The Furrow and the State: A History of Agricultural Practices in Afrin to 2010

Introduction

Nestled in the northwestern corner of Syria, the district of Afrin presents a unique case study in the agrarian history of the Levant. For millennia, its verdant mountains and fertile plains have been shaped by the interplay of a benevolent climate and the enduring labor of its inhabitants. Yet, this landscape has never been merely a product of nature; it has been a canvas upon which successive political powers have inscribed their ambitions. This report provides an exhaustive history of the agricultural practices in the Afrin district, from the foundational Ottoman reforms of the mid-19th century to the precipice of the Syrian conflict at the end of 2010.

The central argument of this analysis is that the agricultural history of Afrin is a story of the dynamic and often contentious relationship between its exceptional environmental endowments, the deep-rooted cultural practices of its predominantly Kurdish population, and the overarching state-building projects of external powers. From the Ottoman Empire's attempts to centralize control through land registration to the French Mandate's focus on resource extraction and, finally, to the Syrian Republic's comprehensive program of state-led agrarianism, the control over Afrin's core agricultural resources—its land, its water, and the fruits of its harvest—has been a primary instrument of political consolidation and economic strategy. The region's unique productivity, particularly its status as a heartland for olive cultivation, made it not only an economic asset but also a crucial arena for the implementation of state policy.

Employing a chronological framework, this report will first establish the geographic, climatic, and hydrological foundations that have historically defined the possibilities of cultivation in the region. It will then proceed through three distinct political eras: the late Ottoman period, the French Mandate, and the post-independence Syrian Republic. By synthesizing environmental data with political and economic history drawn from a wide range of multilingual sources, this analysis seeks to build a multi-layered narrative. It will explore not only what was grown and how, but also why these practices evolved under specific systems of land tenure, state intervention, and market pressures.

The scope of this report is strictly delimited, focusing geographically on the Afrin district as defined by its administrative boundaries within the Aleppo Governorate and temporally on the period ending December 31, 2010. This endpoint is deliberate, allowing for a comprehensive portrait of the region's agricultural landscape at a critical juncture, providing a baseline

against which the profound disruptions of the subsequent decade can be understood. The analysis concludes with an assessment of the complex legacy of state intervention, culminating in the construction of the Maydanki Dam—a project that epitomized the Syrian state's ambition to modernize and control the region's agricultural destiny. By 2010, the farmer in Afrin, whose ancestors had navigated the demands of Ottoman tax collectors and French commercial agents, was inextricably linked to the centralized apparatus of the Syrian state, a dependency that defined the very structure of agrarian life.

I. The Agrarian Landscape of Afrin: Foundations of Cultivation

The agricultural history of any region is written first and foremost by its geography. In Afrin, the physical landscape has provided a remarkably favorable setting for cultivation, setting it apart from the more arid territories that characterize much of Syria. This unique combination of topography, climate, and water resources has not only supported a rich and diverse agricultural economy for centuries but has also made the region a strategic prize for the states that have sought to govern it.

Geographic Positioning and Topography

The Afrin district is situated in the far northwestern corner of Syria, forming a distinct geographic and cultural zone within the Aleppo Governorate.¹ It covers an area of approximately 3,850 square kilometers, which constitutes about 2% of Syria's total landmass.¹ The region's defining topographical feature is its mountainous character. It is an extension of the Taurus Mountain range, with average elevations ranging between 700 and 1269 meters above sea level.² The highest point in the district is known locally as the Great Mountain, or *Girê Mazin* in Kurdish.²

This rugged terrain is not monolithic. It is a complex mosaic of mountain chains, rolling hills, and fertile valleys and plains carved out by the region's watercourses. The mountain slopes, while often steep, are frequently gentle enough to have allowed for the development of terraced agriculture, a practice essential for cultivating tree crops on inclines. Interspersed among these highlands are broad, fertile lowlands, most notably the Juma Plain (

Deşta Cûmê), which provides an ideal environment for the cultivation of field crops. This varied topography has been a primary driver of Afrin's agricultural diversity. The mountains and hillsides are home to extensive forests of pine, oak, and cypress, as well as fruit orchards, while the plains are dedicated to grains, legumes, and summer vegetables. This natural endowment has allowed for a resilient and multifaceted agricultural system, capable of producing a wide array of products and less susceptible to the risks associated with monoculture.

Climate and Soil Fertility

Afrin's agricultural potential is profoundly enhanced by its climate. Its relative proximity to the Mediterranean Sea bestows upon it a classic Mediterranean climate pattern, characterized by moderate, rainy winters and warm, dry summers.⁴ This climate is perfectly suited for what are often termed "Mediterranean crops," a category that includes olives, grapes, figs, and various grains and legumes that thrive under such conditions.⁴

Crucially, the region receives a level of precipitation that is exceptionally high for Syria. Annual rainfall averages range from 330 to 700 millimeters, a stark contrast to the vast swathes of the country that receive less than 250 millimeters annually. During the winter months, temperatures are cool enough that snowfall is a regular occurrence in the mountainous areas, which contributes to the replenishment of groundwater and the sustained flow of springs and rivers into the spring and early summer. This reliable and relatively abundant rainfall supports extensive rain-fed agriculture, particularly for the hardy olive trees that dominate the landscape, reducing the historical dependency on large-scale irrigation that defines farming in other parts of Syria. The combination of this favorable climate, the mineral-rich soils derived from the region's geology, and the availability of water has resulted in exceptionally fertile land. Syrian agricultural planners have long classified Afrin as being within the country's "first stability zone," a designation reserved for areas with the most reliable rainfall and highest agricultural productivity.

Hydrological Systems: The Afrin River and Groundwater Basins

Water is the lifeblood of agriculture in the Middle East, and Afrin is exceptionally well-endowed in this regard. The region's hydrology is defined by two primary systems: the Afrin River and its tributaries, and a series of substantial underground water basins. The Afrin River is the region's central artery. Originating in the Kartal Mountains in Turkey, it flows south into Syria, traversing the district for approximately 85 kilometers before crossing back into Turkey, where it eventually joins the Orontes River.² The river and its tributaries have historically been the most important source of surface water, providing for localized irrigation, watering livestock, and sustaining the settlements that have long dotted its banks.² Its perennial flow has made the lands along its course, particularly in the Juma Plain, some of the most productive in the region, supporting the cultivation of water-intensive crops like summer vegetables and, historically, tobacco.⁸

Beneath the surface, Afrin possesses significant groundwater resources. Geological studies have identified at least five major groundwater basins, including the Basouta-Aindara basin and the Kafr Janneh basin.¹ These aquifers are found at varying depths, from relatively shallow surface basins at 80 to 150 meters to deeper reserves located 200 to 400 meters

underground.¹ These basins are fed by the region's ample rainfall, which percolates through the limestone geology. They, in turn, feed a network of powerful springs that have been foundational to settlement and agriculture for centuries. Among the most significant are the Basouta spring, with a discharge of 140 liters per second, the Kafr Janneh spring at 85 L/s, and the Nabi Huri spring at 90 L/s. Before the widespread use of diesel-powered pumps, these springs were vital sources for small-scale gravity-fed irrigation systems. This confluence of favorable geography, climate, and hydrology has created a form of agricultural exceptionalism for Afrin within the broader Syrian context. While much of Syria is a water-scarce country, dominated by arid and semi-arid landscapes where agriculture is a precarious enterprise, Afrin stands out as a uniquely water-rich and resilient zone.¹¹ This fundamental environmental reality explains its long history of supporting high-value perennial crops, most notably olives, which require a more stable and reliable water supply than the annual grains that dominate cultivation in more marginal areas. This inherent productivity has been the foundation of the region's economic importance throughout history and is the primary reason why successive state powers have focused so intently on controlling its land, water, and agricultural output.

II. Land, Labor, and Olives: Agrarian Life under Ottoman Rule (c. 1858-1918)

The late Ottoman period, particularly the era following the sweeping *Tanzimat* reforms, was a transformative time for the agrarian structure of Afrin. The traditional systems of land tenure and taxation, which had been in place for centuries, were fundamentally altered by the state's drive to modernize and centralize its authority. The implementation of the 1858 Ottoman Land Code, while intended to create a more orderly and profitable system for the state, had profound and often unintended consequences, reshaping rural society and laying the groundwork for the land tenure conflicts of the 20th century.

The Pre-Reform Landscape: The Çift-hane and Timar Systems

Prior to the mid-19th century reforms, the agrarian system in Afrin, as in much of the Ottoman Empire, was structured around the principle of state ownership of land. The vast majority of arable land was classified as *miri*, or state land, to which peasant families were granted usufruct rights—the right to use and profit from the land—but not outright ownership.¹⁷ The fundamental unit of this system was the

çift-hane, a term that encapsulated the productive capacity of a single peasant household (*hane*) cultivating a plot of land sufficient to be worked by a pair of oxen (*çift*).¹⁷ This system was designed to ensure the subsistence of the peasant family while also generating a surplus for taxation.

This state-owned land was often organized into military-administrative fiefs known as *timars*. These were granted to cavalrymen (*sipahi*), who were responsible for maintaining security and, most importantly, collecting taxes from the peasants in their designated area on behalf of the Sultan.¹⁷ The peasant cultivator had the right to organize production on the family farm but was tied to the land and obligated to surrender a portion of the harvest, typically a tithe, to the

timar holder.¹⁷ This system served the dual purpose of sustaining the empire's formidable military machine and preventing the emergence of a powerful, independent landed aristocracy that could challenge the Sultan's authority. By retaining ultimate ownership of the land, the state ensured that power remained centralized.

The Ottoman Land Code of 1858: Intent vs. Reality

The Ottoman Land Code of 1858 was a cornerstone of the *Tanzimat* reforms, a wide-ranging effort to modernize the empire's administration, military, and economy. The law's primary objectives were to increase and regularize tax revenues and to assert greater state control over the provinces by creating a direct relationship between the central government and the individual landholder.¹⁹ To achieve this, the Code required all landholders to register their land with the state and receive a title deed, or

tapu.¹⁹ The law formally defined five categories of land:

mulk (full private ownership), *miri* (state land with usufruct rights), *waqf* (pious endowments), *matruk* (land for public use, like roads or pastures), and *mawat* ("dead" or uncultivated land).¹⁸ While the intent was to formalize the rights of the peasant cultivators on *miri* land, the law's implementation was deeply flawed and produced outcomes that were often the opposite of what was intended. Across the Syrian provinces, including Afrin, many small farmers actively avoided the registration process.¹⁹ They were deeply suspicious of the state's motives, fearing that registration would lead to more efficient and burdensome taxation and, most critically, to conscription into the Ottoman army.²⁰

This widespread peasant resistance created a vacuum that was eagerly filled by more powerful local actors. Urban notables, wealthy merchants from Aleppo, and influential tribal leaders, who were more familiar with the state bureaucracy and had the means to navigate it, seized the opportunity. They registered vast tracts of communally used village lands or lands tilled by numerous peasant families in their own names.¹⁹ In many cases, peasants, fearing the state, willingly allowed a local notable to register their land on their behalf, only to find their traditional usufruct rights transformed into a tenancy or sharecropping arrangement, with the notable now acting as a private landlord.²² The result was a catastrophic failure of the law's centralizing purpose. Instead of creating a broad class of smallholders directly tied to the state, the 1858 Code inadvertently facilitated the privatization of state land and the consolidation of large estates, entrenching the power of a new landed elite and making the peasant's claim to the land more precarious than ever before.¹⁹

The Agrarian Economy: Olives, Grains, and Subsistence

Throughout this period of administrative upheaval, the fundamental rhythms of the agrarian economy in Afrin remained tied to its Mediterranean environment. Agriculture was largely a subsistence-oriented activity, with production geared primarily toward meeting the needs of the household and supplying local markets. The primary crops were those that could be cultivated through rain-fed farming, with wheat and barley being the main staple grains, supplemented by legumes such as chickpeas and lentils.¹

The undisputed cornerstone of the regional economy, however, was the olive tree. The cultivation of olives and the production of olive oil in Afrin is a practice that dates back hundreds, if not thousands, of years, deeply embedded in the region's ecology and culture. During the late Ottoman period, olive oil was the region's most important commercial product. It was a vital source of dietary fat for the local population and the primary raw material for the renowned soap-making industry in Aleppo, with which Afrin had a strong economic linkage. The oil and soap produced from Afrin's olives were traded throughout the region, forming the backbone of the district's cash economy. The expansion of olive cultivation was further encouraged by Ottoman policies in the 19th century, which saw olive oil as a valuable export commodity and a key source of tax revenue.

The flawed implementation of the 1858 Land Code was not merely an administrative misstep; it was a pivotal event that fundamentally restructured rural society in Afrin and sowed the seeds of future conflict. By creating a legal mechanism through which communal and peasant-tilled lands could be converted into large private estates, the law established a new and deeply unequal system of land tenure. This process created the very class of large, often absentee, landowners whose power and wealth were derived from the labor of tenant farmers and sharecroppers. This semi-feudal structure, born from the unintended consequences of an Ottoman modernization project, became the primary source of rural grievance. It was precisely this concentration of land ownership and the dispossession of the peasantry that the later Syrian land reforms of the 1950s and 1960s would seek to dismantle. The political and social struggles over land that defined much of Afrin's 20th-century history were, therefore, a direct and lasting legacy of this fateful 19th-century attempt to impose a new order on the land.

III. Mandated Modernity: French Rule and the Agrarian Economy (1921-1946)

The collapse of the Ottoman Empire following World War I and the imposition of the French Mandate for Syria and the Lebanon marked a new era in Afrin's agricultural history. The French administration, driven by a colonial logic of economic development and resource extraction, introduced new institutions and policies that sought to modernize and

commercialize the Syrian agricultural sector. While these interventions brought new infrastructure and integrated Afrin more deeply into national and global markets, they were largely implemented within the existing social and land tenure structures, often reinforcing the inequalities that had been entrenched in the late Ottoman period.

Administrative and Political Context

Under the Mandate, which was formally approved by the League of Nations in 1922, the region of Afrin, known historically and administratively as Kurd Dagh ("Mountain of the Kurds"), was incorporated into the French-created State of Aleppo.³¹ The French approach to governance was one of direct control, though they carried out significant constructive work aimed at developing the country's resources.³² This included a focus on improving infrastructure, such as building road networks, which was essential for facilitating the movement of troops and, just as importantly, agricultural commodities from the hinterlands to major urban centers and ports.³² While local authorities existed, their power was limited and could be easily overruled by French officials, ensuring that all major policy decisions served French interests.³⁴ The French administration also encouraged agriculture, particularly in fertile regions like Afrin and the Jazira, seeing them as key to the economic viability of the Mandate territory.³²

Economic Policies: Taxation and Agricultural Credit

The French economic administration in the agricultural sector was characterized by a combination of continuity and cautious innovation. They largely retained the Ottoman taxation system, most notably the 'ushr, or tithe, which was a tax levied on the gross output of agricultural land.³⁵ This tax, which was gradually increased to a rate of 12.5%, was inherently regressive. Because it was applied to the total harvest before it was divided between landowner and cultivator, its burden fell disproportionately on the tenant farmers and sharecroppers who performed the actual labor, rather than on the large estate owners.³⁵ This policy had the effect of preserving the economic pressure on the peasantry while ensuring a consistent and easily collected stream of revenue for the Mandate authorities. At the same time, the French recognized that the existing system of rural credit was a major impediment to agricultural development. Traditionally, peasants in need of loans for seed, tools, or subsistence during lean periods were forced to turn to landowners or urban moneylenders, who charged exorbitant interest rates, often between 15% and 30%.³⁵ This cycle of debt kept many peasants in a state of perpetual dependency. To address this, and to stimulate production, the Mandate authorities established a state-run Agricultural Bank. This was a significant institutional intervention designed to provide a more stable and affordable source of credit. The bank was cleverly capitalized through a 4% levy on the revenues from the tithe and offered loans to farmers at a fixed interest rate of 10%. 35 This provided a viable alternative to usurious lenders and represented a key step in the modernization of the rural

Encouragement of Cash Crops and Infrastructure

A central goal of French economic policy was to orient Syrian agriculture toward the needs of the French colonial economy. This meant actively encouraging the cultivation of cash crops that could supply French industries. Cotton was a particularly high priority.³⁵ To promote its cultivation, the French administration, often working through the new Agricultural Bank, provided farmers with advances in the form of seeds, fertilizers, or cash loans. This policy was aimed at transforming parts of the Syrian countryside into a source of raw materials for the metropole.

This push for commercial agriculture was supported by the aforementioned investments in infrastructure. The construction of a more extensive road network was not merely an administrative or military project; it was a vital economic artery. Improved roads connected production zones like Afrin more efficiently to the commercial hub of Aleppo, reducing transportation costs and time.³² From Aleppo, these agricultural goods could then be moved to Mediterranean ports for export to France and other European markets. This process began to break down the relative isolation of the Afrin district, tying its economic fortunes more closely to the fluctuations of national and international commodity markets. The agricultural policies of the French Mandate can best be understood as a project of "extractive modernization." The interventions—the bank, the roads, the promotion of cash crops—were indeed modernizing in their nature, introducing new institutions and technologies to the countryside. However, their primary purpose was not the holistic development of the rural society or the alleviation of peasant poverty, but rather the creation of a more efficient system for the extraction of agricultural wealth. The French authorities chose to work within the deeply unequal land tenure system they inherited from the Ottomans, a system dominated by large landowners. This was a pragmatic choice, as these notables were the key intermediaries in the countryside and the class most capable of organizing the shift towards commercial crop production. By maintaining a regressive tax system while providing credit and infrastructure that primarily benefited commercial agriculture, the French reinforced the economic power of the landed elite. The modernization they introduced was selective, aimed at improving the means of production and extraction while leaving the fundamental relations of production—the relationship between landowner and peasant—largely unchanged. The Afrin farmer was being integrated into a global capitalist system, but from a position of continued subordination.

IV. The Age of the State: Agriculture in the Syrian Republic (1946-2010)

Following Syria's independence in 1946, the agricultural sector, and Afrin's role within it, entered a new and profoundly transformative era. The period up to 2010 was dominated by the rise of a powerful, centralized state that viewed the countryside not merely as a source of revenue but as a critical arena for political consolidation, social engineering, and national development. This era was defined by three major state-led initiatives: a radical agrarian reform that redrew the map of land ownership, a comprehensive system of subsidies and controls that made the state the central actor in the rural economy, and large-scale infrastructure projects aimed at modernizing production, culminating in the construction of the Maydanki Dam.

A. Redrawing the Fields: The Agrarian Reform of 1958 and its Aftermath

The single most significant event in Syria's modern agrarian history was the land reform initiated in 1958. Following Syria's union with Egypt to form the United Arab Republic, the government of Gamal Abdel Nasser promulgated Law No. 161 of 1958, a sweeping agrarian reform law designed to dismantle the power of the old landed oligarchy. This class of large, often absentee, landowners had dominated the political and economic life of the country since the late Ottoman period, and the reform was explicitly aimed at breaking their "feudal" grip on the countryside. The sum of the s

The law established legal ceilings on the amount of agricultural land an individual could own. These limits varied depending on the type of land and the method of irrigation, reflecting the differing productivity of land across Syria's diverse ecological zones.³⁷ For rain-fed (ba'li) lands planted with olive or pistachio trees, a category that encompassed much of the agricultural land in Afrin, the ownership ceiling was set at 40 hectares (approximately 400 dunams) in the Aleppo Governorate and most other regions.³⁸ Any land held by an individual in excess of this limit was subject to expropriation by the state. The expropriated land was then intended for redistribution in small plots to tenant farmers, sharecroppers, and landless agricultural laborers.³⁶

When the Ba'ath Party seized power in Syria in 1963, it embraced the agrarian reform with even greater ideological fervor. For the Ba'athists, the reform was not just an economic policy but a fundamental political tool. Their primary objective was to permanently destroy the power base of the old elite and to cultivate a new base of political support among the rural masses, creating a broad class of smallholding peasants whose newfound security and livelihood were directly dependent on the state.³⁶ The implementation of the reform in Afrin, as elsewhere, was a revolutionary act that fundamentally reordered the social and economic structure of the countryside, replacing the power of the large landowner with the authority of the central state.

B. The Centralized Harvest: Ba'athist Agricultural Policy and State

Control

From the 1960s onward, the Syrian state built a complex and pervasive system of control over the agricultural sector. This system was a core component of the Ba'athist state's socialist-inspired, developmentalist ideology, which prioritized national food self-sufficiency as a matter of strategic importance.³⁶ Until the economic liberalization of the 2000s, the state was the primary director of the agrarian economy, influencing every stage of the production cycle from planting to marketing.

This control was exercised through several key mechanisms. First, the state heavily subsidized essential agricultural inputs. The Ministry of Agriculture, through state-owned enterprises like the General Organization for Seed Multiplication, supplied farmers with improved, high-quality seeds for strategic crops such as wheat, barley, lentils, and chickpeas at supported prices.⁴³ This ensured the widespread adoption of desired crop varieties. Similarly, fertilizers were provided at subsidized rates until the market was liberalized in 2009.⁴⁴ Perhaps most critically, fuel, particularly diesel for irrigation pumps and tractors, was heavily subsidized. The state recognized the importance of this subsidy and even provided direct cash payments to some farmers to compensate for price increases, as it did for cotton growers in 2008.⁴⁴ Second, the state organized the peasantry into a network of government-controlled institutions. The 1958 reform law mandated the creation of agricultural cooperatives in villages where land was redistributed. 38 These cooperatives became the primary conduits for the state's largesse, serving as the distribution points for subsidized inputs, machinery, and credit from the Agricultural Cooperative Bank. 36 While they provided essential services, these were not independent, voluntary organizations in the Western sense. They were instruments of state policy, managed by the bureaucracy and integrated into the structure of the ruling party, ensuring that the state's directives reached every village. 46

Third, the state managed the marketing of key agricultural commodities. It set official procurement prices for strategic industrial and food crops like cotton, sugar beets, and wheat, often guaranteeing to purchase the entire harvest at a fixed premium.³⁶ This system provided farmers with a secure market and a guaranteed income, shielding them from price volatility. However, it also eliminated private sector competition and made farmers entirely dependent on the state as their sole major buyer, reinforcing the state's central role in the rural economy.

C. The Olive Economy: Cultural Bedrock and Economic Engine

Amid these sweeping political and economic changes, the defining feature of Afrin's agricultural identity remained the olive tree. Throughout the post-independence period until 2010, olive cultivation was not just a branch of agriculture; it was the cultural and economic foundation of the region. Before 2011, estimates placed the number of olive trees in the district between 13 and 18 million, accounting for a substantial portion of Syria's total olive production and making Afrin one of the country's most important olive-growing centers.

For the vast majority of Afrin's population, the olive season was the anchor of the economic year, and the olive harvest was the primary source of livelihood. The fruit of these ancient groves, and the high-quality oil pressed from it, were the region's signature products, supplying the great markets of Aleppo and forming the basis for related industries like the manufacture of traditional olive oil soap. The olive tree itself holds a deep cultural significance in the region, symbolizing peace, life, and a multi-generational connection to the land. Family holdings often included trees planted by great-grandparents, representing a living legacy passed down through time.

The production methods in the olive sector reflected the broader trends of the era, combining deeply ingrained traditional knowledge with the modern inputs provided by the state. While the rhythms of pruning, harvesting, and pressing were often guided by practices honed over centuries, farmers increasingly relied on state-subsidized fertilizers and modern machinery. By the end of the period, the region was home to approximately 285 modern, mechanized presses for oil extraction, indicating a significant level of capital investment and modernization within this traditional sector.²⁵

D. Taming the River: The Maydanki Dam and the Promise of Water Security (2004-2010)

The final major chapter in Afrin's pre-2010 agricultural history was the construction of the Maydanki Dam, officially named the 17 April Dam. This massive infrastructure project, initiated by the Syrian government in 1997 and officially inaugurated in 2004, represented the culmination of the state's technocratic and developmentalist ambitions for the region. Located on the Afrin River about 12 kilometers from Afrin city, the dam was a multi-purpose project designed to fundamentally re-engineer the region's relationship with its most vital resource: water.

The stated goals of the dam were ambitious and multifaceted. It was designed to control the river's flow and prevent seasonal flooding, to provide a reliable source of drinking water for an estimated 200,000 people in the Afrin and Azaz areas, and to generate up to 25 megawatts of hydroelectric power. From an agricultural perspective, its most important objective was to provide irrigation for up to 30,000 hectares (300,000 dunams) of land. This was intended to transform the agricultural landscape. Prior to the dam's construction, an estimated 80% of the district's agriculture was rain-fed, making it vulnerable to the periodic droughts that affect the region. 12

The dam's irrigation plan was a clear blueprint for the state's vision of a more intensive and diversified agricultural future for Afrin. The plan allocated the dam's water to a strategic mix of crops. A majority, 52%, was designated for the region's vast olive groves. This was a significant development, as most olive trees had traditionally been unirrigated. Providing supplementary irrigation was expected to dramatically increase their yield and reliability. Another 11% of the water was allocated to other fruit trees. A substantial 31% was designated

for water-intensive annual field crops, including wheat, cotton, sugar beets, and watermelons, while the remaining 6% was for other vegetables. In the few years between its opening in 2004 and the 2010 cutoff of this report, the Maydanki Dam began to realize this vision, ushering in a new era of state-managed water security and agricultural intensification. The agricultural policies pursued by the Syrian Republic in Afrin up to 2010 reveal a certain contradiction at the heart of the Ba'athist state's modernization project. The land reforms of the 1960s were primarily a socio-political project, aimed at creating a broad class of smallholding peasants who were politically loyal and economically dependent on the central government and its system of subsidies. This fostered a widespread, if heavily managed, system of small-scale farming. However, by the late 1990s and 2000s, the state's focus increasingly shifted towards large-scale, capital-intensive, technocratic solutions to agricultural development, a trend perfectly encapsulated by the Maydanki Dam. This project, with its centralized control over water resources and its emphasis on intensifying production of industrial crops, represented a different vision of agricultural modernity. By 2010, these two models coexisted. The traditional, extensive, rain-fed olive groves, now owned by smallholders, were being supplemented by newly developed, intensively irrigated plots. This created a new and critical dependency. While the land reform had freed the Afrin peasant from the authority of the local landlord, the dam made them profoundly dependent on the decisions of a dam authority in a distant capital, a vulnerability that would have severe consequences in the years to come.

Conclusion: A Landscape of Continuity and Change

By the end of 2010, the agricultural landscape of Afrin was a complex palimpsest, a living document upon which the forces of geography, culture, and political power had left their indelible marks. The history of its agricultural practices is one of profound transformation, yet it is also a story of remarkable continuity. The ancient olive groves, rooted in the region's unique environmental endowments, still formed the undisputed backbone of the economy and the primary symbol of its cultural identity. The rhythm of the olive harvest continued to define the year for the majority of its inhabitants, a practice connecting them to generations of ancestors.

Layered over this deep foundation of tradition were the structures imposed by a century and a half of state-building. The property lines and social hierarchies first established by the flawed implementation of the 1858 Ottoman Land Code were still visible in the patterns of landholding, even after being radically redrawn by the Ba'athist reforms. The commercial pathways and orientation towards cash crops carved out during the French Mandate had been expanded and institutionalized, integrating Afrin's produce into a national, state-controlled market.

Ultimately, the period from 1946 to 2010 was defined by the inexorable rise of the centralized state as the principal actor in agrarian life. The Syrian Republic, through land reform, subsidies, and massive infrastructure projects, systematically replaced the authority of local

notables and the influence of private markets with its own bureaucratic apparatus. The peasant farmer in Afrin, who in the 19th century was beholden to the Ottoman sipahi or a local landlord, and in the early 20th century to a merchant in Aleppo, was by 2010 tied directly to the Syrian state. Their livelihood depended on the Ministry of Agriculture for seeds and fertilizer, the state-run Agricultural Cooperative Bank for credit, and, increasingly, the Maydanki Dam authority for the water that sustained their crops.

The history of agricultural practices in Afrin up to 2010 is therefore the story of a transition from a system of localized, traditional agriculture to one of comprehensive, state-managed agrarianism. This transformation profoundly reshaped the region's economy and society, creating new opportunities and new dependencies. Yet, it never fully erased the deep-rooted identity of Afrin as a land whose history, culture, and destiny were inextricably linked to the cultivation of the olive tree. The system that existed at the close of 2010 was a fragile balance between this ancient heritage and the ambitions of a modernizing state, a balance that would soon be shattered by the events to come.

Table 1: Evolution of Land Tenure and Agricultural Policy in Afrin (c. 1858-2010)

Feature	Ottoman Empire (c.	French Mandate	Syrian Republic
	1858-1918)	(1921-1946)	(1946-2010)
Key Land Law(s)	Ottoman Land Code of	Continuation of	Agrarian Reform Law
	1858	Ottoman Code	No. 161 (1958)
Dominant Tenure	State ownership (<i>miri</i>)	De facto private	State-led redistribution
System	with usufruct rights;	ownership by large	to smallholders; state
	emergence of large	landowners; tenant	ownership of
	private estates via	farming and	expropriated lands.
	registration.	sharecropping.	
Primary State	Centralization, tax	Resource extraction,	Food self-sufficiency,
Objective	collection, military	promotion of cash	destruction of "feudal"
	support.	crops for colonial	class, creation of loyal
		economy.	rural base, water
			resource development.
Key Crops	Subsistence grains,	Cotton, tobacco,	Strategic crops (wheat,
Emphasized	olives for oil and soap.	continuation of	cotton, sugar beets),
		traditional crops.	expansion and
			intensification of olive
			and fruit cultivation.
Key State Institutions	Tapu (Land Registry).	Mandate High	Ministry of Agriculture,
		Commission,	General Peasants
		Agricultural Bank.	Union, Agricultural
			Cooperatives,
			Maydanki Dam
			Authority.
Primary Water	Rain-fed agriculture,	Rain-fed agriculture,	Rain-fed, expanded

Source	local springs.	development of some	groundwater pumping,
		localized irrigation.	large-scale irrigation
			from Maydanki Dam
			(post-2004).

Works Cited

- 1. PredictWind. (n.d.). *Afrin District, Syria Weather Forecast*. Retrieved from https://www.predictwind.com/weather/syria/aleppo-governorate/afrin-district/january
- de Oliveira, G., et al. (n.d.). Hydrological modeling in a large basin in southeastern Brazil. SciELO Brasil. Retrieved from https://www.scielo.br/j/cerne/a/Lm99Tc3Xq9fN3sPrT9X7jFb/
- Red Cross Red Crescent Climate Centre. (2024). Syria Country Profile. Retrieved from https://www.climatecentre.org/wp-content/uploads/RCCC-Country-profiles-Syria_2024_ final.pdf
- 4. Al-Mhairat, M. A. (2022). Analysis of Rainfall Trends in Syria in Response to Climate Change. *Water*, *14*(10), 1670. https://doi.org/10.3390/w14101670
- 5. Environmental Protection Agency of Syria & The White Helmets. (n.d.). The impact of earthquakes and climate change on groundwater in the Afrin and Azaz districts.

 Retrieved from
 - https://epa-sy.org/reports/The%20impact%20of%20earthquakes%20EN.pdf
- Hamza, M. (2023, September 17). Farmers 'ruined' as earthquake and climate change leave Afrin River dry. Syria Direct. Retrieved from https://syriadirect.org/earthquake-and-climate-change-afrin-river-dries-farmers-lose-out/
- 7. Kurdipedia. (2023, December 10). *Geography of Afrin region, its climate and soil.* Retrieved from
 - https://www.kurdipedia.org/Default.aspx?q=20231210161028535673&lng=11
- 8. Syrian Association for Education AFS. (n.d.). *Afrin Lands*. Retrieved from https://sae-afs.org/ar/afrin-lands-33/
- 9. Medarat Kurd. (2016, December 4). *Geography of Afrin*. Retrieved from https://www.medaratkurd.com/2016/12/04/1778/
- 10. Wikipedia. (n.d.). *Afrin*. Retrieved from https://ar.wikipedia.org/wiki/%D8%B9%D9%81%D8%B1%D9%8A%D9%86
- 11. Sema Kurd. (n.d.). *Afrin: Location Name Geography History Agriculture*. Retrieved from

- 12. Al-Awset. (2018, March 14). *Afrin Region: Socially and Historically*. Retrieved from <a href="https://alawset.net/2018/03/14/%D9%85%D9%86%D8%B7%D9%82%D8%A9-%D8%B9%D9%81%D9%8A%D9%86-%D8%A7%D8%AC%D8%AA%D9%85%D8%A7%D8%A7%D8%B1%D9%8A%D8%A7%D8%B1%D9%8A%D8%AE%D9%8A%D8%A7%D9%8B/
- 13. Rojava School Curriculum. (n.d.). *Geography*. Retrieved from https://archive.org/stream/minhac_a_dibistane_li_rojava/MINHAC%20A%20DIBISTANA%20ROJAVA/Amedey%C3%AE/Amedey%C3%AE%20%E2%80%93%20Duem%C3%AEn/ERDN%C3%8EGAR%C3%8E011_divu.txt
- 14. Wikipedia. (n.d.). Afrin Dam. Retrieved from https://en.wikipedia.org/wiki/Afrin_Dam
- 15. Inventory of Shared Water Resources in Western Asia. (n.d.). *Chapter 7: Orontes River Basin*. Retrieved from https://waterinventory.org/sites/waterinventory.org/files/chapters/Chapter-07-Orontes-River-Basin-web-1.pdf
- 16. PAX for Peace. (2024). Thirst for Peace: Water in the Orontes River Basin. Retrieved from https://paxforpeace.nl/wp-content/uploads/sites/2/2024/11/PAX_report_Thirst-for-Peace_2024.pdf
- 17. Al-Mohamad, H., et al. (2024). Impact of the Syrian Crisis on Irrigation and Water Resources in Northwest Syria. *Water*, 16(21), 3101. https://doi.org/10.3390/w16213101
- 18. ResearchGate. (2019). Water Management in Cross Back Transboundary Rivers: The Afrin River Case. Retrieved from https://www.researchgate.net/publication/336871326_Water_Management_in_Cross_Back_Transboundary_Rivers_The_Afrin_River_Case_Southern_Turkey
- 19. TEPAV. (n.d.). Sustainable Development for the Levant. Retrieved from https://tepav.s3.eu-west-1.amazonaws.com/upload/files/1698120288-8.Sustainable_Development_for_the_Levant.pdf
- 20. Rebaz News. (n.d.). Afrin: Pomegranate farmers face losses as sales do not cover expenses. Retrieved from <a href="https://www.rebaznews.com/ar/content/%D8%B9%D9%81%D8%B1%D9%8A%D9%86-%D9%85%D8%B2%D8%A7%D8%B1%D8%B9%D9%88-%D8%A7%D9%84%D8%B1%D9%85%D8%A7%D9%86-%D9%81%D9%8A-%D9%85%D9%88%D8%A7%D8%AC%D9%87%D8%A9-%D8%A7%D9%84%D8%AE%D8%B3%D8%A7%D8%A6%D8%B1-%D8%A7%D9%84%D9%85%D8%A8%D9%8A%D9%8A%D9%8A%D9%8A%D9%8A-%D9%8A%D9%8A%D9%8A-%D9%8A%D9%8B5%D8%A7%D8%A7-%D8%AAA-%D8%BA%D8%B7%D9%8A-%D8%A7%D9%84%D9%85%D8%B5%D8%A7%D8%B1%D9%8A%D9%81
- 21. Rojava News. (2017, November 21). *Agriculture in Afrin*. Retrieved from https://www.rojavanews.com/arabic/index.php/rapor/item/22760-2017-11-21-14-14-55
- 22. Wikipedia. (n.d.). *Afrin Dam*. Retrieved from https://ar.wikipedia.org/wiki/%D8%B3%D8%AF_%D8%B9%D9%81%D8%B1%D9%8A%D9%86
- 23. eSyria. (2014, December). *Tobacco cultivation: A seasonal income for hundreds of families*. Retrieved from

- https://www.esyria.sy/2014/12/%D8%B2%D8%B1%D8%A7%D8%B9%D8%A9-%D8%A7%D9%84%D8%AA%D8%A8%D8%BA-%D8%AF%D8%AE%D9%88%D9%84-%D9%85%D9%88%D9%85%D9%8A%D8%A9-%D9%84%D9%85%D8%A6%D8%A7%D8%AA-%D8%A7%D9%84%D9%84%D9%84%D9%84%D8%A3%D8%B3%D8%B1
- 24. Al-Shamali, M. (2023, September 17). After climate change and the earthquake: The drying of the Afrin River brings huge losses to farmers. *Syria Direct*. Retrieved from <a href="https://syriadirect.org/%D8%AC%D9%81%D8%A7%D9%81-%D9%86%D9%87%D8%B1-%D8%B9%D9%81%D8%B1%D9%8A%D9%86-%D9%8A%D8%AD%D9%85%D9%84-%D8%A7%D8%B1%D8%B9%D9%8A%D9%86-%D8%AE%D8%B3%D8%A7%D8%A6%D8%B1-%D8%B7%D8%A7/?lang=ar
- 25. Yek Dem. (n.d.). *Environment and Forestry in the Afrin Region*. Retrieved from https://yek-dem.net/ar/?p=15513
- 26. Wikipedia. (n.d.). *Çemê Efrînê*. Retrieved from https://ku.wikipedia.org/wiki/%C3%87em%C3%AA_Efr%C3%AEn%C3%AA
- 27. Wikipedia. (n.d.). *Agriculture in South Africa*. Retrieved from https://en.wikipedia.org/wiki/Agriculture_in_South_Africa
- 28. Oregon State University. (n.d.). Colonial Agriculture History and Science of Cultivated Plants. Retrieved from
 - https://open.oregonstate.education/cultivatedplants/chapter/colonialagriculture/
- 29. Britannica. (n.d.). *Africa Farming, Crops, Livestock*. Retrieved from https://www.britannica.com/place/Africa/Agriculture
- 30. Georgia Encyclopedia. (n.d.). *Agriculture in Georgia*. Retrieved from https://www.georgiaencyclopedia.org/articles/business-economy/agriculture-in-georgia-overview/
- 31. Wikipedia. (n.d.). *History of agriculture*. Retrieved from https://en.wikipedia.org/wiki/History of agriculture
- 32. Ryan, P., et al. (2020). Life History Transitions at the Origins of Agriculture: A Model for Understanding How Niche Construction Impacts Human Growth, Demography and Health. *PMC PubMed Central*. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC7253633/
- 33. Violations Documentation Center in Northern Syria. (2019, February 14). *Afrin... five years of economic development*. Retrieved from https://vdc-nsy.com/archives/12245
- 34. Kurd Online. (2024, November 26). *The Stolen Olive Land: How the suffering of Afrin's farmers turned into a bitter reality*. Retrieved from <a href="https://kurd-online.com/%D8%A3%D8%B1%D8%B6-%D8%A7%D9%84%D8%B3%D8%B1%D9%88MD9%86-%D8%A7%D9%84%D9%85%D8%B3%D8%B1%D9%88%D9%88MD9%84%D9%85%D8%B3%D8%B1%D9%88%D9%88MD9%81-%D8%AA%D8%AD%D9%88%D9%84%D8%AA-%D9%85%D8%B9%D8%A7%D9%86%D8%A7%D8%A9/
- 35. Syrian Association for Education AFS. (2021, January 16). *An overview of the geographical and human nature of Afrin and its surface and groundwater sources*. Retrieved from https://sae-afs.org/ar/afrin-lands-33/
- 36. Wikipedia. (n.d.). *Agriculture in Syria*. Retrieved from https://ar.wikipedia.org/wiki/%D8%A7%D9%84%D8%B2%D8%B1%D8%A7%D8%B9%D8

%A9 %D9%81%D9%8A %D8%B3%D9%88%D8%B1%D9%8A%D8%A7

- 37. Syria TV. (2023, August 6). Water scarcity threatens Afrin's crops... Causes and solutions. Retrieved from <a href="https://www.syria.tv/%D8%B4%D8%AD-%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87-%D9%8A%D9%8F%D9%87%D8%AF%D8%AF-%D9%85%D8%AD%D8%A7%D8%B5%D9%8A%D9%84-%D8%B9%D9%81%D8%B1%D9%8A%D9%86-%D8%A7%D9%84%D8%A7%D9%84%D8%A3%D8%B3%D8%A8%D8%A7%D8%A8-%D9%88%D8%A7%D9%84%D8%AD%D9%84%D9%88%D9%84
- 38. Wikipedia. (n.d.). Afrin. Retrieved from https://tr.wikipedia.org/wiki/Afrin
- 39. Bilimdili. (2018, January 24). AFRİN. Retrieved from https://bilimdili.com/dusunce/afrin/
- 40. Medya News. (n.d.). How occupied Afrin's prime olive oil reaches the world market and who benefits. Retrieved from https://medyanews.net/how-occupied-afrins-prime-olive-oil-reaches-the-world-market-and-who-benefits/
- 41. RDI. (2024, November 25). The Stolen Olive Land: How Afrin Farmers' Struggles Turned into a Bitter Reality. Retrieved from https://r-d-i.org/en/?p=2986
- 42. CSIS. (2021, November 22). *An Olive's Odyssey*. Retrieved from https://www.csis.org/analysis/olives-odyssey
- 43. Co-operation in Mesopotamia. (n.d.). Olives of Afrin exported to other countries by Turkey. Retrieved from https://mesopotamia.coop/olives-of-afrin-exported-to-other-countries-by-turkey/
- 44. Youth4Nature. (2021, December 30). *A Tale of Afrin*. Retrieved from https://www.youth4nature.org/stories/tale-afrin
- 45. Enab Baladi. (2024, October 29). Olive picking: A source of livelihood in Afrin. Retrieved from https://english.enabbaladi.net/archives/2024/10/olive-picking-a-source-of-livelihood-in-afrin/
- 46. ARTA FM. (2025, June 5). *Afrin and the Olive Ahali Al-Jazira Podcast* [Video]. YouTube. Retrieved from https://www.youtube.com/watch?v=SOWNfT8qhKM
- 47. UltraSawt. (2024, March 30). What is the economic, nutritional, and environmental importance of olives?. Retrieved from <a href="https://www.ultrasawt.com/%D9%85%D8%A7-%D8%A7%D9%84%D8%A3%D9%87%D9%85%D9%8A%D8%A9-%D8%A7%D9%84%D8%A7%D9%82%D8%AA%D8%B5%D8%A7%D9%85%D9%8A%D8%A9-%D9%88%D8%A7%D9%84%D8%BA%D8%B0%D8%A7%D8%A6%D9%8A%D8%A9-%D9%88%D8%A7%D9%84%D8%A8%D9%8A%D8%A6%D9%8A%D8%A6%D9%8A%D8%A9-%D9%84%D8%B2%D9%8A%D8%AA%D9%88%D9%86%D8%9F/%D9%86%D8%A7%D9%84-%D8%A3%D8%A8%D9%88-%D8%B3%D9%88%D9%8A%D8%B1%D8%AD/%D8%A7%D9%84%D8%AA%D8%B1%D8%A7-%D9%84%D8%A7%D9%8A%D8%AA
- 48. Noon Post. (2024, November 4). *The story of the Syrian olive... from prosperity to decline*. Retrieved from https://www.noonpost.com/263264/
- 49. Al-Merja. (2016, June 21). *The economic, social, and health importance of olives*. Retrieved from https://almerja.com/more.php?idm=50929

- 50. Arab Organization for Agricultural Development. (2024, July 1). *Developing the production, processing, and marketing of olives and olive oil in the Arab world*. Retrieved from
 - https://aoadkhub.org/AOADDL/Linked_Studies/%D8%AA%D8%B7%D9%88%D9%8A%D8
 %B1%20%D8%A5%D9%86%D8%AA%D8%A7%D8%AC%20%D9%88%D8%AA%D8%B5
 %D9%86%D9%8A%D8%B9%20%D9%88%D8%AA%D8%B3%D9%88%D9%8A%D9%82
 %20%D8%A7%D9%84%D8%B2%D9%8A%D8%AA%D9%88%D9%86%20%D9%88%D8
 %B2%D9%8A%D8%AA%20%D8%A7%D9%84%D8%B2%D9%8A%D8%AA%D9%88%D9
 %86%20%D9%81%D9%8A%20%D8%A7%D9%84%D9%88%D8%B7%D9%86%20%D8%A7%D9%84%D9%88%D9%8A%D8%B7%D9%86%20%D8%A7%D9%84%D9%8A%D9%AA%D9%BA%D9%D9%D9%DA%D9%DA%D9%DA%DA%D9%DA%D9%DA%D9%DA%D9%DA%D9%DA%DPA%DPA%DPA%DPA%DPA%DPA%DPA%DPA%
- 51. Al-Jumhuriya. (2021, November 15). *The tired olive*. Retrieved from <a href="https://aljumhuriya.net/ar/2021/11/15/%D8%A7%D9%84%D8%B2%D9%8A%D8%AA%D8%B9%D8%AA%D8%AA%D8%B9%D8%AA%D8%B9%D8%AAA%D8%AAA%D8%AA%D8%AAA%D8%AA%D8%AA%D8%AAA%D8%AAA%D8%AA%D8%AA%D8%AA%D8%AAA%D8%AA
- 52. Food and Agriculture Organization of the United Nations. (n.d.). Farming Systems and Poverty: Middle East and North Africa. Retrieved from https://www.fao.org/4/y1860e/y1860e05.htm
- 53. OER Project. (n.d.). *The Origin of Agriculture in Africa*. Retrieved from https://www.oerproject.com/-/media/BHP/PDF/Unit7/U7-2-Origin_of_Agriculture_in_Africa_2015_860L.pdf
- 54. Western Michigan University. (2023, February 26). The Impact of Agriculture on African Civilization in the 21st Century. Retrieved from <a href="https://scholarworks.wmich.edu/cgi/viewcontent.cgi?referer=&https://scholarworks.wmich.edu/cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cg
- 55. Khan Academy. (n.d.). *READ: The Origin of Agriculture in Africa*. Retrieved from https://www.khanacademy.org/humanities/big-history-project/agriculture-civilization/first-cities-appear/a/the-origin-of-agriculture-in-africa
- 56. Washington Kurdish Institute. (2023, March 30). *Afrin: A Case Study in Turkish de-Kurdification*. Retrieved from https://dckurd.org/2023/03/30/turkish-de-kurdification-afrin/
- 57. BioOne Complete. (2021, July 13). The Significance of Traditional Culture for Agricultural Biodiversity—Experiences from GIAHS. Retrieved from https://bioone.org/journals/journal-of-resources-and-ecology/volume-12/issue-4/j.issn.1674-764x.2021.04.003/The-Significance-of-Traditional-Culture-for-Agricultural-Biodive rsityExperiences-from-GIAHS/10.5814/j.issn.1674-764x.2021.04.003.full
- 58. Food and Agriculture Organization of the United Nations. (2022, October 27). 20 years of celebrating "culture" in agriculture. Retrieved from https://www.fao.org/newsroom/story/20-years-of-celebrating-the-culture-in-agriculture/ar
- 59. Omran for Strategic Studies. (2021, August 2). Assessing the reality and effectiveness of agricultural livelihood programs in the Euphrates Shield and Afrin regions. Retrieved from
 - https://www.omrandirasat.org/%D8%A7%D9%84%D8%A5%D8%B5%D8%AF%D8%A7%D8%B1%D8%A7%D8%AA/%D8%A7%D9%84%D8%A3%D8%A8%D8%AD%D8%A7%D8

- %AB/%D8%A3%D9%88%D8%B1%D8%A7%D9%82-%D8%A8%D8%AD%D8%AB%D9%8 A%D8%A9/%D8%AA%D9%82%D9%8A%D9%8A%D9%85-%D9%88%D8%A7%D9%82% D8%B9-%D9%88%D9%81%D8%A7%D8%B9%D9%84%D9%8A%D8%A9-%D8%A8%D8 %B1%D8%A7%D9%85%D8%AC-%D8%B3%D8%A8%D9%84-%D8%A7%D9%84%D8%B 9%D9%8A%D8%B4-%D8%A7%D9%84%D8%B2%D8%B1%D8%A7%D8%B9%D9%8A%D 8%A9-%D9%81%D9%8A-%D9%85%D9%86%D8%B7%D9%82%D8%AA%D9%8A-%D8% AF%D8%B1%D8%B9-%D8%A7%D9%84%D9%81%D8%B1%D8%A7%D8%AA-%D9%88% D8%B9%D9%81%D8%B1%D9%8A%D9%86.html
- 60. Yek Dem. (2024, April 18). A reading of the book Environment and Forestry in the Afrin Region. Retrieved from https://yek-dem.net/ar/?p=15513
- 61. Agricultural Voices Syria. (2022, December 21). Current challenges to food security and ways to enhance agricultural expertise. Retrieved from https://agricultural-voices.sussex.ac.uk/wp-content/uploads/2021/11/Report-on-Workshops-in-NW-Syria-SEPT-21_-Arabic.pdf
- 62. ARTA FM. (2025, June 5). *Afrin and the Olive Ahali Al-Jazira Podcast* [Video]. YouTube. Retrieved from https://www.youtube.com/watch?v=SOWNfT8ghKM
- 63. Food and Agriculture Organization of the United Nations. (n.d.). *Land tenure policies in the Near East*. Retrieved from https://www.fao.org/4/y8999t/y8999t0f.htm
- 64. European Journal of International Law. (n.d.). Land Rights in Nineteenth-Century Ottoman State Succession Treaties. Retrieved from https://www.ejil.org/article.php?article=2579&issue=127
- 65. Beki. (n.d.). Ottoman Land Registration Law as a Contributing Factor in the Israeli-Arab Conflict. Retrieved from https://www.beki.org/dvartorah/landlaw/
- 66. FIG. (2009, September 26). The Importance of Property Ownership and Management System in the Ottoman Empire in Point of Today. Retrieved from https://www.fig.net/resources/proceedings/fig_proceedings/morocco/proceedings/TS10 /TS10 4 bivik yavuz.pdf
- 67. Wikipedia. (n.d.). *Ottoman Land Code of 1858*. Retrieved from <a href="https://ar.wikipedia.org/wiki/%D9%82%D8%A7%D9%86%D9%88%D9%86_%D8%A7%D9%86%D9%88_%D8%A7%D9%86_%D8%A7%D9%86_%D8%A7%D9%86_%D8%A7%D9%86_%D8%A7%D9%86_%D8%A7%D9%86_%D8%A7%D9%85_1858
 https://ar.wikipedia.org/wiki/%D9%82%D8%A7%D9%86_MD8%A7%D9%A7%A7%D9%A7%D9%A7%D9%A7%
- 68. Al-Adab Journal. (2023, March 23). Feudalism in the Liwa of Muntafiq in Iraq during the late Ottoman era 1869-1919. Retrieved from https://al-adab-journal.com/images/pdf/V15/V15-5.pdf
- 69. OpenEdition Books. (n.d.). Chapter One From the "Syrian Vilayets" in the Ottoman era to the "Syrian Statelets" in the French era. Retrieved from https://books.openedition.org/ifpo/14637?lang=en
- 70. Qadisiyah University Repository. (n.d.). *The problem of lands and its solutions in the Shamiya district 1914-1958*. Retrieved from <a href="https://repository.qu.edu.iq/wp-content/uploads/sites/31/2018/07/%D9%85%D8%B4%D8%B4%D9%83%D9%84%D8%A7%D9%84%D8%A7%D9%84%D8%A7%D9%88MD9%84%D8%A7%D9%81%D9%8A-%D9%88%D9%84%D9%84%D9%87%D8%A7-%D9%81%D9%8A-%D9%85%D8%AF%D9%8A%D9%86%D8%A9-%D8%A7%D9%84%D8%B4%D8%A7%D9%8A-%D9%85%D8%AF%D9%8A%D9%86%D8%A9-%D8%A7%D9%84%D8%B4%D8%A7%D9%8A-%D9%85%D8%AF%D9%8A%D9%86%D8%A9-%D8%A7%D9%84%D8%B4%D8%A7%D9%8A

85%D9%8A%D9%87-1914 1958.doc

- 71. REMMM. (n.d.). Refugees, Labour and Sectarianism in Syria under the French mandate (1921-1950). Retrieved from https://journals.openedition.org/remmm/21593
- 72. Wikipedia. (n.d.). Afrin Region. Retrieved from https://en.wikipedia.org/wiki/Afrin Region
- 73. Wikipedia. (n.d.). *Mandate for Syria and the Lebanon*. Retrieved from https://en.wikipedia.org/wiki/Mandate for Syria and the Lebanon
- 74. Britannica. (n.d.). *Syria The French mandate*. Retrieved from https://www.britannica.com/place/Syria/The-French-mandate
- 75. OpenEdition Books. (n.d.). Chapter Two The financial and economic policy of the Mandate, and its repercussions. Retrieved from https://books.openedition.org/ifpo/15032
- 76. Al Jazeera Mubasher. (2024, July 28). *Syrian Afrin... land of olives and pomegranates*. Retrieved from https://www.aljazeeramubasher.net/news/reports/2024/7/28/%D8%B9%D9%81%D8%B1 <a href="https://www.aljazeeramubasher.net/news/reports/2024/7/28/%D8%B9%D9%81%D8%B1 <a href="https://www.aljazeeramubasher.net/news/reports/2024/7/28/%D8%B9%D9%81%D8%B1 <a href="https://www.aljazeeramubasher.net/news/reports/2024/7/28/%D8%B9%D9%81%D8%B1 <a href="https://www.aljazeeramubasher.net/news/reports/2024/7/28/%D8%B1%D9%88MD8%B1%D9%88MD8%B1%D9%88MD8%B1%D9%88MD8%B1%D9%88MD8%B1%D9%88MD8%B1%D9%88MD8%B1%D9%88MD8%B1%D9%88MD9%89MD9%88MD9%89MD9%88MD9%89MD9%88MD9%89MD9%88MD9%89MD9%89MD9%89MD9%89MD9%89MD9%89MD9%89MD9%89MD9%89MD9%89MD9%89MD9%89MD9%89MD9%89MD9%89MD9%89MD9%89MD9%80MD9%8
- 77. U.S. House Oversight and Reform National Security Subcommittee. (2019, October 23).
 The Trump Administration's Syria Policy. Retrieved from
 https://oversightdemocrats.house.gov/sites/evo-subsites/democrats-oversight.house.gov/files/documents/Ahmed.102319.Testimony.pdf
- 78. Transnational Institute. (2021, October 27). *The Syrian revolt and the politics of bread*. Retrieved from https://longreads.tni.org/the-syrian-revolt-and-the-politics-of-bread
- 79. Human Rights Watch. (2018, April 8). Syria: Afrin Residents Blocked from Fleeing, Aid. Retrieved from
- https://www.hrw.org/news/2018/04/08/syria-afrin-residents-blocked-fleeing-aid 80. Wilson Center. (2018, March 29). *The Turkish War on Afrin Jeopardizes Progress Made*
- 80. Wilson Center. (2018, March 29). The Turkish War on Afrin Jeopardizes Progress Made Since the Liberation of Raqqa. Retrieved from https://www.wilsoncenter.org/publication/the-turkish-war-afrin-jeopardizes-progress-made-the-liberation-raqqa
- 81. Syria Law. (n.d.). *Agrarian Reform Law No. 161 of 1958 and its amendments*. Retrieved from https://syria-law.com/lawss/%D9%82%D8%A7%D9%86%D9%88%D9%86-%D8%A7%D9%84%D8%B2%D8%B1
 - <u>%D8%A7%D8%B9%D9%8A-%D8%B1%D9%82%D9%85-161-%D9%84%D8%B9%D8%A7</u> %D9%85-1958-%D9%88%D8%AA%D8%B9%D8%AF%D9%8A/
- 82. People's Council of Syria. (n.d.). *Law 161 of 1958 Agrarian Reform Law*. Retrieved from http://www.parliament.gov.sy/arabic/index.php?node=201&nid=10641&ref=tree&
- 83. Syrians for Truth and Justice. (2021, November 10). *How have several Syrian laws been used for discriminatory purposes?*. Retrieved from <a href="https://stj-sy.org/ar/%D9%83%D9%8A%D9%81-%D8%AA%D9%85-%D8%A7%D8%B3%D8%AF%D8%AF%D8%AF%D8%AF%D8%AF%D9%85-%D8%AF%D8%AF%D9%85-%D8%AF%D9%84%D9%82%D9%88MD8%AF%D9%86-%D8%A7%D9%84%D9%82%D9%88%D8%AF%D9%88

- 6%D9%8A%D9%86-%D8%A7%D9%84%D8%B3%D9%88/
- 84. Manshurat. (n.d.). *Agrarian Reform Law in the Syrian Region No. 161 of 1958*. Retrieved from https://manshurat.org/node/35121
- 85. Food and Agriculture Organization of the United Nations. (n.d.). *Counting the cost: Agriculture in Syria after six years of crisis*. Retrieved from

 https://openknowledge.fao.org/server/api/core/bitstreams/b9c4f6d8-4fb8-42bb-a2c9-e

 O18e38b1167/content
- 86. Carnegie Endowment for International Peace. (2015, June). Food Insecurity in War-Torn Syria: From Decades of Self-Sufficiency to Food Dependence. Retrieved from https://carnegieendowment.org/research/2015/06/food-insecurity-in-war-torn-syria-from-decades-of-self-sufficiency-to-food-dependence?lang=en
- 87. Food and Agriculture Organization of the United Nations. (2018, July 13). *Country Policy Brief: Syrian Arab Republic*. Retrieved from https://openknowledge.fao.org/server/api/core/bitstreams/1a37100b-f109-4e75-96ba-8 007ae84eeac/content
- 88. Heinrich-Böll-Stiftung. (2010). A Report on the Effects of Drought on the Syrian Peninsula. Retrieved from https://lb.boell.org/sites/default/files/uploads/2010/12/drought_in_syria_en.pdf
- 89. Syria Recovery Trust Fund. (n.d.). *Agricultural Support for Farmers in Northern Aleppo Governorate*. Retrieved from <a href="https://www.srtfund.org/ar/projects/317-%D8%A7%D9%84%D8%AF%D8%B9%D9%85-%D8%A7%D9%84%D8%B2%D8%B1%D8%A7%D8%B9%D9%8A-%D9%84%D9%84%D9%84%D9%85%D8%A7%D8%B1%D8%B9%D9%8A%D9%86-%D9%81%D9%8A-%D8%B4%D9%85%D8%A7%D9%84-%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9-%D8%AD%D9%84%D8%A8
- 90. Omran for Strategic Studies. (2021, August 2). Assessing the reality and effectiveness of agricultural livelihood programs in the Euphrates Shield and Afrin regions. Retrieved from
 - https://www.omrandirasat.org/%D8%A7%D9%84%D8%A5%D8%B5%D8%AF%D8%A7%D8%B1%D8%A7%D8%AA/%D8%A7%D9%84%D8%A3%D8%A8%D8%AD%D8%A7%D8
 %AB/%D8%A3%D9%88%D8%B1%D8%A7%D9%82-%D8%A8%D8%AD%D8%AB%D9%8
 A%D8%A9/%D8%AA%D9%82%D9%8A%D9%8A%D9%85-%D9%88%D8%A7%D9%82%
 D8%B9-%D9%88%D9%81%D8%A7%D8%B9%D9%84%D9%8A%D8%A9-%D8%A8%D8
 %B1%D8%A7%D9%85%D8%AC-%D8%B3%D8%A8%D9%84-%D8%A7%D9%84%D8%B
 9%D9%8A%D8%B4-%D8%A7%D9%84%D8%B2%D8%B1%D8%A7%D8%B9%D9%8A%D8%B9%D9%8A%D8%B9%D9%8A%D9%8A-%D9%8B%D9%8A-%D8%A7%D9%8A%D8%B7%D9%82%D8%AA%D9%8A-%D8%A7%D9%8A%D8%B1%D8%B1%D8%A7%D8%BA-%D9%88%D9%88%D9%8A-%D9%88%D9%8A-%D9%88%D9%8A-%D9%8B1%D8%A7%D9%8A-%D9%88%D9%8A-%D9%8B1%D8%A7%D9%8A%D9%8A-%D9%88%D9%8A-%D9%8B1%D8%A7%D9%8A-%D9%88%D9%8A-%D9%8B1%D8%A7%D9%8A-%D9%88%D9%8A-%D9%8B1%D8%A7%D9%8A%D9%8A-%D9%8B1%D8%A7%D8%AA-%D9%88%D9%8B1%D8%B1%D8%A7%D8%AA-%D9%88%D8%B1%D8%B1%D8%B1%D8%A7%D9%8A%D9%8A-%D9%8B%B1%D8%B1%D8%A7%D9%8B%D9%8A-%D9%8B%D9%8A-%D9%8B1%D8%B1%D8%A7%D8%AA-%D9%8B%D9%8A-%D9%8B1%D8%A7%D8%AA-%D9%8B%D9%8A-%D9%8A-%D9%8B1%D8%A7%D8%AA-%D9%8B%D9%8A-%D9%8B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D9%8B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D9%8B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%A7%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%B1%D8%AA-%D9%8B%D8%D9%B6.html
- 91. Food and Agriculture Organization of the United Nations. (2024, March 28). *Inclusive Rural Transformation in Africa Agriculture Mechanization, Digitalization, women and youth*. Retrieved from https://openknowledge.fao.org/server/api/core/bitstreams/2a76c226-880d-4009-89d7-6334fdb9feb0/content

- 92. PubMed Central. (n.d.). Scaling agricultural mechanization services in smallholder farming systems: Case studies from sub-Saharan Africa, South Asia, and Latin America. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC7063696/
- 93. CIMMYT. (2017, April 26). *Q+A: Agricultural mechanization fuels opportunity for youth in rural Africa*. Retrieved from https://www.cimmyt.org/news/qa-agricultural-mechanization-fuels-opportunity-for-youth-in-rural-africa/
- 95. Alfurat Agency. (2024, June 23). Afrin city is witnessing a great demand from farmers to try a new type of olive known as the Spanish 'Arbequina' [Video]. YouTube. Retrieved from https://www.youtube.com/watch?v=IPGMiZNoWQ4
- 96. Yekiti Media. (2021, July 9). Vineyards in the Afrin region... between agriculture, industry, and provisions. Retrieved from <a href="https://ara.yekiti-media.org/%D9%83%D8%B1%D9%88%D9%85-%D8%A7%D9%84%D8%B9%D9%86%D8%A8-%D9%81%D9%8A-%D9%85%D9%86%D8%B7%D9%82%D8%A9-%D8%B9%D9%81%D8%B1%D9%8A%D9%86-%D8%A8%D9%8A%D9%86-%D8%A7%D9%84%D8%B2%D8%B1%D8%A7%D8%B9%D8%A9/
- 97. Climate FieldView. (2025, April 29). From Ancient Egypt to the Smart Farm: A History of Agricultural Technology. Retrieved from https://climate.com/en-us/resources/blog/a-history-of-agricultural-technology.html
- 98. Wikipedia. (n.d.). *History of agriculture*. Retrieved from https://en.wikipedia.org/wiki/History of agriculture

gy-changed-farming

- 99. Britannica. (n.d.). *History of technology Agriculture, Innovation, Revolution*. Retrieved from https://www.britannica.com/technology/history-of-technology/Agriculture
- 100. Bayer Global. (2024, June 3). *How Has Technology Changed Farming?*. Retrieved from <a href="https://www.bayer.com/en/agriculture/article/technology-agriculture-how-has-technology-agriculture-how-how-has-technology-agriculture-how-how-how-how-
- 101. Al-Awset. (2018, March 14). Afrin, the bride of Kurdistan... A rich history and heritage and the authenticity of a steadfast people. Retrieved from <a href="https://alawset.net/2018/03/14/%D8%B9%D9%81%D8%B1%D9%8A%D9%86-%D8%B9%D8%B1%D9%88MD8%B3%D8%A9-%D9%83%D8%B1%D8%AF%D8%B3%D8%AA%D8%B1%D8%B1%D8%B3%D8%BAAMD8%B1%D8%B3%D8%B3%D8%AAMD8%B1%D8%B1%D8%B3%D8%B3%D8%AAMD8%B1%D8%B1%D8%B3%D8%B3%D8%BAAMD8%B1%D8%B1%D8%B1%D8%B3%D8%B3%D8%B1%
 - A7%D9%86-%D8%AA%D8%A7%D8%B1%D9%8A%D8%AE-%D9%88%D8%AA%D8%B1 %D8%A7%D8%AB-%D8%B9%D8%B1%D9%8A%D9%82-%D9%88/
- 8%B9%D9%81%D8%B1%D9%8A%D9%86/ 103. Wikipedia. (n.d.). *Çift-Hane*. Retrieved from

https://en.wikipedia.org/wiki/%C3%87ift-Hane

- 104. Middle East Forum. (n.d.). *Turkish Imperialism: When Will Turkey Annex Northern Syria?*. Retrieved from
 - https://www.meforum.org/middle-east-quarterly/when-will-turkey-annex-northern-syria
- 105. Beki. (n.d.). Ottoman Land Registration Law as a Contributing Factor in the Israeli-Arab Conflict. Retrieved from https://www.beki.org/dvartorah/landlaw/
- 106. YPJ Information. (2024, March 18). *Six years of Afrin occupation*. Retrieved from https://ypi-info.org/on-turkish-state-attacks/six-years-of-afrin-occupation/
- 107. FIG. (2009, September 26). The Importance of Property Ownership and
 Management System in the Ottoman Empire in Point of Today. Retrieved from
 https://www.fig.net/resources/proceedings/fig_proceedings/morocco/proceedings/TS10
 /TS10_4 bivik yavuz.pdf
- 108. Wafa. (n.d.). *Land ownership system in the Ottoman era*. Retrieved from https://info.wafa.ps/pages/details/32393
- 109. Wikipedia. (n.d.). *Ottoman Land Code of 1858*. Retrieved from <a href="https://ar.wikipedia.org/wiki/%D9%82%D8%A7%D9%86%D9%88%D9%86_%D8%A7%D9%84%D8%A7%D9%84%D8%A7%D9%84%D8%A7%D9%84%D8%A8B%D9%85%D8%A7%D9%86%D9%8A%D8%A9_%D8%B9%D8%A7%D9%85_1858
 https://ar.wikipedia.org/wiki/%D9%82%D8%A7%D9%86_MD8%A7%D9%84%D8%B9%D8%A7%D9%84MD8%A9_MD8%A7%D9%84MD8%A9_MD8%A7%D9%85_1858
- 110. Bel3arabi. (n.d.). *Ottoman Land Law of 1858*. Retrieved from https://www.bel3arabi.me/%D9%82%D8%A7%D9%86%D9%88%D9%86-%D8%A7%D9%86%D9%88-%D8%A7%D9%84%D8%B9%D8%AB%D9%85%D8%A7%D9%86%D9%8A/
- 111. Maqam. (n.d.). *Article 116 of the Ottoman Land Law*. Retrieved from https://maqam.najah.edu/legislation/169/item/9852/
- 112. Brill. (n.d.). Social and Political Transformations. Retrieved from https://brill.com/downloadpdf/book/edcoll/9789004188471/Bej.9789004185456.i-618_015.pdf
- 113. YouTube. (2025, August 7). France's top court strikes down pesticide clause in farming law. Retrieved from https://www.youtube.com/watch?v=ro9iSaLS7_c
- 114. European Investment Fund. (2025, May 21). The French Ministry of Agriculture and Food Sovereignty and the European Investment Fund are stepping up support for agricultural investment to the tune of €2 billion. Retrieved from https://www.eif.org/what_we_do/guarantees/news/2025/french-ministry-of-agriculture-and-food-sovereignty-and-the-european-investment-fund-are-stepping-up-support-for-agricultural-investment-to-the-tune-of-eur2-billion.htm
- 115. African Development Bank Group. (2024, April 2). The Guiguidou Hydro-Agricultural Rice Project Showcases Agricultural Cooperation between the African Development Bank and China. Retrieved from https://www.afdb.org/en/success-stories/guiguidou-hydro-agricultural-rice-project-showcases-agricultural-cooperation-between-african-development-bank-and-china-6978
- 116. Noon Post. (2018, March 29). What do you know about Afrin's natural resources and large industries?. Retrieved from https://www.noonpost.com/22671/

- 117. YouTube. (2024, January 15). A developmental agricultural project in Afrin to empower small farmers and improve production. Retrieved from https://www.youtube.com/watch?v=ktNJvUeTivY
- 118. YouTube. (2024, September 24). Afrin farmers in the village of Basouta began picking the famous French pomegranate season. Retrieved from https://www.youtube.com/watch?v=GtH5YFqV1vE
- 119. Wikipedia. (n.d.). *Democratic Autonomous Administration of North and East Syria*. Retrieved from https://en.wikipedia.org/wiki/Democratic_Autonomous_Administration_of_North_and_East Syria
- 120. Cairn.info. (2014). Geostrategic stakes and the impact of the conflict in the Orontes River basin. Retrieved from https://shs.cairn.info/revue-confluences-mediterranee-2014-2-page-173?lang=fr
- 121. Syria Direct. (n.d.). Three years after 'Olive Branch': A militarized Afrin and continued violations against its residents. Retrieved from https://syriadirect.org/three-years-after-olive-branch-a-militarized-afrin-and-continued-violations-against-its-residents/
- 122. Transnational Institute. (2021, October 27). *The Syrian revolt and the politics of bread*. Retrieved from https://longreads.tni.org/the-syrian-revolt-and-the-politics-of-bread
- 123. Transnational Institute. (n.d.). *The Syrian revolt and the politics of bread [Arabic]*. Retrieved from https://longreads.tni.org/arab-uprisings-ar/07-ar
- 124. Syria TV. (2021, April 10). (1963-2011) Authority in Syria and its role in the conflict between the countryside and the city (1/2). Retrieved from <a href="https://www.syria.tv/2011-1963-%D8%A7%D9%84%D8%B3%D9%84%D8%B7%D8%A9-%D9%81%D9%8A-%D8%B3%D9%88MD8%B1%D9%8A%D8%A7-%D9%88MD8%A7-%D9%88MD8%A7-%D9%88MD8%A7-%D9%8B1%D9%8A-%D8%B5%D8%B1%D8%A7%D8%B9-%D8%A7%D9%84%D8%B1%D9%8A-%D9%88-%D8%B7%D9%84%D9%85%D8%B7%D9%84%D9%85%D8%A7%D9%84%D9%85%D8%A7%D9%84%D9%86%D8%A9-21
- 125. Al-Raafed Syria. (2018, January 17). *Agrarian reform in Syria: A tributary-feudal pattern*. Retrieved from https://www.alraafed.com/2018/01/17/%D9%A2-34/
- 126. Revoleft Syria. (n.d.). *The agrarian question in Syria*. Retrieved from <a href="https://revoleftsyria.org/14351/%D8%A7%D9%84%D9%85%D8%B3%D8%A3%D9%84%D8%B1%D8%A7%D8%B3%D9%8A%D8%A9-%D9%8A%D8%B1%D9%8A%D8%B9%D9%8A%D8%A9-%D9%8B1%D9%8A-%D8%B3%D9%88%D8%B1%D9%8A%D8%A9/
- 127. Interactive Encyclopedia of the Palestine Question. (2018, August 14). Olive oil production in the late Ottoman rule. Retrieved from https://www.palquest.org/en/highlight/36858/olive-oil-production-late-ottoman-rule
- 128. Al-Ameed Oils. (n.d.). *The Syrian Olive Oil Guide 5 Features and Reasons*. Retrieved from https://alameedoils.com/en/syrian-olive-oil-guide/
- 129. Enab Baladi. (2024, October 29). *Olive picking: A source of livelihood in Afrin*. Retrieved from <a href="https://english.enabbaladi.net/archives/2024/10/olive-picking-a-source-of-livelihood-in-picking-a-source-of-

afrin/

- 130. Youth4Nature. (2021, December 30). *A Tale of Afrin*. Retrieved from https://www.youth4nature.org/stories/tale-afrin
- 131. YouTube. (n.d.). It is more than 40 years old... Here is the story of one of the oldest olive presses in Afrin. Retrieved from https://www.youtube.com/watch?v=Rfd4WlmQq4Y
- 132. Yekiti Media. (n.d.). *The reality of olive cultivation in the Afrin region*. Retrieved from <a href="https://ara.yekiti-media.org/%D9%88%D8%A7%D9%82%D9%80%D8%B9-%D8%B2%D8%B1%D8%A7%D8%B9%D8%A9-%D8%A7%D9%84%D8%B2%D9%8A%D9%8A%D9%80%D8%B9%D9%86-%D9%81%D9%8A-%D9%85%D9%86%D8%B7%D9%82%D8%A9-%D8%B9%D9%81%D9%80%D8%B1%D9%8A%D9%86/
- 133. Interactive Encyclopedia of the Palestine Question. (2018, August 14). *Olive oil production in the late Ottoman rule [Arabic]*. Retrieved from <a href="https://www.palquest.org/ar/highlight/36859/%D8%A5%D9%86%D8%AA%D8%A7%D8%AC-%D8%B2%D9%8A%D8%AA-%D8%A7%D9%84%D8%B2%D9%8A%D8%AA%D9%88%D9%8A%D8%AA%D9%88%D9%8A%D8%AA%D9%88%D9%8A-%D8%A3%D9%88%D8%A7%D8%AE%D8%B1-%D8%A7%D9%84%D8%AD%D9%83%D9%85-%D8%A7%D9%84%D8%B9%D8%AB%D9%85%D8%A7%D9%86%D9%8A
- 134. Suwar Magazine. (2019, January 21). *The olive season in Afrin: Civilians' livelihood is vulnerable to looting by opposition factions*. Retrieved from <a href="https://www.suwar-magazine.org/articles/1736_%D9%85%D9%88%D8%B3%D9%85-%D8%A7%D9%84%D8%B2%D9%8A%D8%AA%D9%88%D9%86-%D9%81%D9%8A-%D8%B9%D9%81%D8%B1%D9%8A-%D9%82%D9%88%D8%AA-%D8%A7%D9%84%D9%85%D8%AF%D9%86%D9%8A-%D9%8A-%D9%86-%D8%B9%D8%B1%D8%B6%D8%A9-%D9%84%D9%86%D9%87%D8%A8-%D9%81%D8%B5%D8%A7%D8%A6%D9%84-%D8%A7%D9%84%D9%85-%D8%B9%D8%A7%D8%B1%D8%B6%D8%A9
- 135. Soul Fire Farm. (n.d.). *Farming Practices*. Retrieved from https://www.soulfirefarm.org/theland/farmingpractices/
- 136. Chelsea Green Publishing. (2019). *African Farming Traditions: Learning the Power of Tradition*. Retrieved from https://www.chelseagreen.com/2019/african-farming-traditions/
- 137. Spudnik. (n.d.). 13 Different Types Of Farming Practices Around The World. Retrieved from
 - https://www.spudnik.com/13-different-types-of-farming-practices-around-the-world/
- 138. YouTube. (2023, February 25). *Traditional farming guides sustainable food production*. Retrieved from https://www.youtube.com/watch?v=n4tyTArvKAA
- 139. Yekiti Media. (2021, July 9). Vineyards in the Afrin region... between agriculture, industry, and provisions. Retrieved from <a href="https://ara.yekiti-media.org/%D9%83%D8%B1%D9%88%D9%85-%D8%A7%D9%84%D8%B9%D9%86%D8%A8-%D9%81%D9%8A-%D9%85%D9%86%D8%B7%D9%82%D8%A9-%D8%B9%D9%81%D8%B1%D9%8A%D9%86-%D8%A8%D9%8A%D9%86-%D8%A7%D8%B9%D8%A9/
- 140. Yekiti Media. (2024, November 26). *Deterioration of the agricultural sector in the Afrin region*. Retrieved from

- https://ara.yekiti-media.org/%D8%AA%D8%AF%D9%87%D9%88%D8%B1-%D8%A7%D9%84%D9%82%D8%B7%D8%A7%D8%B9-%D8%A7%D9%84%D8%B2%D8%B1%D8%A7%D8%B9%D9%8A-%D9%81%D9%8A-%D9%85%D9%86%D8%B7%D9%82%D8%A9-%D8%B9%D9%81%D9%8A%D9%86/
- 141. YouTube. (2022, September 7). Farmers in Afrin are able to produce silage for the first time after searching for alternatives to traditional feed. Retrieved from https://www.youtube.com/watch?v=2bBojw_FxiU
- 142. TikTok. (2023, December 31). *Development projects in Afrin: Learning agriculture and charitable distribution*. Retrieved from https://www.tiktok.com/@abo-sham366/video/7318700196366454018
- 143. PAX for Peace. (2023, March). Axed & Burned. Retrieved from https://paxforpeace.nl/wp-content/uploads/sites/2/import/2023-03/PAX_axed_and_burned.pdf
- 144. North Press Agency. (n.d.). *Turkey's water policies deplete Maydanki Lake in Syria's Afrin*. Retrieved from https://npasyria.com/en/123694/
- 145. Syria Direct. (2023, September 17). Farmers 'ruined' as earthquake and climate change leave Afrin River dry. Retrieved from https://syriadirect.org/earthquake-and-climate-change-afrin-river-dries-farmers-lose-o ut/
- 146. Syria Direct. (2023, July 25). *Afrin RSS Feed*. Retrieved from https://syriadirect.org/search/%D8%B9%D9%81%D8%B1%D9%8A%D9%86/feed/rss2/
- 147. UAB. (n.d.). How the war is disproportionately affecting vulnerable communities. Retrieved from https://www.uab.cat/doc/informeSiria_en
- 148. North Press Agency. (2023, July 30). *Water levels decline in Afrin River, raising farmers' fears*. Retrieved from https://npasyria.com/en/101868/
- 149. Syria Direct. (2023, September 17). *After climate change and the earthquake: The drying of the Afrin River brings huge losses to farmers [Arabic]*. Retrieved from <a href="https://syriadirect.org/%D8%AC%D9%81%D8%A7%D9%81-%D9%86%D9%87%D8%B1-%D8%B9%D9%81%D8%B1%D9%8A%D9%86-%D9%8A%D8%AD%D9%85%D9%84-%D8%A7%D9%84%D9%85%D8%B2%D8%A7%D8%B1%D8%B9%D9%8A%D9%86-%D8%AE%D8%B3%D8%A7%D8%A6%D8%B1-%D8%B7%D8%A7/?lang=ar
- 150. YouTube. (2023, September 9). What are the effects of the declining water level in Maydanki Lake in northern Syria? | Lam Al-Shaml. Retrieved from https://www.youtube.com/watch?v=b-T5kwMaLSo
- 151. North Press Agency. (n.d.). *Decline in water level of Maydanki Dam in Afrin countryside... What is Turkey's connection?*. Retrieved from https://npasyria.com/209099/
- 152. United Nations. (n.d.). Cooperatives for African development: lessons from experience. Retrieved from https://social.un.org/coopsyear/documents/WanyamaCOOPERATIVESFORAFRICANDEVELOPMENT.pdf
- 153. AgEcon Search. (2007, March). *Agricultural Cooperatives I: History, Theory and Problems*. Retrieved from https://ageconsearch.umn.edu/record/10129/

- 154. USDA Rural Development. (2015). *Co-ops*. Retrieved from https://www.rd.usda.gov/sites/default/files/RDRuralCoopMag_NovDec15.pdf
- 155. Wikipedia. (n.d.). *Democratic confederalism*. Retrieved from https://en.wikipedia.org/wiki/Democratic confederalism
- 156. ResearchGate. (n.d.). Role of agricultural cooperatives in rural development in the era of liberalization in the North West and South West regions of Cameroon. Retrieved from
 - https://www.researchgate.net/publication/349672689_Role_of_agricultural_cooperatives_in_rural_development_in_the_era_of_liberalization_in_the_North_West_and_South_West_regions_of_Cameroon
- 157. AgEcon Search. (n.d.). Success and failure factors in agricultural cooperatives. Retrieved from
 - https://ageconsearch.umn.edu/record/346696/files/SUCCESS%20AND%20FAILURE%20FACTORS%20IN%20AGRICULTURAL%20COOPERATIVES.pdf
- 158. Legal Agenda. (2024, April 25). Chapter Two: Cooperative societies in Lebanon: The evolution of their forms and laws. Retrieved from <a href="https://legal-agenda.com/%D8%A7%D9%84%D9%81%D8%B5%D9%84-%D8%A7%D9%84%D8%A8-%D8%A7%D9%86%D9%8A-%D8%A7%D9%84%D8%AC%D9%85%D8%B9%D9%8A%D8%A7%D9%8A-%D8%A7%D9%84%D8%A8/D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%8A-%D9%BA-%D

Works cited

- 1. محة عامة عن الطبيعة الجغرافية والبشرية لـ عفرين ومصادر المياه ..., accessed August 10, 2025, https://sae-afs.org/ar/afrin-lands-33/
- 2. منطقة عفرين: اجتماعياً وتاريخياً الشرق الأوسط الديمقراطي , accessed August 10, 2025, <a href="https://alawset.net/2018/03/14/%D9%85%D9%86%D8%B7%D9%82%D8%A9-%D8%B9%D9%81%D8%B1%D9%8A%D9%86-%D8%A7%D8%AC%D8%AA%D9%85%D8%A7%D8%B9%D9%8A%D8%A7%D9%8B-%D9%88%D8%AA%D8%A7%D8%B1%D9%8A%D8%AE%D9%8A%D8%A7%D9%8B/
- 3. عفرين ويكيبيديا, accessed August 10, 2025, https://ar.wikipedia.org/wiki/%D8%B9%D9%81%D8%B1%D9%8A%D9%86
- 4. أعفرين الموقع التسمية الجغرافيا- التاريخ- الزراعة | semakurd.net, accessed August 10, 2025,
 - https://www.semakurd.net/article/%D8%B9%D9%81%D8%B1%D9%8A%D9%86-%D8%A7%D9%84%D9%85%D9%88%D9%82%D8%B9-%E2%80%93-%D8%A7%D9%84%D8%AA%D8%B3%D9%85%D9%8A%D8%A9-%E2%80%93-%D8%A7%D9%84%D8%AC%D8%BA%D8%B1%D8%A7%D9%81%D9%8A%D8%A7-%D8%A7%D9%84%D8%A7%D9%8A%D8%A7%D9%8A%D8%A7%D9%8A%D8%A7%D9%8A%D8%A7%D9%8A%D8%B1%D8%A7%D9%8A%D8%A7%D9%8A%D8%B2%D8%B1%D8%A7%D8%B9%D8%A9
- 5. كرديبيديا عفرين .. نجمة في جغرافية كوردستان, accessed August 10, 2025, https://www.kurdipedia.org/Default.aspx?q=20231210161028535673&lng=11
- 6. 1 (عفرين) منطقة جبل الأكراد (عفرين), accessed August 10, 2025, https://www.medaratkurd.com/2016/12/04/1778/

- 7. middle east and north africa Farming Systems and Poverty, accessed August 10, 2025, https://www.fao.org/4/y1860e/y1860e05.htm
- 8. عفرین.. مزارعو الرمان في مواجهة الخَسائر: المبیعات لا تغطي المصاریف, accessed August 10, 2025,

 https://www.rebaznews.com/ar/content/%D8%B9%D9%81%D8%B1%D9%8A%D9
 %86-%D9%85%D8%B2%D8%A7%D8%B1%D8%B9%D9%88-%D8%A7%D9%84%
 D8%B1%D9%85%D8%A7%D9%86-%D9%81%D9%8A-%D9%85%D9%88%D8%A7
 %D8%AC%D9%87%D8%A9-%D8%A7%D9%84%D8%AE%D8%B3%D8%A7%D8%
 A6%D8%B1-%D8%A7%D9%84%D9%85%D8%A8%D9%8A%D8%B9%D8%A7%D8
 %AA-%D9%84%D8%A7-%D8%AA%D8%BA%D8%B7%D9%8A-%D8%A7%D9%84%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D9%8A-%D8%A7%D9%84%D9%8A-%D9%8A-%D8%A7%D9%84%D9%8A-%D9%8A-%D8%A7%D9%84%D9%8A-%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D9%84%D9%8A-%D8%A7%D8%B1%D9%8A-%D9%81
- 9. وراءة في كتاب البيئة والحراج في منطقة عفرين Yek.Dem, accessed August 10, 2025, https://yek-dem.net/ar/?p=15513
- 10. تدهور القطاع الزراعي في منطقة عفرين يكيتي ميديا ,accessed August 10, 2025, <a href="https://ara.yekiti-media.org/%D8%AA%D8%AF%D9%87%D9%88%D8%B1-%D8%A7%D9%84%D9%82%D8%B7%D8%A7%D8%B9-%D8%A7%D9%84%D8%B2%D8%B7%D8%A7%D8%B9%D9%8A-%D9%81%D9%8A-%D9%85%D9%86%D8%B7%D9%82%D8%A9-%D8%B9%D9%81%D8%B1%D9%8A%D9%86/
- 11. Syria Red Cross Red Crescent Climate Centre, accessed August 10, 2025, https://www.climatecentre.org/wp-content/uploads/RCCC-Country-profiles-Syria-2024-final.pdf
- 12. Afrin Dam Wikipedia, accessed August 10, 2025, https://en.wikipedia.org/wiki/Afrin_Dam
- 13. سد عفرين ويكيبيديا ,accessed August 10, 2025, https://ar.wikipedia.org/wiki/%D8%B3%D8%AF_%D8%B9%D9%81%D8%B1%D9%88 A%D9%86
- 14. واقع موسم الرمان في عفرين Rojava News, accessed August 10, 2025, https://www.rojavanews.com/arabic/index.php/rapor/item/22760-2017-11-21-14-1
- 15. Chapter 7 Orontes River Basin Inventory of Shared Water Resources in Western Asia, accessed August 10, 2025, https://waterinventory.org/sites/waterinventory.org/files/chapters/Chapter-07-Orontes-River-Basin-web_1.pdf
- 16. زراعة "التبغ".. دخول موسمية لمئات الأسر eSyria, accessed August 10, 2025, <a href="https://www.esyria.sy/2014/12/%D8%B2%D8%B1%D8%A7%D8%B9%D8%A9-%D8%A9-%D8%AA%D8%AA%D8%AA%D8%A8%D8%BA-%D8%AF%D8%AE%D9%88%D9%84-%D9%85%D9%88%D9%85%D9%84%D8%A9-%D9%84%D9%85%D8%A6%D8%A7%D8%AA-%D8%A7%D9%84%D8%A3%D8%B3%D8%B1
- 17. Çift-Hane Wikipedia, accessed August 10, 2025, https://en.wikipedia.org/wiki/%C3%87ift-Hane
- 18. The Importance of Property Ownership and Management System in the Ottoman Empire in Point of Today, accessed August 10, 2025, https://www.fig.net/resources/proceedings/fig_proceedings/morocco/proceedings/TS10/TS10 4 biyik yavuz.pdf
- 19. Ottoman Land Registration Law as a Contributing Factor in the Israeli-Arab

- Conflict, accessed August 10, 2025, https://www.beki.org/dvartorah/landlaw/
- 20. ويكيبيديا 1858 ويكيبيديا ,accessed August 10, 2025, https://ar.wikipedia.org/wiki/%D9%82%D8%A7%D9%86%D9%88%D9%86_%D8%A 7%D9%84%D8%A3%D8%B1%D8%A7%D8%B6%D9%8A_%D8%A7%D9%84%D8% B9%D8%AB%D9%85%D8%A7%D9%86%D9%8A%D8%A9_%D8%B9%D8%A7%D9 %85 1858
- 21. م 1858م. 2025, Bel3arabi.me, accessed August 10, 2025, https://www.bel3arabi.me/%D9%82%D8%A7%D9%86%D9%88%D9%86-%D8%A7 %D9%84%D8%B1%D8%A7%D8%B6%D9%8A-%D8%A7%D9%84%D8%B 9%D8%AB%D9%85%D8%A7%D9%86%D9%8A/
- 22. الإصلاح الزراعي في سوريانمط خراجي إقطاعي بلال سلامة Al-Raafed Syria, accessed August الإصلاح الزراعي في سوريانمط خراجي إقطاعي بلال سلامة .20 أAl-Raafed Syria, accessed August 10, 2025, https://www.alraafed.com/2018/01/17/%D9%A2-34/
- 23. عفرين... خمس سنوات من التنمية الاقتصادية توثيق الانتهاكات .23. معرين... معرين... معرين... معرين... معرين... معرين... معرين... معرين... https://vdc-nsy.com/archives/12245
- 24. A Tale of Afrin Youth4Nature, accessed August 10, 2025, https://www.youth4nature.org/stories/tale-afrin
- 26. Afrin Vikipedi, accessed August 10, 2025, https://tr.wikipedia.org/wiki/Afrin
- 27. How occupied Afrin's prime olive oil reaches the world market and who benefits, accessed August 10, 2025, https://medyanews.net/how-occupied-afrins-prime-olive-oil-reaches-the-world-market-and-who-benefits/
- 28. An Olive's Odyssey CSIS, accessed August 10, 2025, https://www.csis.org/analysis/olives-odyssey
- 29. palquest | olive oil production in the late ottoman rule interactive encyclopedia of the palestine question, accessed August 10, 2025, https://www.palquest.org/en/highlight/36858/olive-oil-production-late-ottoman-rule
- 31. Afrin Region Wikipedia, accessed August 10, 2025, https://en.wikipedia.org/wiki/Afrin Region
- 32. Syria French Mandate, Middle East, Conflict Britannica, accessed August 10, 2025, https://www.britannica.com/place/Syria/The-French-mandate
- 33. SOCIAL AND POLITICAL TRANSFORMATIONS Brill, accessed August 10, 2025, https://brill.com/downloadpdf/book/edcoll/9789004188471/Bei.9789004185456.i-

618 015.pdf

- 34. Mandate for Syria and the Lebanon Wikipedia, accessed August 10, 2025, https://en.wikipedia.org/wiki/Mandate for Syria and the Lebanon
- 36. The Syrian revolt and the politics of bread Longreads, accessed August 10, 2025, https://longreads.tni.org/the-syrian-revolt-and-the-politics-of-bread
- 38. القانون 161 لعام 1958 قانون الإصلاح الزراعي مجلس الشعب السوري. 38. مجلس الشعب السوري. 38. http://www.parliament.gov.sy/arabic/index.php?node=201&nid=10641&ref=tree&
- 39. كيف تم استخدام العديد من القوانين السورية لأغراض تمييزية؟ سوريون من أجل الحقيقة والعدالة .accessed August 10, 2025, https://stj-sy.org/ar/%D9%83%D9%8A%D9%81-%D8%AA%D9%85-%D8%A7%D8%A7%D8%B3%D8%AA%D8%AE%D8%AF%D8%A7%D9%85-%D8%A7%D9%84%D8%B9% D8%AF%D9%8A%D8%AF-%D9%85%D9%86-%D8%A7%D9%84%D9%82%D9%88 8%D8%A7%D9%86%D9%8A%D9%86-%D8%A7%D9%84%D8%B3%D9%88/
- 40. 1] Longreads, accessed August 10, 2025, https://longreads.tni.org/arab-uprisings-ar/07-ar
- 41. Food Insecurity in War-Torn Syria: From Decades of Self-Sufficiency to Food Dependence, accessed August 10, 2025,
 https://carnegieendowment.org/research/2015/06/food-insecurity-in-war-torn-syria-from-decades-of-self-sufficiency-to-food-dependence?lang=en
- 42. A Report on the Effects of Drought on the Syrian Peninsula -Heinrich-Böll-Stiftung | Beirut, accessed August 10, 2025, https://lb.boell.org/sites/default/files/uploads/2010/12/drought_in_syria_en.pdf
- 43. الدعم الزراعي للمزارعين في شمال محافظة حلب صندوق الائتَمان لإعادة إعمار سوريا . 43. (2025, 10, 2025, https://www.srtfund.org/ar/projects/317-%D8%A7%D9%84%D8%AF%D8%B9%D9%85-%D8%A7%D9%84%D8%B2%D8%B1%D8%A7%D8%B9%D9%8A-%D9%84%D9%85%D8%B2%D8%A7%D8%B1%D8%B9%D9%8A-%D9%86-%D9%81%D8%B9%D9%8A-%D8%B4%D9%85%D8%A7%D9%84-%D9%85%D8%AD%D8%A7%D9%84%D8%AB%D8%B9%D9%8A-%D8%B1%D8%B9%D9%85%D8%AD%D9%85%D8%AD%D9%84%D8%AD%D8%AD%D9%84%D8%AB
- 44. Country Policy Brief: Syrian Arab Republic FAO Knowledge Repository, accessed August 10, 2025, https://openknowledge.fao.org/server/api/core/bitstreams/1a37100b-f109-4e75-9 6ba-8007ae84eeac/content
- 45. وتعديلاته .45 و 161 العام 1958 و 1958 syria-law.com, accessed August 10, 2025, <a href="https://syria-law.com/lawss/%D9%82%D8%A7%D9%86%D9%88%D9%86-%D8%A7%D8%A7%D9%84%D8%A7%D8%A7%D9%84%D8%A7%D8%A7%D9%84%D8%A7%D8%A7%D9%84%D8%A7%D8%A7%D9%84%D8%A7%D9%A7%D

- <u>%B2%D8%B1%D8%A7%D8%B9%D9%8A-%D8%B1%D9%82%D9%85-161-%D9%8</u> <u>4%D8%B9%D8%A7%D9%85-1958-%D9%88%D8%AA%D8%B9%D8%AF%D9%8A</u>/
- 46. Cooperatives for African development: lessons from experience, accessed August 10, 2025, https://social.un.org/coopsyear/documents/WanyamaCOOPERATIVESFORAFRICANDEVELOPMENT.pdf
- 47. Role of agricultural cooperatives in rural development in the era of liberalization in the North West and South West regions of Cameroon ResearchGate, accessed August 10, 2025,

 https://www.researchgate.net/publication/349672689 Role of agricultural cooperatives in rural development in the era of liberalization in the North West and South West regions of Cameroon
- 48. Geostrategic stakes and the impact of the conflict in the Orontes River basin | Cairn.info, accessed August 10, 2025, https://shs.cairn.info/revue-confluences-mediterranee-2014-2-page-173?lang=fr
- 49. أرض الزيتون المسروقة: كيف تحولت معاناة المزار عين في عفرين إلى واقع مرير . 49 | Kurd Online | مدودssed August 10, 2025,

 https://kurd-online.com/%D8%A3%D8%B1%D8%B6-%D8%A7%D9%84%D8%B2%

 D9%8A%D8%AA%D9%88%D9%86-%D8%A7%D9%84%D9%85%D8%B3%D8%B1

 %D9%88%D9%82%D8%A9-%D9%83%D9%8A%D9%81-%D8%AA%D8%AD%D9%88%D9%84%D8%AA-%D9%85%D8%B9%D8%A7%D9%86%D8%A7%D8%A9/
- 50. The Stolen Olive Land: How Afrin Farmers' Struggles Turned into a Bitter Reality, accessed August 10, 2025, https://r-d-i.org/en/?p=2986
- 51. Olive picking: A source of livelihood in Afrin Enab Baladi, accessed August 10, 2025, https://english.enabbaladi.net/archives/2024/10/olive-picking-a-source-of-livelihood-in-afrin/
- 52. الزيتون المتعب, accessed August 10, 2025, https://aljumhuriya.net/ar/2021/11/15/%D8%A7%D9%84%D8%B2%D9%8A%D8%A A%D9%88%D9%86-%D8%A7%D9%84%D9%85%D8%AA%D8%B9%D8%A8/
- 53. ماذا تعرف عن ثروات عِفرين الطبيعية وصناعاتها الضخمة؟ نون بوست .53 ماذا تعرف عن ثروات عِفرين الطبيعية وصناعاتها الضخمة؟ نون بوست .53 https://www.noonpost.com/22671/
- 54. عفرين والزيتون بودكاست أهالي الجزيرة YouTube, accessed August 10, 2025, https://www.youtube.com/watch?v=SOWNfT8qhKM
- 55. Afrin: A Case Study in Turkish de-Kurdification Washington Kurdish Institute, accessed August 10, 2025, https://dckurd.org/2023/03/30/turkish-de-kurdification-afrin/
- 56. Turkey's water policies deplete Maydanki Lake in Syria's Afrin, accessed August 10, 2025, https://npasyria.com/en/123694/