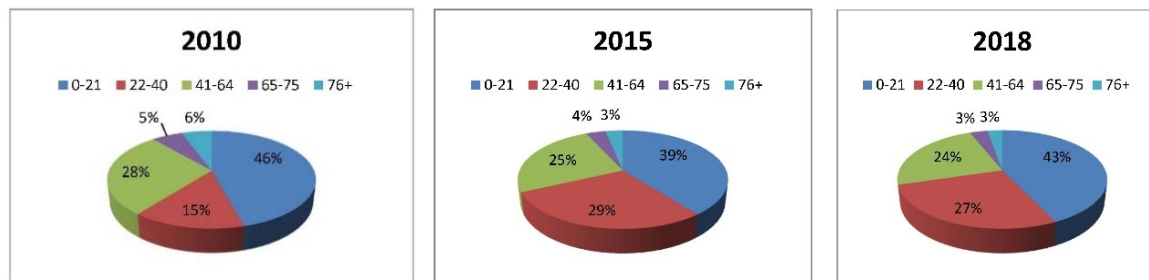


Figure 9: Percentage of population based on age (Author, 2019)



### ***3.3.3. Economic Sectors***

Historically, the rural area where Kafra is located relied mainly on agriculture as a central economic activity. However, the lack of interest from the Central State, the lack of irrigation, and other difficulties all compounded to undermine agriculture in the area. As a result, while agriculture was the cornerstone of the economy of Kafra, today it barely supports the subsistence of some of the villagers. Chapter 6 provides more details about this sector along with its linkage to the village of Kafra.

Conversely, the real estate and construction sectors in the village witnessed a boom, in parallel to the boom in the whole country, but also reflecting the particularity of the area after 2006, and the role of expats in the vitality of this sector. The large number of remittances in foreign currencies are widely invested in real estate which is contributing more and more to the financialization of land (AFD, 2020).

Aside from these two sectors, Kafra's permanent residents are typically employed in the public sector (e.g., education, health), or they make a living through trade and commerce by opening stores along the main artery linking Tyre to Bint Jbeil.

## CHAPTER 4

### KAFRA'S BUILT DEVELOPMENT

This chapter reviews the evolution of the built development in the village. It examines urban sprawl, its relationship with planning, and its impact on agriculture. The chapter also covers new types of developments (e.g., villas) and Kafra's becoming a "secondary home" village instead of a site for local agricultural development.

The chapter argues that building sprawl has had severe negative effects on the town, ruining agricultural land and natural landscapes. The chapter links this sprawl to planning decisions, such as road development, as well as the lack of effective land regulations, lax informal permitting, and particularly an active speculative land market.

#### **4.1. Land Use and Land Cover**

In line with other rural areas in Lebanon, Kafra's land uses have shifted over the past three decades heavily towards urbanization, losing much of their agricultural assets to urban sprawl. Indeed, weak land and natural resources management, weak implementation of adequate urban planning, violations of existing urban plans, and real estate speculation all pushed toward this form of urbanization (AFD, 2020).

Agricultural lands represent only around 37.7% of the total area of the village, while the built fabric represents 11.6% of the total area. The latter figure represents the result of the evolution of urbanization expanding over agricultural lands throughout the years, which will be shown in the next section on the physical development of Kafra.

#### 4.2. The Physical Development of Kafra

Kafra's development reflects the dynamics of a rural region that has endured occupation in South Lebanon since 1982. Living conditions in the area are difficult, water and sanitation systems and education levels are weak, and household incomes are among the lowest in Lebanon<sup>20</sup>.

Throughout its history, Kafra's morphology followed the traditional landscape of villages in South Lebanon where an old village core, typically settled on a hilltop, was surrounded by agricultural lands down towards the valley. The built fabric was mainly concentrated along the old main road, ramified from the main artery linking Tyre to Bint-Jbeil, and leading to the core of the old village. Figure 10 shows the built fabric based on the Lebanese Army Map of 1962. The public square within the old village included the old mosque, a *husseyniyya*, and a shrine for Prophet Younes. In 1982<sup>21</sup>, Kafra came under Israeli occupation, which caused the forced displacement of families. Villagers left for other Lebanese cities and to destinations outside Lebanon, especially to the US and South Africa. Interviews with farmers indicated that up to 50% of the residents who remained after the 1982 occupation were elderly. Due to the lack of security, residents partly deserted agricultural lands, causing eventual degradation of this land. During this period, there was no public development strategy led by the central government.

After the liberation of the South in May 2000, Kafra witnessed major building development activities. First, new roads were implemented, often crossing through

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<sup>20</sup> Based on CAS household survey conducted in 2019, 23% of the residents in caza Bint Jbeil are considered poor or very poor, 67% are considered average to poor, while the remaining 10% are considered wealthy (MOE/UNHCR/UNICEF/UNDP, 2020). The situation has been escalating with the occurring economic crisis.

<sup>21</sup> Kafra witnessed incomplete liberation until September 1987, when Israeli Army withdrew from all the sites located on the highest hills in the village as Al-Hakban and Al-Khazzan hills. Nevertheless, Kafra remained in proximity to Israeli forces, and under their recurrent incursions.

agricultural lands. These roads allowed for construction to follow, causing rapid sprawl and irreversible damage to the agricultural commons of the village, and along the main artery linking Tyre to Bint Jbeil. Figure 11 shows the built fabric in the area based on Google Map of 2005, which was concentrated mainly in the old village, the main artery linking Tyre to Bint Jbeil, and the newly implemented road towards Deir Ames.

After the 2006 War, the main artery linking Tyre to Bint-Jbeil witnessed rapid building development, as businesses and buildings flocked to this vital economic, commercial, and service axis for the village and its surroundings. Mixed-use buildings (residential, commercial, and industrial) are concentrated along this artery continuously from Kafra to the nearby village of Haris. Figure 12 shows the built fabric in the village based on Google Map of 2015.

This rapid building development has continued to develop, despite the current economic crisis. In Kafra, the sprawl followed newly implemented roads and was spread over different directions, in the West towards Deir Ames and Rechknanieh, in the South towards Srobbine, and along the main artery linking Tyre to Bint Jbeil. Figure 13 shows the built fabric in the area based on Google Map of 2021.

As for future expansion, unless any measures are taken, building sprawl is expected to follow the same path, through spreading along new/ future implemented roads, including agricultural roads, in the form of ribbons and “leapfrog development”, at the expense of agricultural lands, thus increasing the prospects of irreversible damage to the natural landscape.

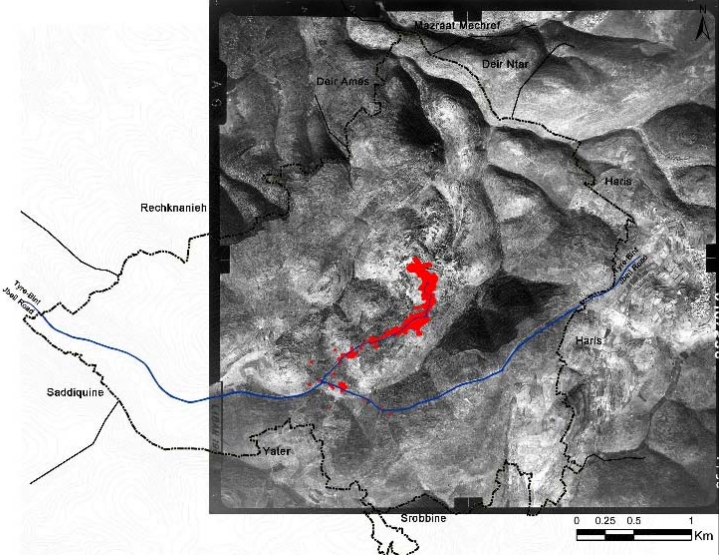


Figure 10: Built fabric, based on the Lebanese Army Map of 1962 (Author, 2022)

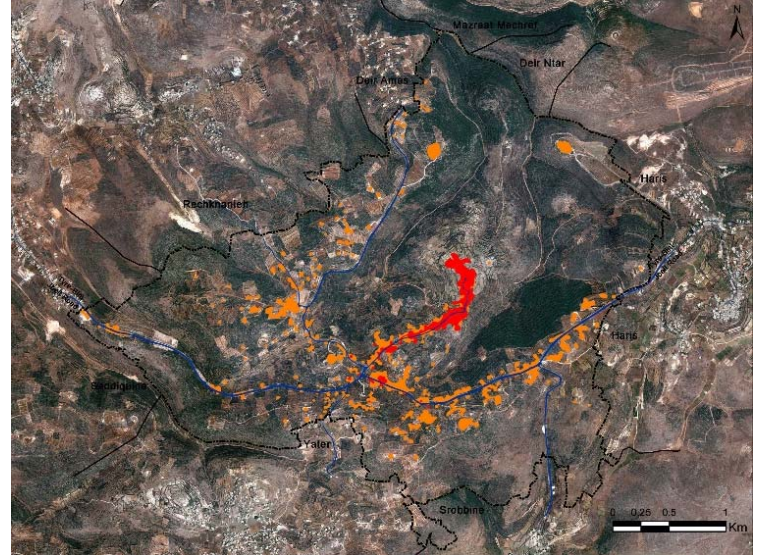


Figure 11: Built fabric, based on Google Map of 2005 (Author, 2022)

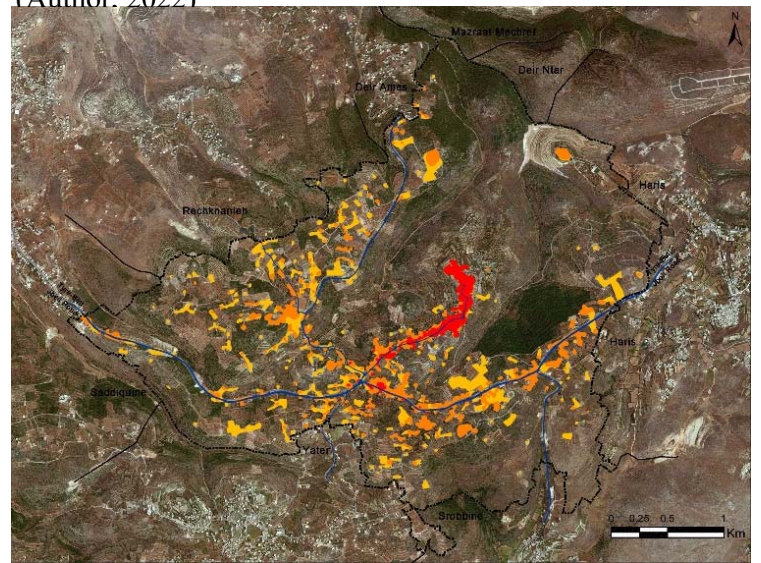


Figure 12: Built fabric, based on Google Map of 2015 (Author, 2022)

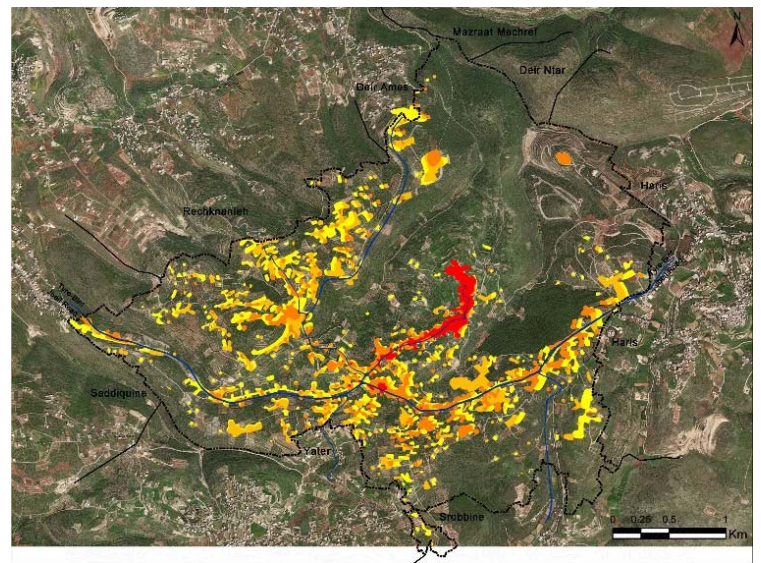


Figure 13: Built fabric, based on Google Map of 2021 (Author, 2022)

Morphological differences, in terms of height and architectural design, exist between the old core and the rest of the village. Regarding the built heritage, the brutal Israeli destruction of the village especially during the 2006 war, left only a few old buildings (with only fourteen remaining) within the historical core of the village. Some of the remaining old houses<sup>22</sup> are currently inhabited, while others need repair (Figure 14). While mixed-use buildings are located around the main spine and have different typologies and heights varying between two to five floors (Figure 15).

A prominent aspect of the village is the presence of some sumptuous residences that dominate hilltops (Figure 16). Wealthy landowners acquire most of a given hill, pool land, and plant trees on the entire land. This process occurred over four hills. The landowners of these residences are mainly expatriates, some of them originated from the adjacent village, Haris.

As for open spaces, the old village had three consecutive squares, (i) *Bab Al Seha*, where elderlies used to meet on daily basis, in a form of a non-official council, to discuss various topics related to their village, (ii) *Bab Al Jameaa* which includes the old mosque, a *husseyniyya*, and a shrine for Prophet Younes, and (iii) *Tourbet Al Fawqa*, close to the cemeteries. The majority of roads within the old village are narrow, with no sidewalk.

Communal facilities were relocated from the old village core to the extension of the new village, along the road linking Kafra to Deir Ames. This includes the municipal building, two additional *husseyniyyas* and two mosques, a public school, and a health center. Moreover, an existing building that was initially intended for use as a hospital by the Waqf is to date not finalized, but builders intend to reuse/repurpose this building.

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<sup>22</sup> The oldest house in the old village dated back to 1810, and the 1<sup>st</sup> registry of population during Ottoman mandate dated back to 1867.

Some new developments reflecting the dynamism of the municipality in Kafra are to be noted, such as the newly built secondary school<sup>23</sup>, a football court<sup>24</sup>, and a municipal land intended to be equipped as a public garden (Figure 17).

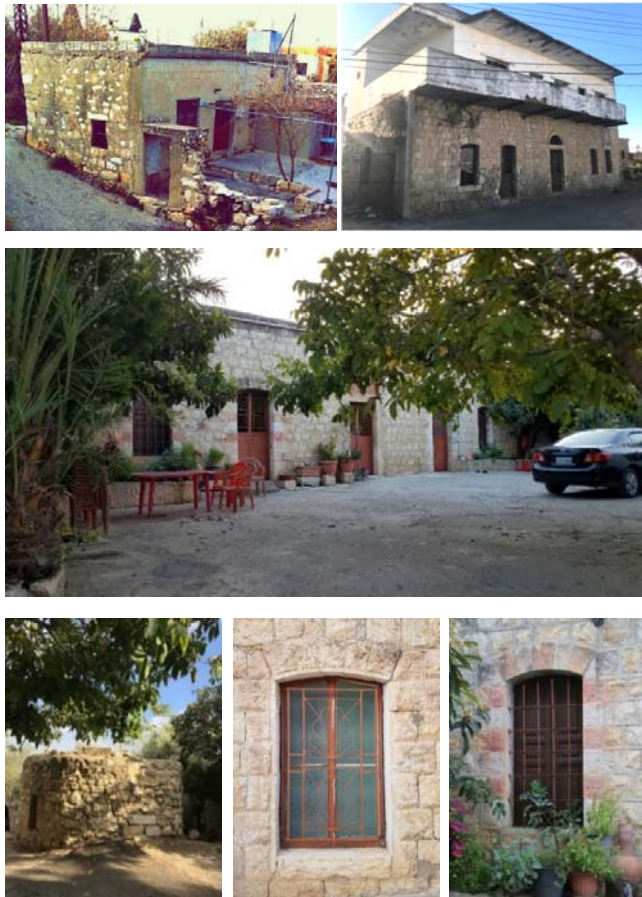


Figure 13: Traditional buildings in the old village (Author, 2019)



Figure 14: Buildings on the main artery linking Tyre to Bint Jbeil (Author, 2019)

<sup>23</sup> As a replacement for the old public school and targeting students within Kafra and its surrounding. It was also built over a municipal land in 2018 with a fund by Majlis Al Janoub.

<sup>24</sup> Built in 2016 over a municipal land and funded by expats, the municipality, and the Union of Al Qualaa. It receives games from different league levels.



Figure 15: Sumptuous residences dominating hilltops (Author, 2022)



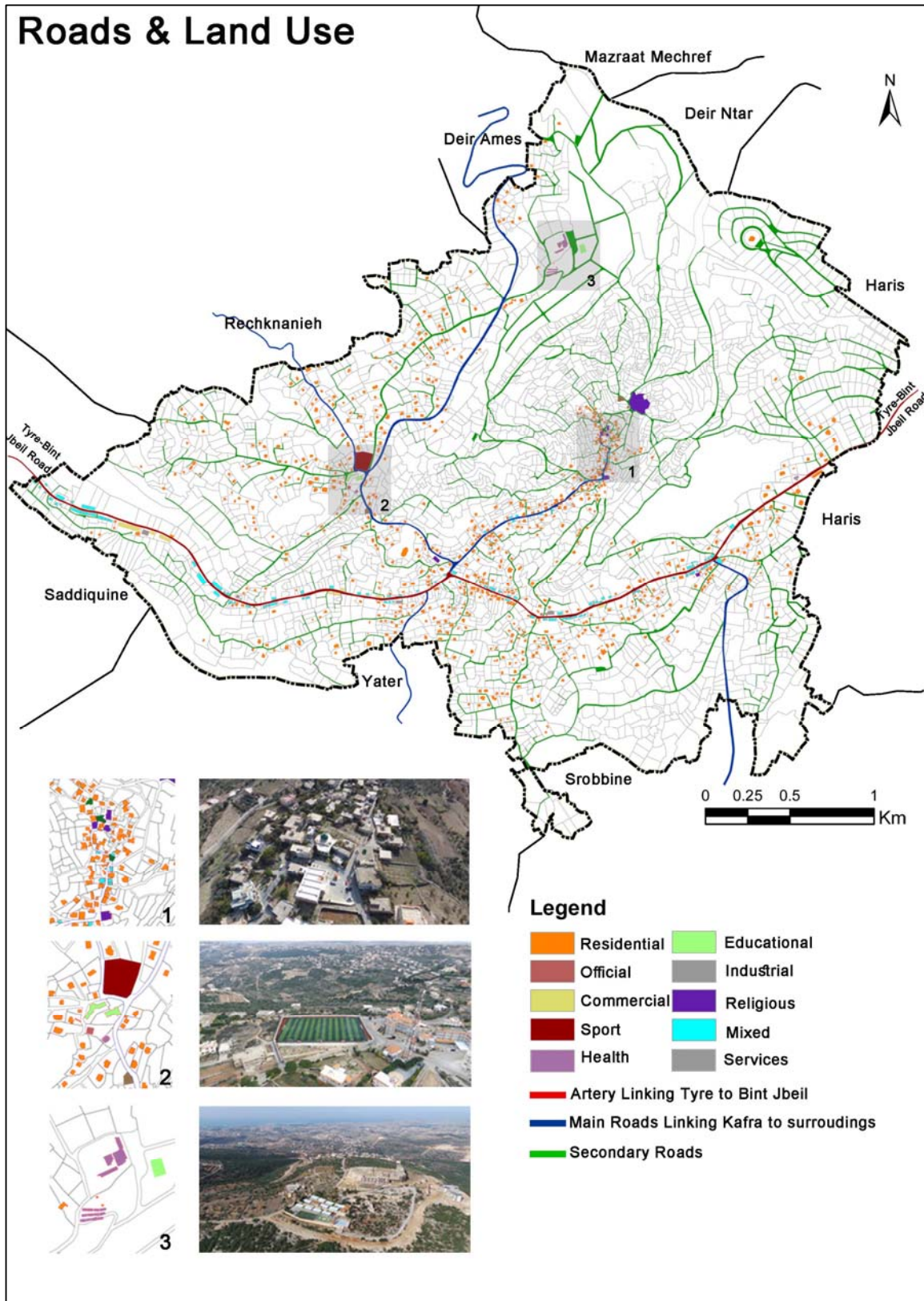


Figure 16: Roads and Land Use (Author, 2022)

### 4.3. The Building Regulatory Framework

Zoning has an essential role in protecting the interests of the country and its citizens and ensuring good management of land to preserve wealth and natural resources, in addition to protecting land in particular and the environment in general (FAO, 2012). There are critical gaps in the Lebanese legislation that fail to protect agricultural land and the natural environment, accompanied by a lack of coordination between various departments involved in land use and zoning (FAO,2012).

In Lebanon, a National Physical Master Plan of The Lebanese Territory (NPMPLT)<sup>25</sup> was developed to define the principles of development and the basis of the usage of territory for all areas in Lebanon (NPMPLT, 2005).

According to the Legal Agenda (2018), around 14% of the Lebanese territory in 2018 had a land-use plan issued by a decree, around 4% were partially planned, and the remaining 81% were unplanned. The head of DGU in Caza Bint Jbeil confirmed that only three villages within the caza, Bint Jbeil, Tebnine, and Froun, have approved masterplans. In his master thesis, Zeineddine (2014) highlighted that master plans are supposed to be used as tools to protect natural wealth, however, it failed in the case of the Tebnine Master Plan to prevent urban sprawl and to protect agricultural lands. Other experts consider that the result of the DGUP's flagrant disregard for the NPMPLT, during the elaboration of Master Plans by the central authority, and the indolence in planning areas exacerbated inequalities among different areas (Basbous et al., 2018).

Kafra depends on the directorate general of urbanism in Bint Jbeil for permitting since both the village and the Union lack an engineering department. To date, the village has no master plan. Accordingly, there are no restrictions on building anywhere

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<sup>25</sup> NPMPLT was developed by the Council of Development and Reconstruction (CDR) in 2009 under the Decree 2366.

within the village, similar to all unplanned areas in Lebanon, where all private lands can benefit from high building ratios of 25% for the surface exploitation ratio, and 50% for the total exploitation ratio. As a result, urban sprawl threatens increasingly the natural landscape and the identity of Kafra.

Work on land registration in Kafra started in 2008. At the time, surveys were initiated, and they have yet to be finalized. Surveys and clarification of property boundaries has not been an easy task: numerous conflicts over ownership have emerged, both in the definition of borders with other villages and within the boundary of the village. Additional details are provided in chapter 5.

#### **4.4. Construction Permits and Licenses Provided by the Municipality**

In 2018, the records of the Order of Engineers and Architects showed a severe drop in construction permits across all governorates in Lebanon. The least severe drop was recorded in the South governorate where only a 6.1% drop was noted. Table 3 shows the distribution of construction permit surface area allocated in 2018 (source of the data compiled by OEA and published by Banque du Liban) (MOE/UNHCR/UNICEF/UNDP, 2020). Conversely, a considerable increase in built-up area occurred in Kafra in 2021 despite the economic crisis. The average area for this new construction is around 500 m<sup>2</sup>, which typically indicates the construction of villas. Most of these villas are owned by expats (Figure 18).

Governorate	Surface area derived from construction permits in 2018 (m <sup>2</sup> )	Evolution from 2017
North Lebanon	132,600	- 33.7%
Mount Lebanon	4,550,000	- 25.2%
Beirut	348,000	- 50%
South Lebanon	1,660,000	- 6.1%
Nabatiyeh	1,070,000	- 19.4%
Bekaa	1,150,000	- 23.4%

Table 3: Construction permit floor area (MOE/UNHCR/UNICEF/UNDP, 2020)



Figure 17: New constructions of villas (Author, 2022)

According to the municipality of Kafra, figures 19 and 20 show the built-up area during the last ten years in terms of permits. The figures also show the informal permits (licenses) disbursed by the municipality following circular 613 of 2014. This circular allowed exceptionally for the development of up to 150m<sup>2</sup> of construction without regular permitting, and often in violation of regulations.

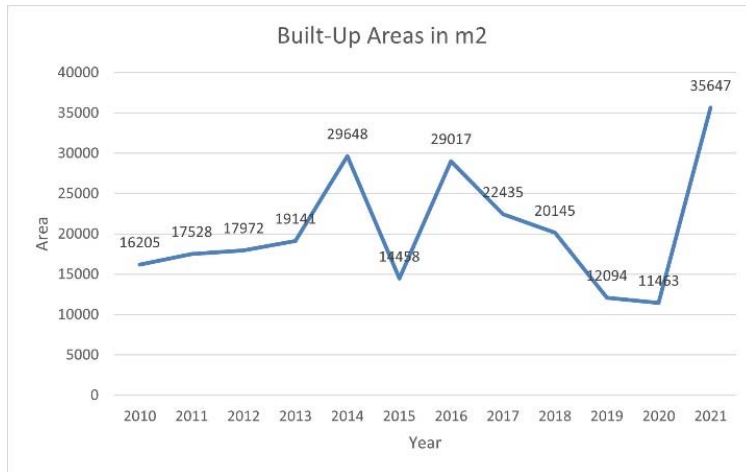


Figure 18: Built-up areas in m<sup>2</sup> (Author, 2022)

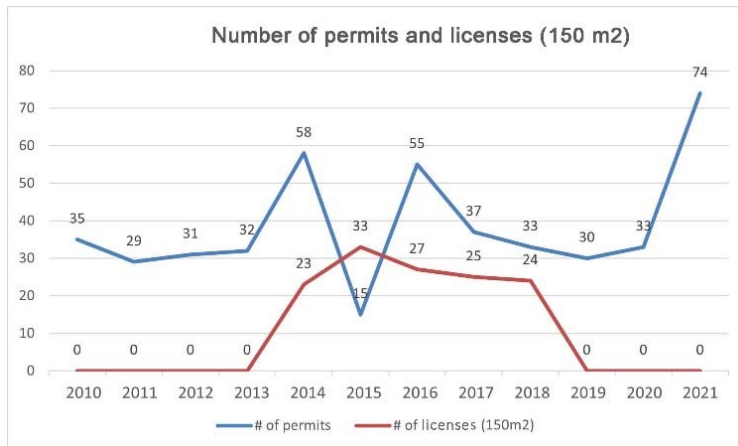


Figure 19: Number of permits & licenses provided by the municipality (Author, 2022)

Many of these informal permits were dispersed in agricultural lands and along implemented roads. It is important to notice that additional sprawl started occurring during the last couple of years<sup>26</sup> in the areas surrounding the old village core down towards the valley, affecting primarily the fertile agricultural lands (Zurayk, 2018) which continued to be cultivated even during the Israeli occupation (Figure 21).

<sup>26</sup> As noticed through my field visits that took place between 2019 (when enrolled in the diploma) and 2022.



Figure 20: Urban sprawl occurring within the core agricultural lands surrounding the old village (Author, 2022)

#### 4.5. Real Estate and Land Prices in Kafra

The Lebanese economy gives huge importance to the real estate sector. Multiple drivers supporting this industry, including incentives, laws, and policies encourage real estate development even in agricultural lands (FAO, 2012). These incentives led to the abandonment of agricultural land due to rising land prices along with low agricultural profit (FAO, 2012).

Prices of lands, in Kafra and everywhere else in Lebanon, reflect the dominance and primacy given to the best locations (along main arteries or located over hilltops), and the best use of land (services, residential, villas), through the impact of construction at the expense of agricultural lands.

Based on the information I collected about prices of lands in 2019, provided by an expert in the real estate field in the village<sup>27</sup>, figure 22 shows considerable price variations between lands and plots according to their various locations and the uses of

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<sup>27</sup> It is important to note that the current economic crisis resulted in complexities in the property's valuation all over Lebanon, and the current instability of the market affected by the devaluation of the Lebanese pound versus the USD, in addition to the different available means of payments and agreements (bank check, Lollars, in cash...).

land. High prices, varying between 150 to 200 \$/m<sup>2</sup>, are considered for lands located on the main artery linking Tyre to Bint Jbeil, due to the vitality of this artery, and the abundance of services and industrial activities along it. These values even increase up to 250 \$/m<sup>2</sup> towards Haris, on top of the highest hills, and in residential areas considered for villas. Lands facing the sea have also high prices varying between 80 & 150 \$/m<sup>2</sup>. Agricultural land prices diminished up to 30 to 50 \$/m<sup>2</sup>, and 40 to 80 \$/m<sup>2</sup>, with terraced lands, while lowest prices varied between 20 to 30\$/m<sup>2</sup>, for lands located down the valleys.

In conclusion, this chapter showed how the evolution of the built environment in the village is occurring along newly implemented roads. While the lack of zoning allowed construction everywhere, along with licenses provided by the municipality, leading to sprawl occurring throughout the village including agricultural lands. Moreover, the economic model dealing with land as an asset, favoring freehold and encouraging uses of land for construction over agricultural use, resulted in Kafra becoming a “secondary home” village at the expense of local agricultural development.

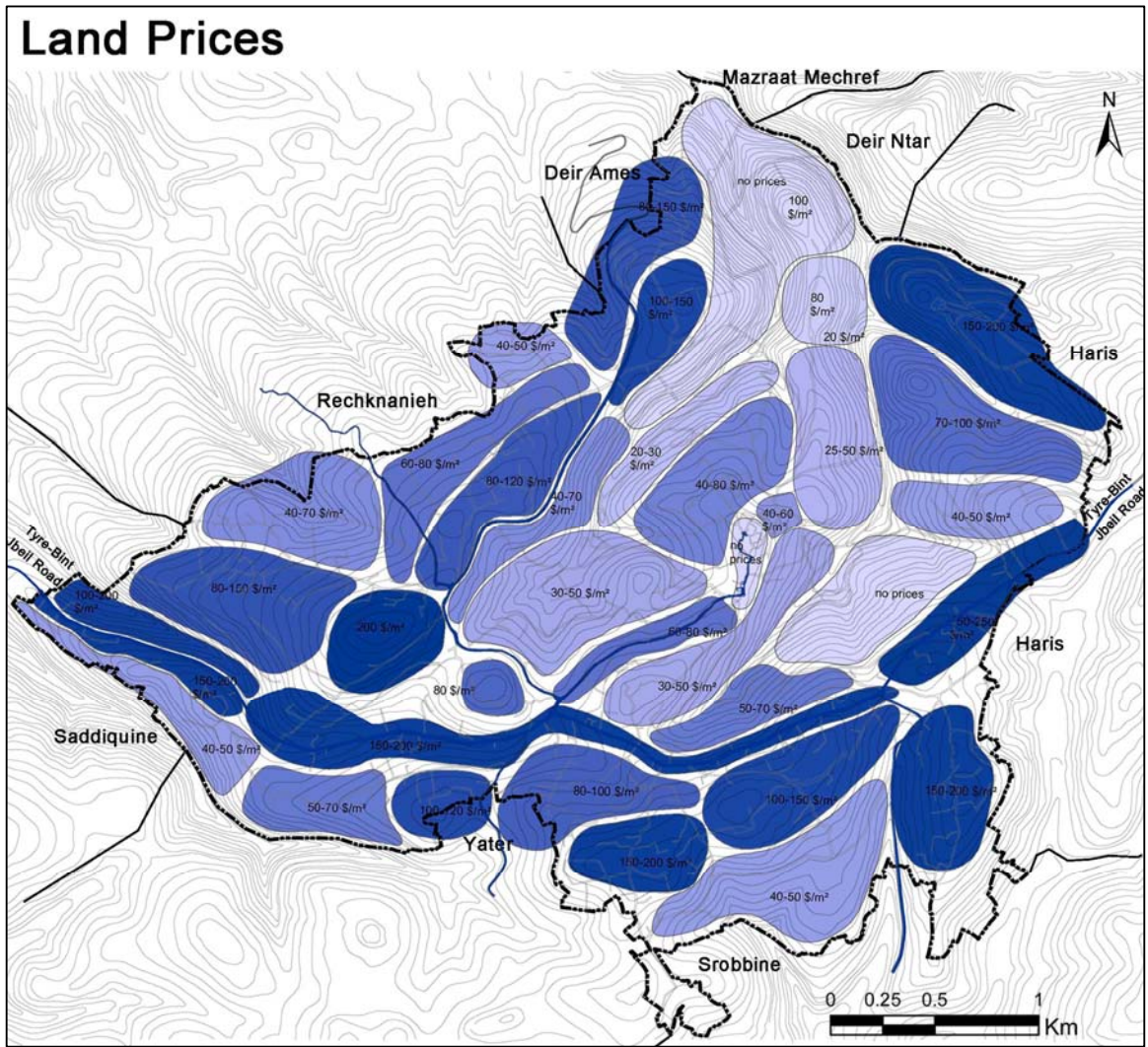


Figure 21: Land Prices of 2019 (Author, 2022)



## CHAPTER 5

### THE IMPACT OF THE CADASTRAL SURVEY ON KAFRA'S PUBLIC LANDS

As part of its commitment to good land management and following recommendations of Agenda 21 of the Earth Summit on Sustainable Development, for example, Lebanon has continued to extend the process of surveying land and developing the national cadaster until it covers the entire country. This step is seen as part of the good management of land, and it is expected to help preserve national wealth and protect natural resources, along with ensuring economic progress and prosperity (FAO, 2012). Indeed, land registration, along with land use planning, land management, and property taxation represent the good practice of how land tenure rules are applied and made operational (UNECE, 1996). Major challenges related to the clarification of tenure and the finalization of the land registry, as we will see in this chapter, are related to the delineation of village boundaries and the privatization of public assets.

This chapter reviews the process through which the land survey was conducted in the village of Kafra, focusing specifically on the survey delineating public lands. The chapter argues that the delineation of properties has worked against the protection of categories of public land and led to their loss.

#### **5.1 The Institution of the Cadaster and Lebanon's Surveying Process**

The current institution of the National Land Registry (Cadaster) dates back to the French Mandate period (1929), and it adopts the categories of land ownership that were introduced by the French authorities during the Mandate rule. The accuracy of the

registry rests on the continuous maintenance and update of the records (Fares, 2002). To support the process, a project of digitization was initiated in 1996. The digitization was not however fully implemented, and Lebanon's cadastral systems still lack the Geographic and Land Information Systems (GIS & LIS) that are now used in advanced countries (Fares, 2002).

When a land lot is fully surveyed and recorded, the Land Registry includes multiple references to effectively "delineate" it. Aside from recording it in the actual Registry, the lot appears in the daily Registry, the Cadastral Map<sup>28</sup>, and supporting legal documents (Fares, 2002).

Sizable sections of the Lebanese territories are however not fully surveyed (FAO, 2012). Thus, the national cadaster doesn't extend over the entire territory<sup>29</sup>, and many areas -including Kafra- continue to rely on historical property records that date back to earlier registries, most notably the Ottoman registry. According to the Final Drawing Department in the Directorate General of Land Registry and Cadaster (DGLRC)<sup>30</sup>, 50% of the Lebanese territories had been completely surveyed at the beginning of the civil war; 30% were surveyed but not finalized, with only delineation of plots boundaries<sup>31</sup> being conducted without providing final cadastral maps, and the remaining 20% of the national territory was not surveyed at all. In the 1990s, survey works resumed and they primarily targeted previously surveyed areas for finalization. Today, also referring to the DGLRC, 400 out of the 500 Lebanese towns and villages are surveyed, while 4-5% of the Lebanese territories are not completely surveyed.

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<sup>28</sup> Established based on aerial photos and defined as a map used to identify particular parcel for ownership and registration purposes and showing the boundaries with a level of accuracy.

<sup>29</sup> Until the independence, only a small area was covered by the cadaster (AFD, 2020). Surveys were halted during the civil war.

<sup>30</sup> Interviewed in October and November 2021, he gave figures considered for that period of time.

<sup>31</sup> Known as release and delimitation works or *Tahreer w Tahdeed*

Unlike the modern registry that relies on maps and delineates fixed property boundaries, the Ottoman registry did not consistently delineate property boundaries and did not develop maps. The Ottoman registry further includes property categories (e.g., Miri land, Communal/Mushaa land) that are not included in the French registry. As a result, surveying, and delineation activities require translation and arbitration, which leaves room for multiple conflicts<sup>32</sup>, as will be fleshed out for the case of the village of Kafra in this thesis.

Disputes arise between private parties due to disagreements over shares in family inheritance or the delineation of borders between neighboring owners. These conflicts are particularly acute when real estate speculation has risen the price of land. Disputes also arise with respect to some categories of ownership, particularly old common lands<sup>33</sup> being privatized. Conflicts may also arise around the boundaries of neighboring villages whose administrative boundaries include old common lands. Many of these conflicts remain unresolved for years (AFD, 2020). There is ample evidence that the process of delineation is far from clear, and that powerful actors (such as politicians and religious actors) affect the process of delineation of properties.

## **5.2. The Tenure System**

The Lebanese modern land registry, as it was adapted in 1929 under the rule of the French Mandate, includes several categories of land ownership, or forms of tenure. Each of these forms carries specific entitlements and restrictions for property claimants. The forms of land tenure vary across the Lebanese context, with different forms of land

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<sup>32</sup> For more on the registry, see Fares, 2002.

<sup>33</sup> Known as *Mushaa*

tenure across Old Mount Lebanon known as *Moutassarifah* or *Quaimaquamiatein*, and other regions located outside the boundary of Old Mount Lebanon.

Within Kafra, I was able to identify the following forms of land tenure:

- (i) *Mulk*: private freehold within the built or administratively specified areas, or within the residential area of the village known as *Nitak Baladi*<sup>34</sup> including both rights of holding (ownership) known as *Raqaba*, and usufruct rights (use rights), known as *Tassaruf* (Act 5/ Judicial Laws, 2015).
- (ii) *Miri*: historically, this category of landownership that is translated from the Ottoman registry allocates land rights and use rights to title holders, while the holding rights of land (property) remain in the hand of the central state authority (the Empire/Sultan at the time of the Ottoman Empire) (Act 6/ Judicial Laws, 2015). In Lebanon, and since independence, land claimants have traded this property like *Mulk*, with the single difference that *Miri* land is inherited equitably between men and women, unlike *Mulk* which follows religious Muslim law (*Shari'a*) and grants men twice the share of women<sup>35</sup>.
- (iii) *Waqf*: private freehold owned by a religious entity<sup>36</sup>. In Kafra, it belongs to the Shiite Waqf.

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<sup>34</sup> The municipal area, which is known as *Nitak Baladi*, represents the residential area within a village. The officer of DGLRC informed that based on traditions, and a Court in 1981, the boundary of the *Nitak Baladi* was considered at 300 m after the last housing unit. The *Nitak Baladi* for each village should be specified based on a decree, but during the last 70 years, this decree was not occurring. Moreover, in fact, housing units are currently located everywhere within the village, and not only within the core as in the past. Thus, there are different standings among real estate judges towards this issue, accordingly, differences occur among villages. This was noticed through reviewing a number of *ifedeh ikarieh* in Kafra, where some of the lots were classified as *Mulk* while others were classified as *Miri*, regardless of the location within the village.

<sup>35</sup> A current legal proposal in parliament proposes to equate *Miri* land to *Mulk*.

<sup>36</sup> Authorities of each religious entity have a unit for the management of their estate

- (iv) State Land - Matrouka Mourfaqa<sup>37</sup>: this category belongs to the State, along with use rights for groups of people or inhabitants of a village or town (Act 7/ Judicial Laws, 2015).
- (v) State Land - Matrouka Mahmiya: this category belongs to the State and is part of the public properties. It is controlled by the State or the municipality (Act 8/ Judicial Laws, 2015).
- (vi) Municipal Land: owned by the municipality within the residential area of the village.

### **5.3. The Survey Process**

Surveying works started in Kafra in 2008. Given the size of the village, it was expected for the process to take 2-3 years. However, the process was severely delayed. To date, the final file has not been issued, and accordingly, there is no final cadastral map.

One of the main reasons behind the delay is allegations of corruption that led to an investigation of the surveying process, through a mission allocated by the Ministry of Finance to the Final Drawing Department in the Directorate General of Land Registry and Cadaster (DGLRC), to report the status and encroachments over Public Properties and State-Private Properties in different cazas across the Lebanese territories.

The report of the Head of the Final Drawing Unit's field investigation in Kafra states that the surveying works in Kafra were completed. The report records that conflicts over the border with Srobbine, including wide areas which are supposed to incorporate public lands, and lots owned by individuals, remain unresolved.

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<sup>37</sup> Known as *Mushaa*.

I report below on the outcomes of the official report:

The total area of the village represents 1162.40 Hectares, while the area of lots (belonging to the State, Waqf, and municipality) represents 113 Hectares.

### ***5.3.1. Delineating the Boundaries of the Village***

A first challenge in the survey of the village's land is the delineation of the respective village boundaries. In Kafra, these boundaries were defined when the final survey for the surrounding villages was completed, in 2006 for Deir Ntar, and in 2008 for Haris.

In the current surveys, challenges emerged between Kafra and the surrounding villages over their boundaries. Narratives reported by interviewed villagers and reiterated by an official expert who spoke on condition of anonymity showed that conflicts over old common lands existed historically between Kafra and the surrounding villages, specifically the villages of Deir Ntar and Haris. These conflicts resulted in the loss of more than 50 Ha from Kafra to Deir Ntar (such as the valley known as Wadi Ashour, and Ain Ez Zarqa) (Figure 23).

As for conflicts with the village of Srobbine, these occurred over plots located in Khallet-Al-Dalieh<sup>38</sup>, which are bare, and woodlands located on a slope towards the valley.

The areas that were taken over by surrounding villages were however historical commons, which were lost by the village. This loss eventually weakens the municipality's ability to provide services since its stock of public land is already very limited.

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<sup>38</sup> Srobbine used to be historically an extension of Kafra, with mainly farmlands and agricultural lands.

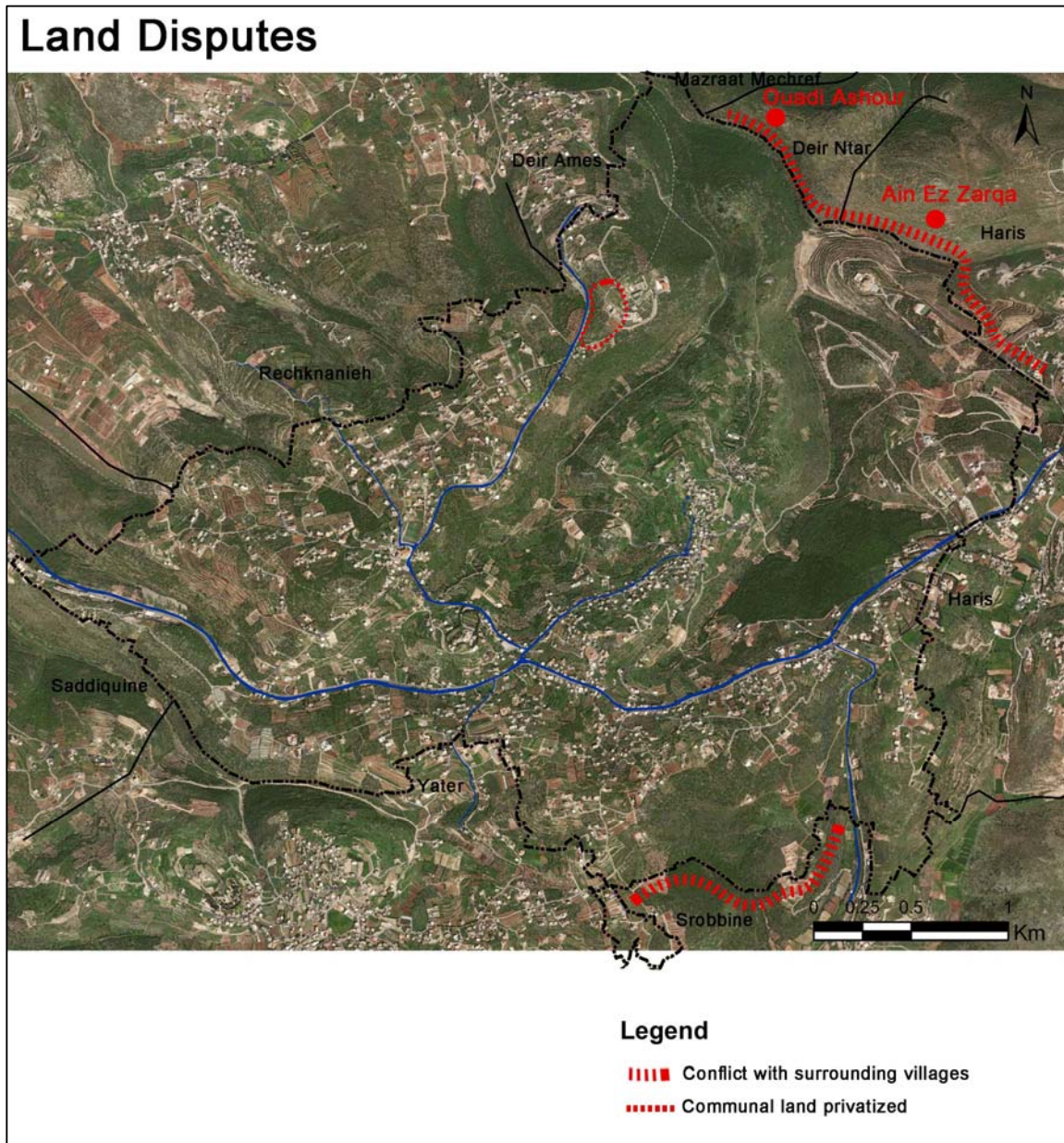


Figure 22: Land disputes, based on Google Map of 2021 (Author, 2022)

### 5.3.2. Land Distribution in Kafra

Based on the survey conducted in 2021, only 9% of Kafra's lands are public, divided into multiple properties, while 91% of lands are private (*Mulk* and *Miri*).

Two maps were produced based on data provided by the municipality of Kafra in 2019<sup>39</sup>, these maps show the distribution of land ownership (Figure 24), and land areas (Figure 25). Figure 24 shows that the vast majority of land in Kafra was defined by the survey as private, with 90.59% of the total area of the village (including Mulk and Miri), and 0.12% Waqf. Waqf areas represent a total of six lots including two mosques, two *husseyniyyas*, a shrine, and a cemetery. An additional *husseyniyya* and mosque in the village were constructed over private properties endowed by some expats or other local wealthy figures. These lands remained private and were not bequeathed to Waqf. While 5.57% of land represents State land – Matrouka Mourfaqa, 2.92% State land – Matrouka Mahmiya (the natural reserve), and the remaining 0.8% is Municipal land.

Looking further at private land, we find that a minute percentage of plots (0.1%) are below 150 m<sup>2</sup> (Figure 25), and these plots are mainly located in the old village where they used to be built with historical homes. Another very small percentage of plots (0.9%) is sized between 150 and 500 m<sup>2</sup>, while 4.1% for plots between 500 and 1000 m<sup>2</sup>, and 5.9% for plots between 1000 and 1500 m<sup>2</sup>. Small lots (less than 1000 m<sup>2</sup>) are usually used for residential functions.

Most plots are larger than 1,500 m<sup>2</sup> (and hence eligible for agricultural support from the Ministry of Agricultural development project/Green Project). These include 22.6% for plots sized between 1,500 and 3,000 m<sup>2</sup>, 20.3% for plots between 3,000 and 5,000 m<sup>2</sup>, 20.6% for plots between 5,000 and 10,000 m<sup>2</sup>, 9.1% for plots between 10,000 and 20,000 m<sup>2</sup>, 10% for plots between 20,000 and 50,000 m<sup>2</sup>, and 6.5% for plots greater than 50,000 m<sup>2</sup>.

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<sup>39</sup> It is important to highlight that these figures may change as the final cadastral map has not been officially issued yet to the Real Estate Judge.



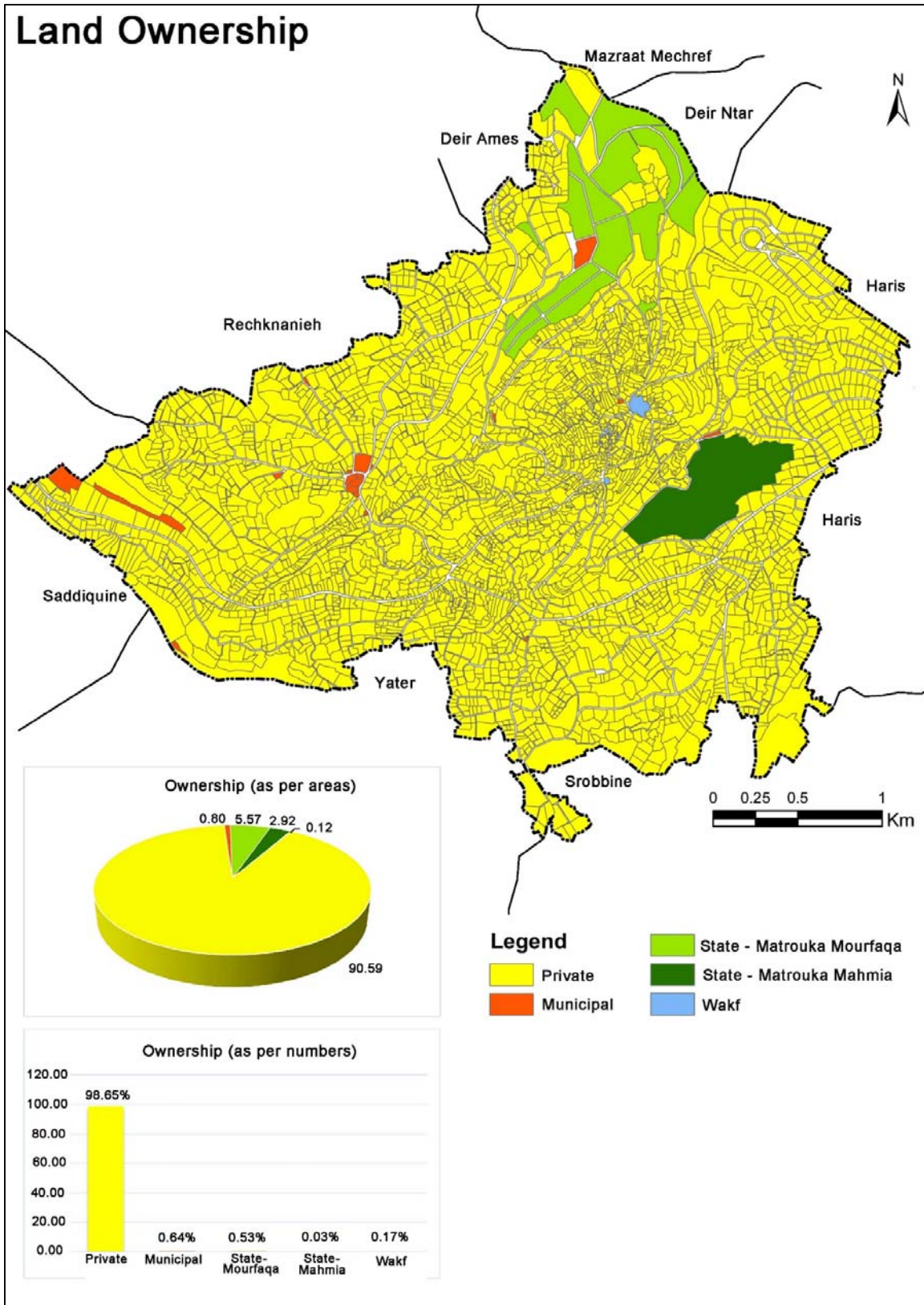


Figure 23: Land Ownership (Author, 2022)

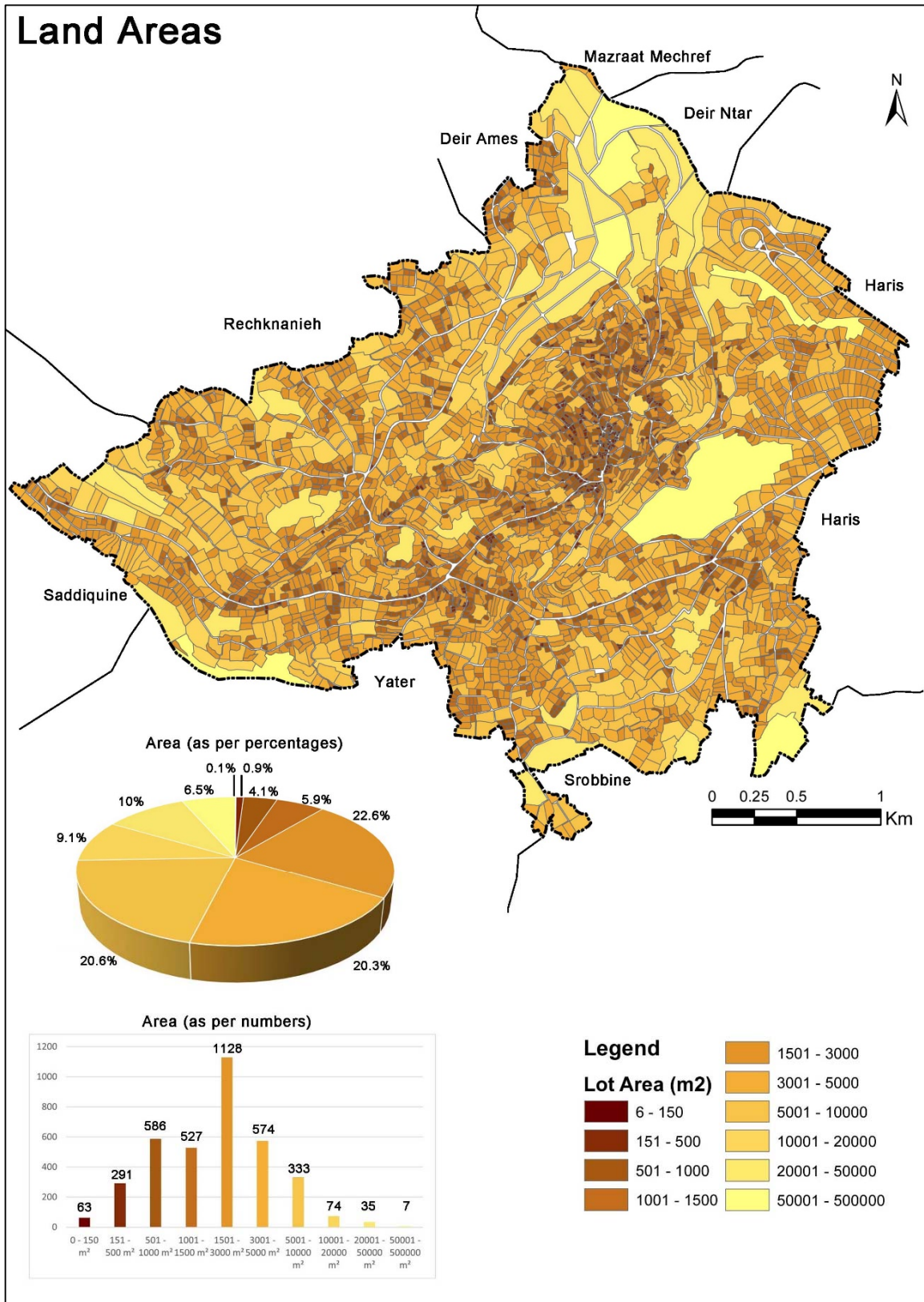


Figure 24: Land Areas (Author, 2022)

### ***5.3.3. Surveying Public Land***

In this section, I focus specifically on the survey of public land and the reasons behind losing common lands. In Kafra, several challenges occur through encroachments over properties.

Aside from losing commons to nearby villages, the survey of public land within the village created the opportunity for powerful actors to seize public lands or commons and to impose their registration as privately held land. Given the danger associated with pointing to such public thefts, it was difficult to collect information, and knowledgeable respondents spoke under conditions of anonymity. Those who could show me documents did so with the explicit agreement that they would not be quoted, or their names mentioned, and they refused to share documents. There is however ample evidence, widely echoed by rumors in the village, that powerful individuals who hail down from historical feudal leaders in the region, as well as politically backed individuals and at least one religious figure, were deeply involved in the illegal privatization of the public land.

To give one example, in 2016/2017, the municipality of Kafra initiated a project of public nature on a communal land (Mushaa) in an area known as Rwayset-Al-Zaytoun hill. The plot's area of around 3,500m<sup>2</sup> was to be equipped to become a public garden. Until then, the land was left unused and abandoned. Works on the public garden were however halted in 2018 when a powerfully backed religious figure claimed tenure over this land. Referencing earlier supposed promises he had been given, and the proximity of a hospital building under construction, financed by religious donations, the

powerful actor pressured and appealed to strong political actors until land ownership was transferred to his name in 2019<sup>40</sup>.

As for the surveying process, the ambiguity and confusion in the understanding and practice of land management laws, by some of the Real Estate judges and the legal actors, especially in the understanding of the conditions of some of the categories of public properties, facilitates de facto privatization (AFD, 2020) and leaves behind some large woodlands and bare lands that should be recognized as belonging to the State treasury, as informed by the DGLRC officer.

Moreover, the officer from DGLRC explained that current encroachments are occurring due to various practices and misuse of the title and the role of some local public representatives<sup>41</sup>, and the surveyors assigned for the delineation works. Accordingly, the process of delineation of land boundaries lacks transparency. Although a prerequisite, some local public representatives ignored announcing the delineation works, prior to the process, within a given village and its surroundings to the involved actors, such as landlords, landlords' neighbors, and the representative of the State Property Department concerned with State lands, leading to their absence during the process. Moreover, surveyors are also skipping organizing records on-site, which is also a prerequisite.

Additional information about the illegal practices occurring was provided by an official sworn expert<sup>42</sup> who explained that encroachments over old common lands are occurring due to collusions between some local public representatives and the surveyors

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<sup>40</sup> This information was verified through multiple local informants whose anonymity is protected by this paper. It is in fact common knowledge in the village that the process occurred. It was impossible to verify property records because they are still under construction.

<sup>41</sup> Known as *Moukhtars*.

<sup>42</sup> His anonymity is also protected by the study.

assigned for surveying a given village, along with the weak governance and the lack of accountability, in addition to the influence of some political actors in the areas, providing covers for any breach. The expert explained that some local public representatives issued in some cases illegal ‘Informing and Reporting’ documents<sup>43</sup>, providing proof for ownership under the pretext of the passage of time (a ten-year duration)<sup>44</sup>, for individuals who aren’t the real owners. The representatives commit intentional delays in producing the documents, since after the ten-year duration, the rights of other individuals to object or to provide evidence for their ownership over a given plot would be annulled. The representatives usually take advantage of the absence of some expats, and the death or amnesia of elderlies who can provide valuable information.

In conclusion, given that the survey and delineation process was not conducted with the necessary due diligence, they resulted in the loss of public land. Furthermore, several private conflicts remain unresolved. Loss of public assets was the inevitable result of a set of factors, such as the influence of powerful political and religious actors in the area, public land being neglected, the lack of awareness of the rural community of their assets, and hence the absence of a mobilization to stop the illegal takeover of public land, in addition to corrupt individuals involved in the surveying process. The loss of public land was also facilitated by the circumstances and the slow pace at which public agencies conducted land surveying and delimitations, without setting an estimated date for finalizing it over the Lebanese territories, which allowed for multiple negotiations. Theft, appropriation, and collusion of some local public representatives, surveyors, and influential actors lead the process of cadaster development.

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<sup>43</sup> Known as *Ifedet Ilm wa Khabar*

<sup>44</sup> Known as *Mourour el Zaman*

## CHAPTER 6

### AGRICULTURE IN KAFRA

This chapter explores another intersection between land management and the collective good through the lens of the agricultural sector. Despite its critical importance at a time of global food shortage, the sector remains neglected in Lebanon, well in line with the historical position of the Lebanese State towards this economy. The chapter maps the stakes around agricultural land, the linkage of this sector with the rural livelihood in Kafra, and the recent attempt in Kafra and nearby villages to face the threat of food insecurity by trying to revitalize this sector.

#### **6.1 A Brief History**

Historically, agriculture formed the cornerstone of Kafra's economy and the main economic occupation of its dwellers. Most of the village agricultural fields were planted by families that relied on agriculture for subsistence. Farmers recalled agriculture as the cornerstone of the village economy in the narratives of their parents. They recounted a communal practice that historically involved all family members in the labor of the land.

With independence, however, and the prioritization of other sectors of the economy, agriculture lost its central role in the national economy (Baalbaki, 1985), and in this village too. Thus, despite its significant land capital valuable for agriculture,

Lebanon only relied on 3% of its GDP in 2016-2018 on this sector (MoA, 2020), and employed 4% of the Lebanese labor force in 2018<sup>454647</sup>.

It is important to locate the agricultural sector in Kafra in relation to South Lebanon's agriculture. During the 20<sup>th</sup> century, the agricultural sector faced successive crises, mainly due to decreases in the production values (NPMPLT, 2005). Today, although the techniques have improved and productivity increased, agricultural production suffers from international competition (NPMPLT, 2005). Indeed, globalization and the influence of neoliberal economics encouraged cheaper food imports at the expense of locally produced food (Weber, 2018; Akram-Lodhi & Kay, 2010b; Haidar, 2004; Zurayk, 2000). This contributed to the degradation of the agricultural lands, leading to swallowing large areas of arable and productive land and shifting its use for other purposes (Weber, 2018; Zurayk, 2018). Ultimately, agriculture took two different paths in the country: a "capitalist" irrigated path, especially in the coastal areas growing at the expense of traditional agriculture due to profitability, and a rainfed agriculture in the inner areas (Baalbaki, 1985).

In Kafra, farmers pointed to the slow decay of the sector since independence. They explained that in order to survive, many farmers had to shift to planting tobacco, which was a state subsidized crop. Tobacco plantation started growing within the internal rainfed agricultural community, at the expense of traditional rainfed crops as grains and fruitful trees (Zeineddine, 1994).

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<sup>45</sup> Labor Force and Household Living Conditions Survey, 2018-2019, CAS.

<sup>46</sup> Agriculture contributes to 12% of the total labor force on full-time basis, and 13% on a part-time or seasonal basis, including Lebanese, Syrian and Palestinian (MoA, 2020).

<sup>47</sup> Based on the agricultural comprehensive survey conducted in 2015, the total arable lands in Lebanon represented 330,000 Ha, while 250,000 Ha of it is cultivated (Zeineddine, 2018). The governorate of South was classified in the third place, with a total cultivated area of 33,193 Ha, representing 13% of the Lebanese total cultivated area. These include seasonal and permanent agriculture, with crops such as lemons, bananas, olives, fruits, vegetables, and tobacco (Zeineddine, 2018).

Farmers also pointed to the 1982 Israeli invasion as a critical turning point that triggered the displacement of numerous farmers and the long-term abandonment of land and its agricultural practices.

## **6.2. Land Cover**

Through the analysis done of the land cover in Kafra based on Google Map of 2021 (Figure 26), I found that agricultural land covers only around a third (37.7%) of the total area of the village of Kafra. 10.1% of this land is located within the core agricultural land surrounding the old village and 27.6% within the village boundary. Figure 27 shows the core exploited agricultural areas, surrounding the old village, which were planted historically, even during the Israeli occupation, being less exposed to the Israeli site located on Al Hakban hill, and are currently planted.

Due to the harsh nature of the land in Kafra when being left without maintenance by its landlord, an additional percentage of 2.4% of the total area of the village, planted with old olive trees, were invaded by shrubs and oak trees throughout the years (Figure 28). These lands are located in the surrounding of the old village down towards the valley.



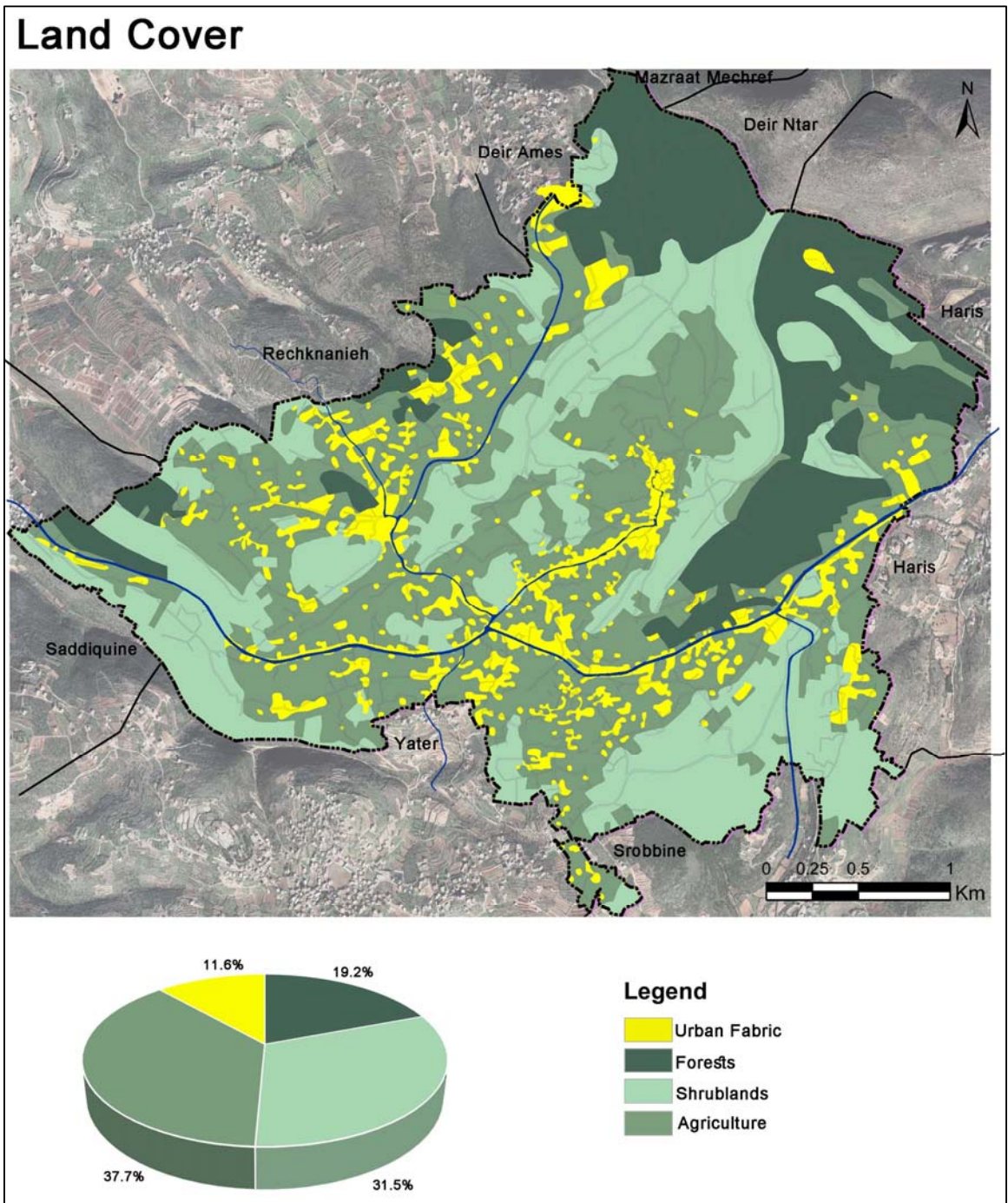


Figure 25: Land cover, based on Google Map of 2021 (Author, 2022)

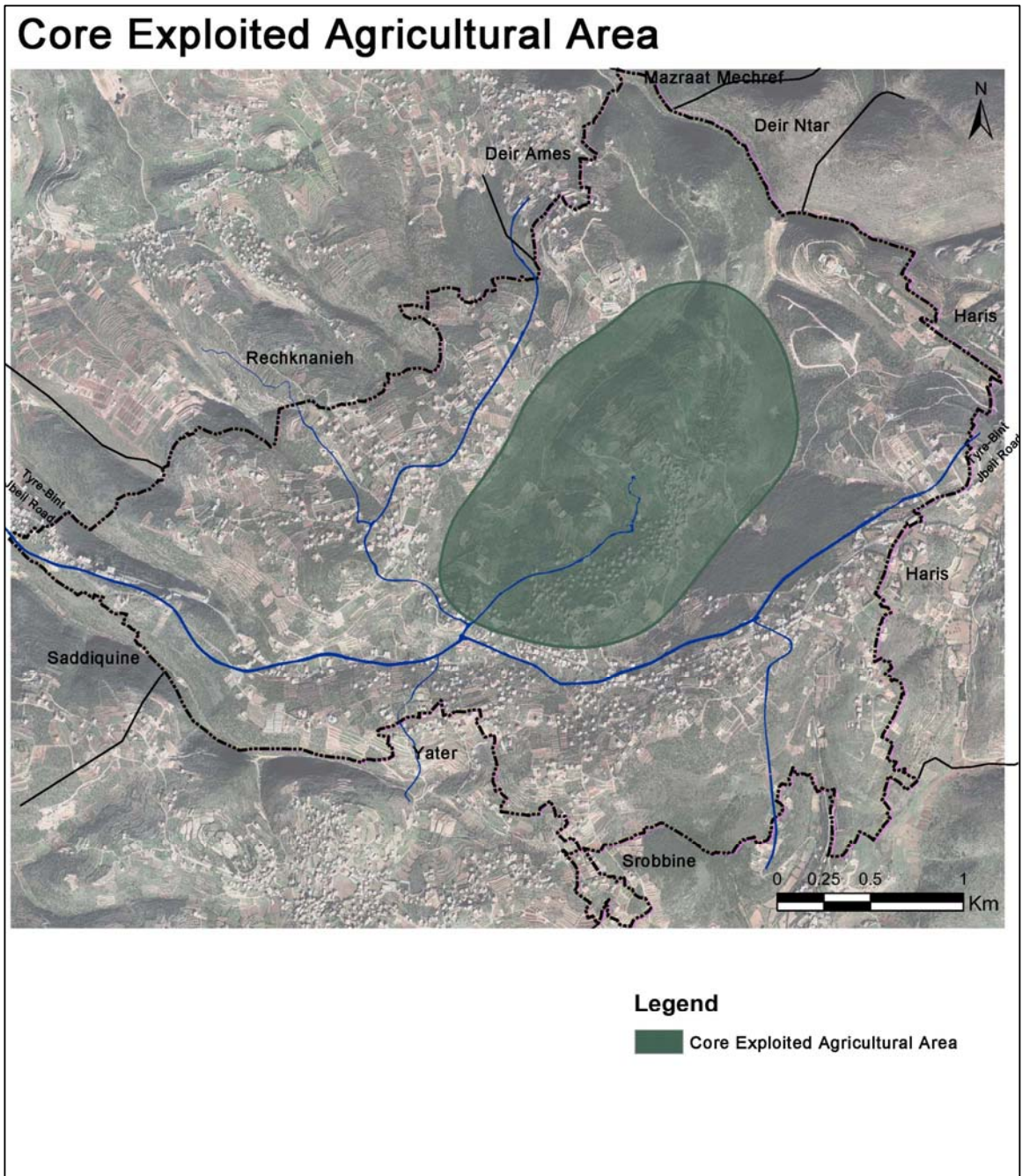


Figure 26: Core exploited agricultural area, based on Google Map of 2021 (Author, 2022)

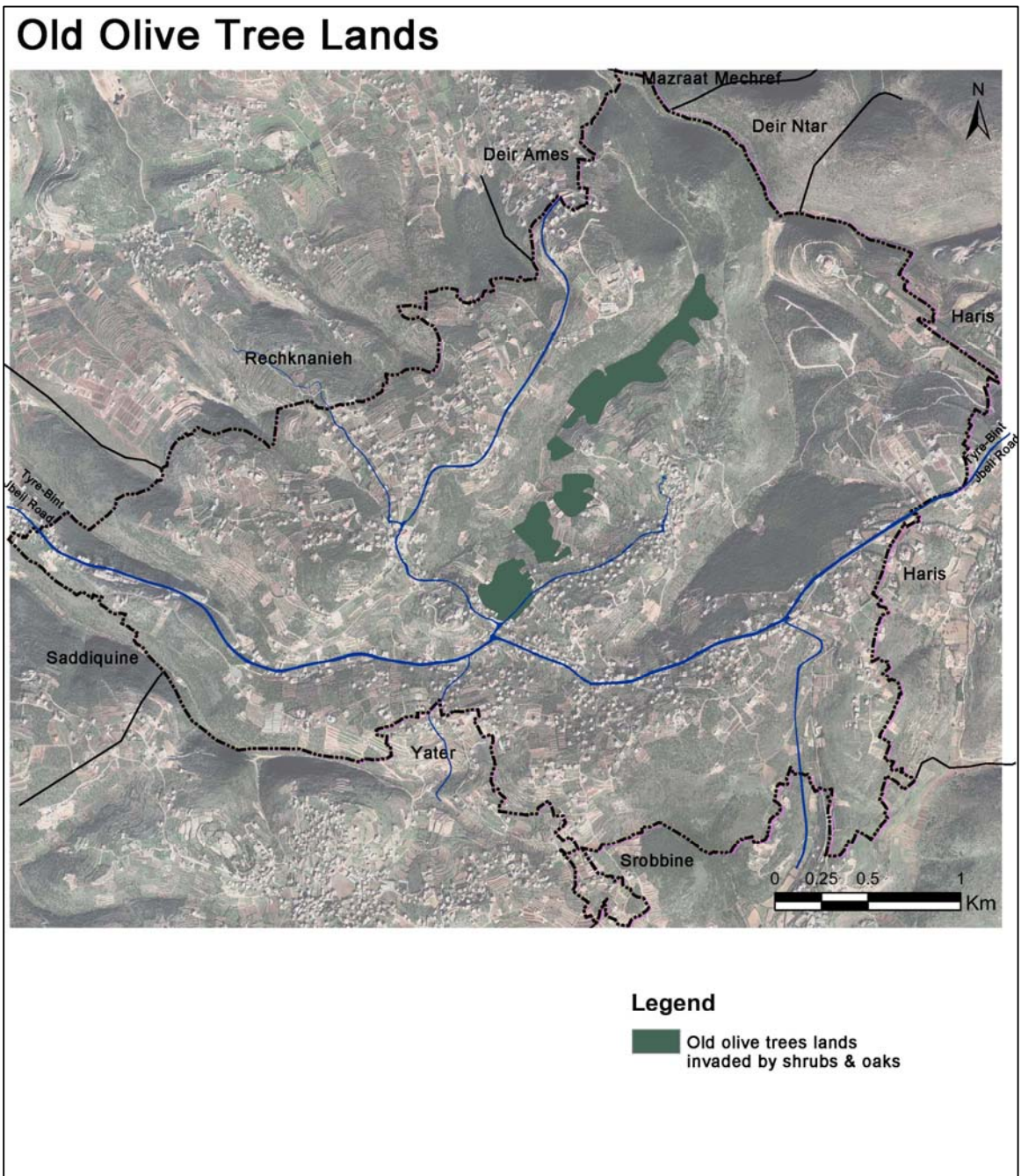


Figure 27: Old olive trees lands, based on Google Map of 2021 (Author, 2022)

As for the agricultural landscape (Figure 29), agricultural lands mainly planted with olives, along with figs and grapes at the borders of the piece of land, represent around 25.9% of the total area of the village. Wheat plantation still occurs in the village, but it is currently limited to 1% of the total area. These lands are mainly located in the surrounding of the old village. Terracing lands represents an important agricultural practice in Kafra due to its steep topography necessitating this terracing, where additional 10.6 % of the total area of the village is terraced. Terraces occur in various location in the village, since landlords work their land especially in proximity to their newly built house, and plant it with various types of fruit trees for domestic use. While plastic houses are newly emerging in the village and represent only 0.2% of the total area of the village.

Shrublands<sup>48</sup> represent 31.5% of the total area of the village (including the abandoned 2.4% historically planted with olive trees and invaded by shrubs due to lack of maintenance). By overlying the land cover and land ownership, a percentage of around 94.4% of unexploited lands, or shrublands, is privately owned. Figure 30 shows the distribution of public and private unexploited lands in the village. This aspect reflects the way the economic system encourages investment in lands. Moreover, it is also linked to the tenure system, which allows abandoning a private land, without using it, while preventing others from using and benefitting from its agricultural use, just being a private freehold. This abandoned land hasn't been reclaimed as it is privately owned by people temporarily residing in the village. Most likely, these people migrated, however, they kept their lands as an investment.

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<sup>48</sup> Wooded lands are divided into coniferous shrubs, broadleaved shrubs, mixed shrub lands, and grassland with trees (MoA/ FAO, 2005).

# Agricultural Landscape

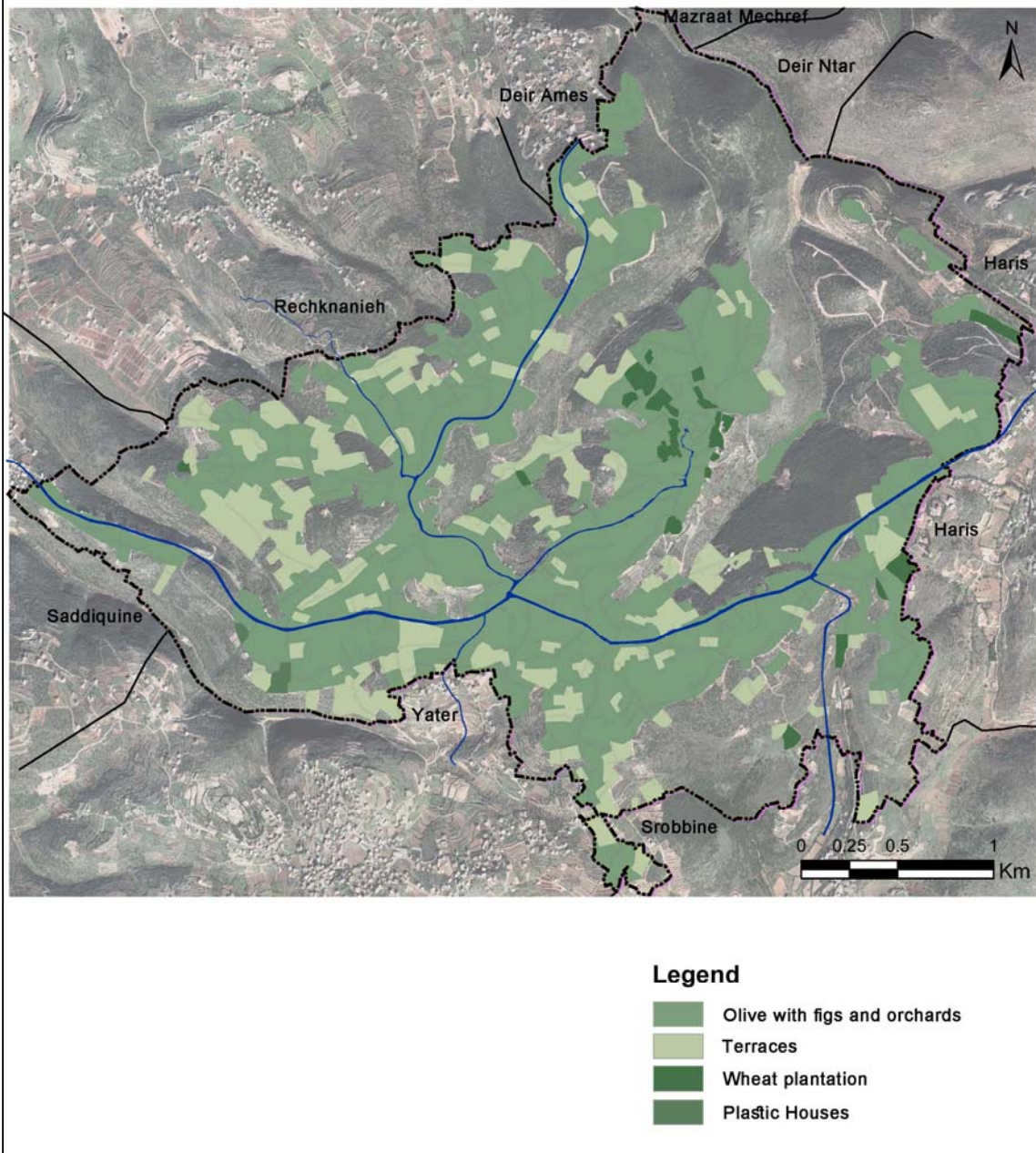


Figure 28: Agricultural landscape, based on Google Map of 2021 (Author, 2022)

# Private / Public Unexploited Lands

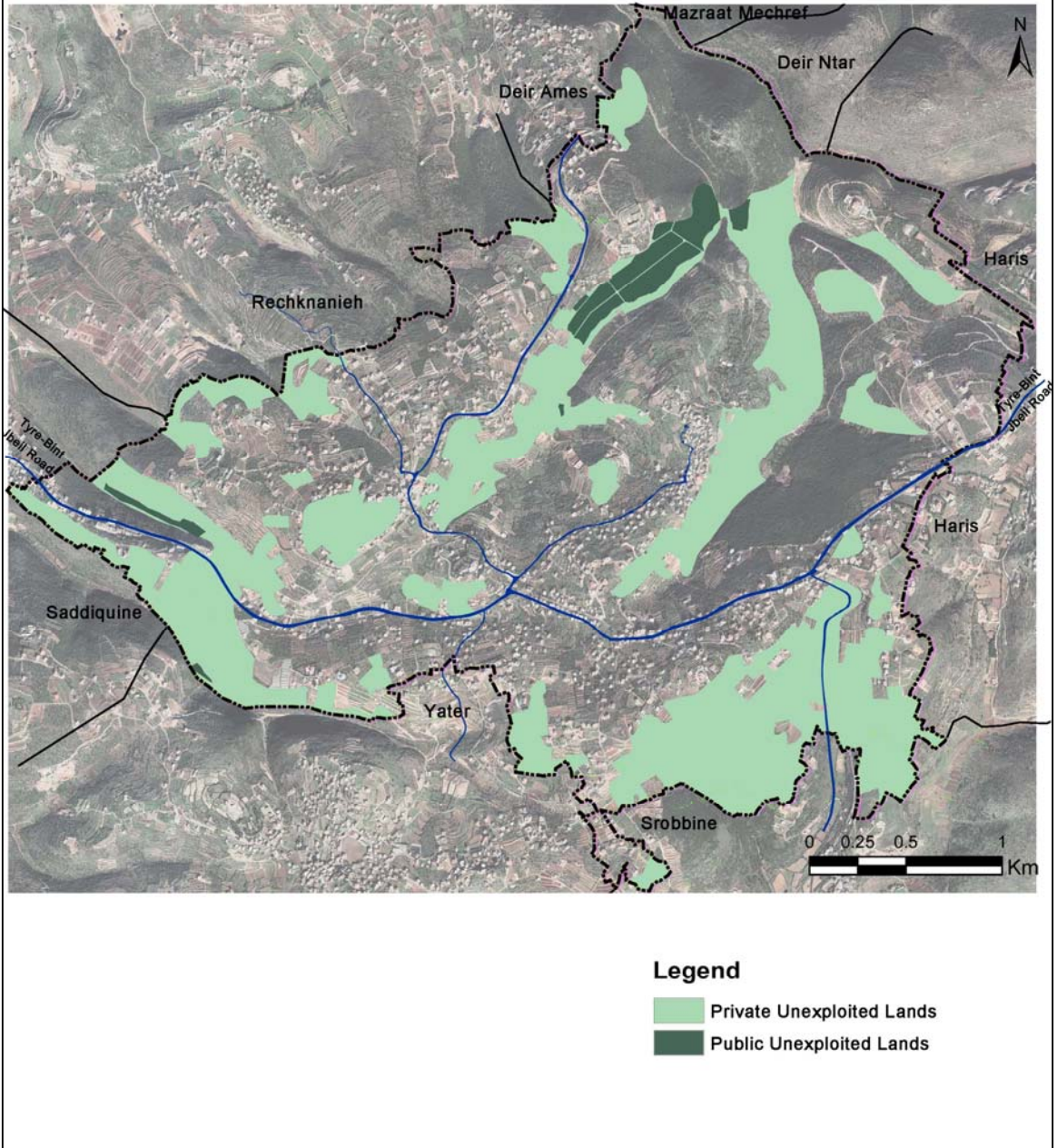


Figure 29: Private/public unexploited lands (Author, 2022)

### **6.3. Lot Sizes and Agricultural Practices**

Early efforts at land registration in Lebanon (and the region) were tied to the desire to tax profits made from agriculture (Al Khatib, 2013). At the time, land was typically cultivated, but ownership of both villages and agricultural land went back to the Ottoman rulers. As noted in the previous chapter, late Ottoman land registries and the French Mandate registry were to introduce a heavier reliance on private ownership. During the French Mandates, efforts to modernize the land registry and record all property began to translate in the delineation of property into freehold. However, the orientation of the economy towards the banking and service sectors maintained a secondary role for agriculture and consequently, surveys of agricultural land lagged behind those of urban areas that were seen as a priority.

Land tenure in agricultural communities can be classified under different categories following the size of the tenure, such as dwarf, small, medium, and large (Zeineddine, 1994). In Kafra, dwarf tenure or lands with an area less than 1000 m<sup>2</sup> represents 5.1% of the total area of the village; 48.8% for small tenure with land area varying between 1000 m<sup>2</sup> and 5000 m<sup>2</sup>; 39.6% for medium tenure with area between 5000 m<sup>2</sup> and 50,000 m<sup>2</sup>; and 6.5% for large tenure with area greater than 50,000 m<sup>2</sup>.

Based on the analysis of the land cover, agricultural land represented a percentage of 37.7% of the total area of the village. 10.1% located in the surrounding of the old village, the core agricultural lands, where plot sizes are typically small, with 13% of the total lots are considered dwarf, and 87% of the total number of lots are considered small. While for the remaining 27.6% agricultural lands located across the village, plots are mainly classified as small tenure (between 1000 m<sup>2</sup> and 5000 m<sup>2</sup>), and medium tenure (between 5000 m<sup>2</sup> to 50,000 m<sup>2</sup>).

#### **6.4. Forms of Farming**

In order to learn about agriculture in Kafra, I conducted five open-ended interviews with local farmers in Kafra. Given their long-term involvement with the village and its agriculture, these farmers were able to paint a detailed picture of the sector

#### Box 1

Abou Mohammad, a farmer from Kafra, inherited the profession from his ancestors. In the 50s and 60s, people used to live from traditional agriculture. Abou Mohammad stressed that all lands were cultivated in the past, regardless of the status, be it reclaimed or not, terraced or not, and there were no encroachments over *Mushaa* lands, “*Mushaa has never been encroached. Each person dealt with his property, and no one dared to encroach other properties as it’s happening nowadays*”. However, lots of challenges occurred due to the State’s negligence to the sector resulting in large migrations.

During the Israeli occupation, most lands were left behind. From 1982 to the 90s, Abou Mohammad and his family were the first farmers to return to their land, started agricultural reclamation for their land, and operated it, but they were only able to receive preliminary support from the Green Project. Due to inheritance, land is divided into a smaller area, thus it became insufficient for cultivation. Accordingly, he works currently in both sectors, construction, and agriculture. Moreover, he cultivates his own land and sharecropped additional lands to secure his livelihood. Referring to Abou Mohammad, From the 90s till the 2000s, people returned to their land, but the interest in agriculture retreated to 10% only. Today, only 5% in the village are farmers.

The economic crisis creates an additional challenge, as it increases burdens on farmers due to rising prices of fuel, seeds, feeds, and fertilizers, which requires urgent interference from the State to save what’s remaining from the sector. Currently, without the expats’ essential support to families (a number of families’ livelihoods depend entirely on expats remittances), the situation would have been unbearable.

Abou Mohammad considers that people in the South are attached to their land and roots, and land represents their safety net, “*No matter where people travel or migrate, they will return eventually to their lands*”.



within their village. Moreover, based on the interviews conducted with farmers and municipal officers during my field visits to Kafra between November 2021 and January 2022, I estimated that less than 10 % of the resident households in Kafra depend on agriculture as a main source of livelihood for their subsistence<sup>49</sup>. This is a considerable drop-in communal practices since historically almost all residents planted the land. In order to take stock of the forms of farming, and how they intersect with land ownership, I was able to identify the following forms within

Kafra:

### **[1] Descendants of Farmers/ Professional Farmers**

A dismal number of the former farmers' children inherited the profession and continue to practice agriculture. They are all considered small farmers, referring to the local farmers themselves, as they secure their own provision, and sell the rest on the main road of the village (as figs, grapes, cactus, and products of summer "*sahra*"<sup>50</sup> including tomato, cucumber, and zucchini), through small temporary movable settings.

#### Box 2

Abou Hassan, a previous consultant in the municipal council, an architect & practitioner in Kafra, reside Kafra seasonally, and during the weekends. Abou Hassan plants the land surrounding his house, with various types of fruits, including figs and grapes. To him, agriculture represents a linkage with the land. But due to his lack of time, he gets the support from some labors in maintaining and working the land.

Abou Hassan considers that there's no more attachment to land as it used to be in the past. Land used not only to be cultivated as a source of living, but it represented an essential feature throughout the different aspects of life, including seasonal social practices and entertainment. Nowadays, when inheriting or buying a land, all what people consider is its exchange value, and the exploitation ratios FAR.

Abou Hassan considers there is a need to retrieve the value at the human level, to strengthen the belonging towards the land and to avoid the unique linkage to a village through voting and seeking identification documents. He also considers that new generations are essential in finding solutions, to reestablish their linkage to their origins and roots.

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<sup>49</sup> The rest depends on other public sectors, such as health and education, the real estate sector, in addition to trade, commerce and industrial activities spread along the main spine, and expats remittances.

<sup>50</sup> In South Lebanon, vegetables and fruits that grow directly on the floor are referred to as "*sahra*".

**[2] Professional/ More recent:**

2a. Beekeeper

Except for one beekeeper, he is considered medium size farmer. This beekeeper is an expert in his domain, he also belongs to the syndicate of beekeepers, and he is famous for the quality of his product (produced in two seasons per year, winter and spring), within his own village and other nearby villages. There are other few beekeepers (up to five) who practice this as a hobby and producing a limited quantity that can barely secure their own annual provision.

2b. Plastic houses

A very limited attempt started in 2017, in implementing plastic houses for commercial uses (mainly tomatoes, cucumber, and strawberries). Only two farmers, among the farmers of the village (two brothers who own separate

Box 3

About Ali, another farmer from Kafra with a long-time experience in agriculture (in the past before the Israeli occupation, and after the liberation of the South till the moment), planted the land surrounding his house with vineyards, figs, olives, peaches, and apple orchards. His crops also included cereals such as beans, chickpeas, wheat, lentil, and even feed for animals such as barley. During summertime, his family also planted tobacco, as well as fruits and vegetables that directly grow on the ground such as tomatoes, cucumbers, and watermelons. These crops were mostly used as subsistence agriculture, but tobacco also secured a financial revenue. The family was able to keep seeds provision for the following seasons and used to trade in or barter among them other types of crops needed.

About Ali was not alone in the practice. At the time, villagers (including About Ali and his family) reclaimed unplanted lands and they built terraces using traditional primitive equipment and techniques. This type of heavy work required group effort, thus, they practiced what was known as “*moujamaleh*”, where people supported each other. Another important practice, reflecting the social cohesion within the rural community, was the support known as “*el aouneh*” (meaning support provided), that villagers provided to the farmers who get sick during the harvesting season. Thus, they harvested their crop known as “*jkara*” on their behalf. Similar support was also provided to those being in delay during the harvest season. The whole family used to work in agriculture, including both gender and the various age groups, except for the minority of around 2% of the people who didn't own a piece of land or animals for plowing.

When the Israeli invasion occurred in 1978 and 1982, almost all agricultural practices stopped, especially in the areas exposed to the Israeli sites, as Israelis used to settle on hilltops. Al-Hakban, the highest hill in Kafra, used to be the most dangerous Israeli site (until 1987), as it overlooked the main artery linking Tyre to Bint Jbeil, where

pieces of land close to each other) implemented these plastic houses separately, close to the entrance of the village.

### **[3] People planting around their houses**

An additional type: people planting in the surrounding of their house, or within the garden for personal use (mainly fruits and vegetables). This practice, especially for vegetables, even emerged and grew more lately, due to COVID lockdown and the economic crisis.

### **[4] Tobacco planters**

As for tobacco planting, it spread among families in Kafra<sup>51</sup>. But during the last few years, this plantation retreated 50 to 60% due the economic crisis, with the high cost of labors, pesticides... Additionally, due

anything that moves was instantly shot.

Under the weight of the Israeli invasions and occupations (1978, 1982-1987), Abou Ali as other residents of the South migrated to Africa, seeking safer and better life opportunities.

In the meantime, agricultural practices resumed in the surrounding of the core of the old village, as most of the village was still unsafe by that time, and most men had fled. Abou Ali described the situation as the “death of the land” with not a single olive tree without shards”. The huge level of degradation of the land represented a major obstacle facing agriculture, and that is related to the harsh nature of the land in Kafra (even if deserted for only one to two years).

After the South liberation in 2000, Abou Ali returned to Kafra where he recovered his old profession. Today, he cultivates the few pieces of land he owns to provide provisions for his own family and his relatives. Nevertheless, he described the relation of Southern people to land: “*Ibn-El-Janoub is attached to his land. Wherever he travels, he will come back to cultivate his land*”. Moreover, people in Kafra still have eagerness toward each other’s, and this can be perceived through the consistent support provided by the expats.

Abou Ali mourns the loss of the social value of land. He reminisces about an older community that knew the real value of the land and sweated while laboring the soil. He laments a generation that now looks at land as an asset, since new generations didn’t suffer and lack this relation towards land. He is convinced that “whichever effort given to land, will be compensated”. While inheriting his lands to his children, he strengthens the value of land, and teaches them that “*No money in the world compensates my land. My land is the capital*”.

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<sup>51</sup> It is a prerequisite for families planting tobacco to get a permit for tobacco plantation from the Regie de Tabac. The minimum area expected to be planted is 0.4 Ha, since there is a minimum threshold or quantity required equal to 400 kg of tobacco. Noting that the average crop is 100 kg of tobacco for each 0.1 ha of area planted. In case the crop cultivated exceeded the 400 kg, the Regie only buy the 400 Kg, as per the agreement or the permit rules and keep the rest for the family. People are allowed to apply retention of permits, but not for two consecutive years.

to climate change, although tobacco is rainfed, it required irrigation during the last few years. In Kafra, currently up to five families are still planting tobacco.

## **6.5. Planning**

This section outlines the planning interventions and initiatives at the State level considered to provide support for the agricultural sector.

### **6.5.1. *The Green Project***

The *Green Project* is a public-led initiative established in 1963, in the aftermath of the 1958 war, in an attempt by the Central State's agencies to encourage rural development, and agriculture. The initiative was based on the recommendations of IRFED<sup>52</sup>, the foreign mission that strongly recommended the harmonization of development, in an effort to deal with the waves of rural to urban migration (Charara, 2012).

The mission of the Green Project included the recovery of neglected and abandoned lands, the implementation of agricultural roads, and the development of infrastructures that would support agricultural development (e.g., water ponds and waterways). Through these missions, the Green Project was believed to support farmers (e.g., loans, agricultural extensions), limit rural to urban migration, and secure new trade routes by studying external markets (Zeineddine, 1994). The Green Project also targeted reforestation. Today, only a limited support is provided to farmers.

The agricultural unit considered by the Green Project to provide support for farmers is land with a minimum area of 1500m<sup>2</sup>. Interviewed officers informed me that

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<sup>52</sup> IRFED was assigned by President Chehab in 1961, being an institute for research and education oriented towards development.

there is no coordination with the DGUP concerning projects implementation. However, they coordinate with the Ministry of Public Works and Transport MoPWT and Ministry of Water and Energy MoEW when implementing agricultural roads. The Green Project has an engineering unit responsible for the design, and the supervision of the implementation of agricultural roads. Moreover, based on the officers, agricultural roads implemented by the Green Project have some characteristics, being asphalted and with six meters width. It is important to point to the negative impact of implementing excessive width for roads in agricultural areas, as it is occurring at the expense of the agricultural land itself, and the fact that asphalted road<sup>53</sup> would encourage even more sprawling building development, especially in unplanned areas. In this extent, NPMPLT recommends avoiding the opening of new agricultural roads or asphalted exiting ones, in case of absence of local planning regulations, as NPMPLT considers any opening or restoration of roads should be preceded by the classification of agricultural lands (NPMPLT, 2005).

### ***6.5.2. National Master Plans and Agricultural Lands***

A National Physical Master Plan of the Lebanese Territories (NPMPLT) was developed<sup>54</sup> with the aim of defining the principles of development and the basis of the usage of territory for all areas in Lebanon.

NPMPLT determined four dominant categories for the uses of land, and highlighted internal areas in the South as agricultural domains of national interest which

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<sup>53</sup> Experts point also to the negative impact on plantation located on the side of asphalted road receiving flying grains resulting from wheel friction with asphalt.

<sup>54</sup> It was developed by the Council of Development and Reconstruction (CDR) in 2009 under the Decree 2366.

needs protection from deterioration and conversion to other unproductive land use as housing, as it represents a national asset.

However, most rural areas in Lebanon, including the South, shifted from the directives considered by NPMPLT, and are becoming more urbanized. This occurred as a result of weak land and natural resources management, weak implementation of adequate urban planning, violations of existing urban plans, and real estate speculation (AFD, 2020). Accordingly, constructions are occurring anywhere in a village with no zoning, even in agricultural lands.

More generally, most of Lebanon has failed to protect agricultural lands that generally fell prey to sprawling urbanization. A comparison of land cover in Lebanon between 2000 and 2010 conducted by FAO showed that 308-kilometer squares were irreversibly lost to urban expansion, among which 63% were agricultural lands (Weber, 2018; FAO, 2012). Noting that Lebanon has a significant land capital valuable for agriculture, which is considered among the most fertile lands in the Middle East, and provides a diversity of location, exposure, and crops (NPMPLT, 2005).

#### Agriculture as Salvation? An Initiative from Ainata, Bint Jbeil

A pilot initiative started in 2019 in Ainata. The municipality, with the aim to ensure a productive role rather than just being a service provider, launched a campaign known as '*Khayratna bi Ardna*', following the concept of "transforming every threat into an opportunity". The municipality of Ainata, with a total area of 1,850 Ha including 1,200 Ha of arable lands, targeted to benefit from all private abandoned lands. Thus, private lands varying from 0.1 to 0.2 Ha and more, were endowed by their owners to the municipality to be cultivated. In the first year, a total endowed area of 22 Ha was cultivated, while the municipality provided all necessary equipment, along with a provision house, a packaging center, and a pond for irrigation. The mayor of Ainata considers this initiative a revolution in agriculture at crucial times, as agriculture should be considered a survival sector for Lebanon.

### **6.5.3. Irrigation**

As for irrigation, agriculture in the internal areas of the country is mainly rainfed. In Kafra, agricultural lands surrounding the old village settling on a hilltop

(Figure 31), used to be historically irrigated through an old irrigation system (Figure 32), named *al-hasel* (collector), leading to *al-ain* (water source) and to a collector at *al-birkeh* (pond) (Figure 33), in addition to other dispersed water ponds.

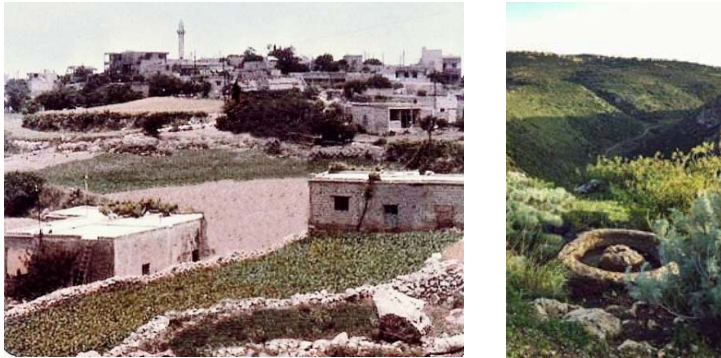


Figure 30: Old picture of core agricultural lands surrounding the old village, and water collections (Kafra Al Janoub Facebook page)



Figure 31: Old irrigation system (Author, 2019)



Figure 32: Pictures showing in order, Al Hasel, Al Ain, and Al Birkeh (Author, 2019)

However, the farmers in Kafra complained from the lack of water for irrigation nowadays, which prevents them from planting various types of crops. Currently, the

existing three water tanks in the village service mainly the urban area and are not hooked to all the agricultural lands across the village.

The need for development projects for irrigation is essential to support and enhance the agricultural sector. Referring to the Head of the Office of the Union of Al Qalaa, a project known as “Conveyor 800” is planned to be servicing the area and providing irrigation for agricultural lands within 800 m altitude. However, delays are expected to occur due to the current circumstances.

In conclusion, building on the role that agriculture used to play in the livelihood of rural villages such as Kafra, especially at times when food insecurity becomes a major concern for rural communities, agricultural lands can be considered an important opportunity<sup>55</sup>. But these lands need to be sustainably managed along with the need to recover the shared value of agricultural land in order to ensure the ultimate benefice from these lands.

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<sup>55</sup> A plan was set by the State to increase or double the production of wheat in the coming five years in order to support in providing a part of our needs.



## CHAPTER 7

### THESIS FINDINGS, RECOMMENDATIONS, AND CONCLUSION

This thesis explored the challenges facing land management, particularly agricultural and public lands in the rural context of Kafra, South Lebanon.

This chapter reviews the findings from this thesis. It concludes with a set of recommendations.

#### **7.1. Thesis Findings**

This thesis shows that the ways in which rural land is managed, how it is conceived in the currently adopted economic and financial model in Lebanon, how it is affected by planning strategies, and how it is managed through tenure models and land surveys, have directly contributed to undermining its social roles. More specifically, the thesis has shown that:

- The built fabric represents 11.6% of the total area of the village. The evolution of this urbanization expanded throughout the years over agricultural lands which represent currently only 37.7% of the total area of the village. While a percentage of 31.5% has been left unexploited although it used to be cultivated in the past.
- The model of land tenure adopted in Lebanon, which favored private individual ownership and undermined communal ownership has led to the parcelization of land lots and discouraged direly needed communal uses of land. The example of the municipal land which was intended to be equipped for the common use, but

ended up being privatized by a religious figure, reflects the lack of protection of public land leading to their loss.

- Land surveys, while designed to protect ownership, failed to protect public lands since interferences by powerful actors during surveys have materialized in the allocation of public lands to private individuals. Indeed, property delineations have allocated tenure over communal lands to influential actors at the expense of communal ownership.
- Modalities through which access to land is organized have undermined agricultural practices. Indeed, the parcelization of land in small lots, the dominance of absentee ownership, and the lack of communal mechanisms to access land collectively along historical practices undermined agricultural use of land. Specifically, upholding private land ownership as sacred has led to the abandonment of large and fertile land plots and prevented village dwellers from benefitting from land for agricultural uses.
- The regulatory framework that favored real-estate and building development undermined agricultural practices, as land was seen increasingly as an asset subject to market exchange and valued following the best paying allocation, and not its most needed social roles.
- Building and zoning regulations further worked to undermine agricultural practices. More specifically:
  - Informal regulations of building practices and licenses decreed by the Minister of Interior and mandating the municipality to grant authorizations irrespective of building and zoning regulations

allowed for sprawling construction to occur anywhere in the village including agricultural lands.

- The absence of zoning regulations contributed to a failure to protect agricultural lands. Instead, the national master plan continued to allow construction in all unzoned areas, with the same exploitation ratio applied within areas including agricultural ones.
- Road development encouraged building sprawl. This practice spilled over to agricultural roads, whereby the imposed road width by the Green Project and its quality (asphalted) facilitated construction along these roads and into agricultural lands.
- Lack of support provided for the agricultural sector such as irrigation, agricultural cooperatives, etc., is notably complained by farmers, especially with the imposed additional burdens due to the multiple crises.

## **7.2. Thesis Recommendations**

Building on the above findings, the thesis provides a set of recommendations in order to protect, enhance public and agricultural lands, and activate the social value of these lands, especially in rural communities:

### **1- Establish popular oversight and incentivize local authorities to protect public land during land surveys:**

- Land surveys need to be conducted under the protection and custodianship of a body that can protect shared ownership. In the current context, giving communal oversight to the process by ensuring higher transparency of the surveying and

delineation process, forming local committees, and setting in place participatory processes of accountability could counter attempts to take over shared lands.

- One option is to develop community mapping, a successful method used in recording customary ownership (Eaton, 2005), involving the participation of the locals in identifying boundaries and traditional land use zone.
- Ensure availability of documentation and marked boundaries to avoid additional loss of lands, especially public lands and the loss of rights and control over communal lands.
- In order to stimulate local authorities to protect communal land, they need to be informed but also empowered to implement development projects in shared areas. Locally adapted programs such as cultural and sports venues or farmers' markets could provide such an incentive.

**2- Empower the use of land for agricultural uses despite private ownership by setting in place institutional frameworks that allow for the use of land irrespective of landholding:**

- Survey the ownership of all unused agricultural land and develop a rental or usage framework through which agricultural practices can be encouraged despite absentee ownership. Thus, separating the use rights from ownership rights, and considering principles of effective use in governing land ownership would enhance and ensure land is being productively used, and accomplish the 'social function' of property.
- Overcome land fragmentation by creating incentives for landowners and farmers to adopt collective agricultural practices.

### **3- Deploy spatial planning to curtail sprawl:**

- Adopt a land use plan that protects agricultural lands and introduce incentives to implement it. Zeineddine (2014) suggested in his thesis, to impose property tax incentives where agricultural properties are subjected to a lighter burden than other types of property, in a way to encourage the use of the land for agriculture (Zeineddine, 2014), since opposition can face the establishment of a registration system, with rural population fearing the enforcement of land tax by the government. This land use plan should not be limited to zoning, it needs to be developed into a strategic plan that supports agricultural practices and consequently stimulates people to adopt them.
- Contain and control all building activities and develop a building framework that responds to communal needs without resorting to informal practices that facilitate sprawl. It is evident that the current building framework is inadequate to orient building practices since it is based on a speculative, highly urban framework. Developing an alternative framework that responds to local needs but maintains regulations to protect agricultural lands is imperative.
- Reconsider the development of roads, and, where possible, even narrow existing roads in agricultural areas to prevent construction. It is possible in many cases to introduce large bike lanes and pedestrian walkways, encouraging healthy practices while limiting the speed of cars and their use through agricultural areas, and consequently building activities.
- Considering all NPMPLT recommendations when developing roads, articulating master plans, and all other building regulations.

It is important to consider a suitable phasing in view of the current circumstances to ensure the success and required outcomes for the previous recommendations. It is essential to start implementing mechanisms for ownership sharing and endowment of lands. Moreover, local authorities (the municipality and the union) are to be encouraged to lead in surveying ownership, abandoned arable and agricultural lands, by organizing ownership sharing and unbundling use rights from ownership, especially at times of multiple crises and food shortage. A participatory approach that embraces landowners and farmers is required as they are major important actors whose involvement and engagement is key. Concerning the spatial planning, the municipality and the union can play an important role through an engineering department vis-avis reconsidering roads and NPMPLT recommendations, and taxations. While land survey and delineation works could be deferred to a later stage, along with the participation of the community, to secure transparency of the process, to monitor it, and to ensure no loss of public lands.

### **7.3. Conclusion**

In today's world, there is no alternative to balancing between humans and their landscapes. This thesis explored the challenges facing agricultural and public lands, and the social function of these lands, especially in a rural context, and recommended tools to be deployed to respond to these challenges, reactivate the social value of rural land and seek to revitalize the concept of communal agricultural and public lands, especially at times of crises and food shortage. This can represent an opportunity and an entry point to the shift in the current economic model.

I conclude with the entry sentence of the NPMPLT report on land (2005)

“The national territory is the collective heritage of the Lebanese people. Every generation has thus the duty to transmit it, in its entire wealth, to future generations, after using it rationally and developing it in a way that would not affect its character or its potential”.

“It is important to remember that all we have is some ten thousand square kilometers... Whether it is the Beqaa valley or the coastal zone, North or South, or even the historical range of our ancient coastal cities, we should get organized so that nothing gets ignored, in order to maintain the land heritage, of which geography and history have given us our share...”  
(Chiha, 1945).

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