

Zgharta Food Strategy

A Territorial Approach Towards Food Sovereignty

by **Zgharta Food Sovereignty Initiative** with the support of
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About JIBAL

JIBAL is a not-for-profit association founded in Beirut in 2017, with final governmental approval in January 2019. It promotes and advances social and environmental justice – or the fair and equitable distribution of environmental and social benefits and burdens – in Lebanon through collective organisation, accessible and open knowledge, and regenerative principles.

JIBAL's work intertwines socio-cultural and ecological perspectives to promote a holistic approach to societal development. It promotes sustainability in all its aspects – in the built and natural environments, in human societies, and in economic and social policies – by developing and implementing programs on environmental justice, food sovereignty, and social justice

Abstract

Zgharta Food Strategy: A Territorial Approach Towards Food Sovereignty

Zgharta Food Strategy: A Territorial Approach Towards Food Sovereignty outlines the development and implementation of a food strategy in the Zgharta region of Lebanon. The report emphasizes the urgent need for a sustainable and resilient food system due to hyperinflation, increasing food insecurity, and heavy reliance on imports. The territorial food strategy aims to unite various stakeholders, including producers, policymakers, NGOs, and local communities, to create environmentally and economically sustainable food systems that prioritize food sovereignty, promote agroecology, and ensure access to affordable and nutritious food for all. The report highlights the methodology, goals, objectives, and action points of the strategy, with the intention of replicating the pilot project in other areas of Lebanon.

This strategy's first version was written early 2023. The final version was written in summer 2023. All the infographics are based on a study that Jibal did in 2020-2021 on the Zgharta region food systems. The study was an internal study not made for publication, it is however available upon request.

The views expressed in this report are those of the authors and do not necessarily reflect the views of Friedrich Ebert Stiftung.

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Introduction

During the past years, hyperinflation led to a massive increase in food price; The (national) average cost of the food Survival Minimum Expenditure Basket (SMEB) registered an increase of 168 percent between October 2019 and August 2020¹, and an increase of 30% during the first six months of the year 2022². Analysts have been warning for years that Lebanon's heavy reliance on imports is dangerous for its food security, a situation that has been thrown into sharp relief since last September, as the value of the Lebanese Pound (LBP) fell from its official rate of 1,500 LBP to the US dollar to more than 140,000 LBP in March 2023.

The agriculture sector in the country is mostly conventional, and therefore relies heavily on the use of seeds, pesticides and fertilizers purchased from abroad. Hence, this inflation affected their cost which increased at least 10 times. Yet, other costs in LBP have also been affected, the cost of laborers alone increased by 50 to 60%, getting animal manure became for money (since it became demanded), and the seeds and seedlings cost increased as a result of devaluation of the Lebanese Lira.

As this crisis is highly impacting the food sector in the country, the Jibal team initiated the first pilot project of a territorial food strategy in the Zgharta region, with the aim of eventually replicating this type of intervention in other areas of Lebanon. The writing and implementation of the strategy itself is the result of a long process of consultations, explained in further details in the methodology section.

To begin with, an assessment of the state of the current food system in the caza was done in 2021, identifying amongst others the existing food actors and networks in the region³. After the assessment, a series of consultations and meetings took place in the caza the following year to gather feedback and mobilize interested parties. This process contributed greatly to the writing of the final strategy. The meetings included NGOs, municipality members, inhabitants of the caza and different professionals working in the food sector.

These consultations led to the creation of an food sovereignty committee with various stakeholders such as the municipality of Zgharta, the union of municipalities, two important NGOs working in the food sector in the region, and others, who will be implementing the territorial food strategy, as well as a steering committee which will include other important stakeholders such as the ministry of agriculture amongst others. The aim is to start implementing the food strategy in 2023 and to replicate this pilot project in other areas of Lebanon.

1. Lebanon: Vam Update on Food Price Trends - August 2020 - Lebanon (2020) ReliefWeb. Available at: <https://reliefweb.int/report/lebanon/lebanon-vam-update-food-price-trends-august-2020> (Accessed: 15 November 2023).
 2. WFP, Country brief, Lebanon, August 2022
 3. Towards More Localized Food Systems in Lebanon: Zgharta Pilot Groundwork - Jibal - 2021 - accessible upon request to contact@jibal.org

1.

Building a Territorial Food Strategy (TFS)

Photo: Fouad el Hajj

a. What is a food strategy?

Territorial Food Strategies (TFS) aim to mobilize and unite different players of a given territory in order to render the food system of that territory more environmentally and economically sustainable, more resilient to external turbulences and more socially just⁴. The strategy can regroup all the actors in the food chain: from producers to distributors, policy makers to private companies, cooperatives to local NGOs... The common goal is to provide access to affordable quality food to everyone, while reducing the environmental damage of food production, distribution, and waste, as well as ensuring a fair circular economy.



4. R.K. (2019) Territorial Food Strategies, Territorial Food Strategies : Dictionary of Agroecologie.
Available at: <https://dicoagroecologie.fr/en/dictionnaire/territorial-food-strategies-the/#:~:text=The%20goal%20of%20tfs%20is,social%20economy%2C%20scientists%2C%20etc.> (Accessed: 15 November 2023).

b. Why is it important?

It has become increasingly evident that current food systems are failing to provide good quality, nutritious and affordable diets that are accessible to everyone⁵. The poor nutritional quality and low prices of food have created an inefficient system that generates large quantities of wasted food. This system has driven the expansion of agricultural land and intensive farming which requires the production of large quantities of food at lower prices to feed the world population and boost economic growth⁶. However, the environmental cost of this chemically intensive, unsustainable agriculture and food production has not been taken into account in the cost of food. This system not only produces highly contaminated, nutritionally-poor crops that contribute to food insecurity and malnutrition, but it also has tremendous effects on the environment such as the depletion and erosion of soil, loss of biodiversity, pollution of water, and emission of greenhouse gases, all of which contributing to the acceleration of climate change. The loss of soil fertility is partly due to the use of chemical inputs in conventional agriculture, but it is also due to the monocultural landscapes which require the intensification of these inputs and leave little opportunity for life to thrive. It is not conventional agriculture alone that drives biodiversity degradation, but the combination of several factors related to each element of the food system value chain: from the way we produce our food to the types of crops we select to grow, from how and where we transform and distribute our food to how we prioritize economic growth over the sustainable use of resources and meeting food security standards. **Therefore it is essential to build a territorial food strategy that aims to provide quality diets in an economically fair and environmentally sustainable way to build resilience locally and achieve food security and sovereignty.**

The limitations of the current agro-industrial food system



Food insecurity:
Poor nutritional quality and diversit - High contamination of foods - High food waste - Unequal access to quality food - Increased health issues.



Economic inequality:
Power dynamics in the food system value chain leading to unequal shares for farmers - Monopoly of the wholesale market.



Environmental depletion:
Soil pollution and erosion - Loss of biodiversity - Water pollution - Emission of greenhouse gases - Acceleration of climate change.

5. Territorial Food Systems for Sustainable Development, Issue Brief for UN Food Systems Summit, 2021
6. Benton, T.G. (2021) Food system impacts research paper on Biodiversity Loss - Chatham House, Food system impacts on biodiversity loss Three levers for food system transformation in support of nature. Available at: https://www.chathamhouse.org/sites/default/files/2021-02/2021-02-03-food-system-biodiversity-loss-benton-et-al_0.pdf (Accessed: 15 November 2023).

The increase in food insecurity, soil degradation and heavy reliance on imports for agricultural inputs and basic food items are indicators of an unsustainable and unresilient food system that requires urgent alternatives.

Therefore, a territorial food strategy is essential for the following reasons:



To prioritize objectives and actions



To foster collaborations and complement each other as actors



To make the collaborations transparent so that people know where public funds are being invested



c.

What does it mean to increase food sovereignty?

According to the global Peasant movement La Via Campesina, food sovereignty is “the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems”⁷. Unlike food security, which focuses on ensuring food access for all, food sovereignty involves direct democratic participation from food producers, consumers, and everyone in between to determine the extent to which they want to be self-reliant, define their agricultural practices, and regulate domestic food production and trade for economic and environmental sustainability⁸. **It places people at the center of the food system**, instead of profit-driven international corporations. **It recognizes that to achieve food sovereignty, sustainability is essential, and hence, the use of agroecology is promoted as a tool.**



Soil Association, 2023, Link: consulted in November 2023
<https://www.soilassociation.org/causes-campaigns/a-ten-year-transition-to-agroecology/>

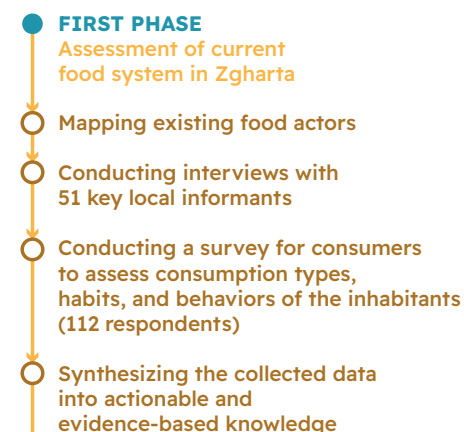
7. Pierrick (2023) Food sovereignty: Explained : Via Campesina, La Via Campesina - EN. Available at: <https://viacampesina.org/en/food-sovereignty/> (Accessed: 15 November 2023).
8. Patel, R. (2019) Full article: Food Sovereignty - Taylor & Francis Online, The Journal of Peasant Studies: Food sovereignty. Available at: <https://www.tandfonline.com/doi/full/10.1080/03066150903143079> (Accessed: 15 November 2023).

An aerial photograph of a residential neighborhood. The area is characterized by a mix of greenery and built-up structures. Numerous houses with red-tiled roofs are scattered throughout, interspersed with dense clusters of trees. A prominent feature on the right side is a large, rectangular swimming pool with a blue roof, surrounded by a paved area and some outdoor furniture. A road or path runs along the bottom right, with several cars parked or driving. The overall scene depicts a suburban or semi-urban environment.

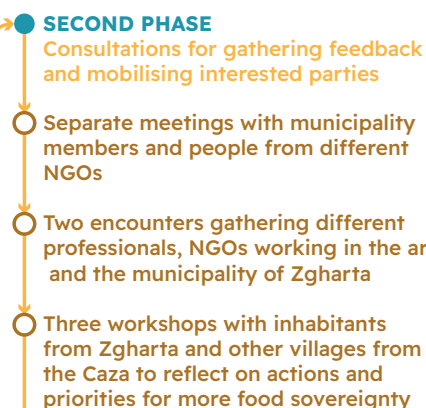
2.

Methodology

2021



2022



2023



A recent study by Jibal titled 'Exploring Alternative Food Initiatives in Lebanon' recommends adopting a territorial approach to address some of the challenges related to food sovereignty. This means promoting cooperative, inclusive, and resilient food systems at the local level. Building on the results of this study and with the ongoing support of FES, the team worked on designing and implementing the first pilot project in the Zgharta region, with the aim of eventually replicating this type of intervention in other areas of Lebanon.

The first phase of the work focused on assessing and understanding the current state of the food system in the caza, with the following objectives:

- Identifying benchmark information on existing food actors, social and economic networks, and governance structures and strategies.
- Synthesizing the collected data into actionable and evidence-based knowledge to be used in the next phase of the project.

This first phase included mapping food actors, conducting interviews with 51 key local informants, holding one focus group discussion with 15 actors, and conducting a survey for consumers to assess consumption types, habits, and behaviors of the inhabitants (112 respondents).

After the assessment, a series of consultations took place in the Caza to gather feedback and mobilize interested parties. These included:

- Separate meetings with municipality members and people from different NGOs before the first and second encounters to explain the approach and objectives.
- Two encounters gathering different professionals, NGOs working in the area, and the municipality of Zgharta. The first encounter aimed at presenting the assessment results and the idea of the strategy, gathering feedback and inputs, while the second aimed to present the broad content of the strategy and mobilize interested parties to coordinate.
- Three workshops with inhabitants from Zgharta and other villages from the Caza to reflect on actions and priorities for more food sovereignty.

These meetings and consultations contributed to the writing of the final strategy.

a.

Governance

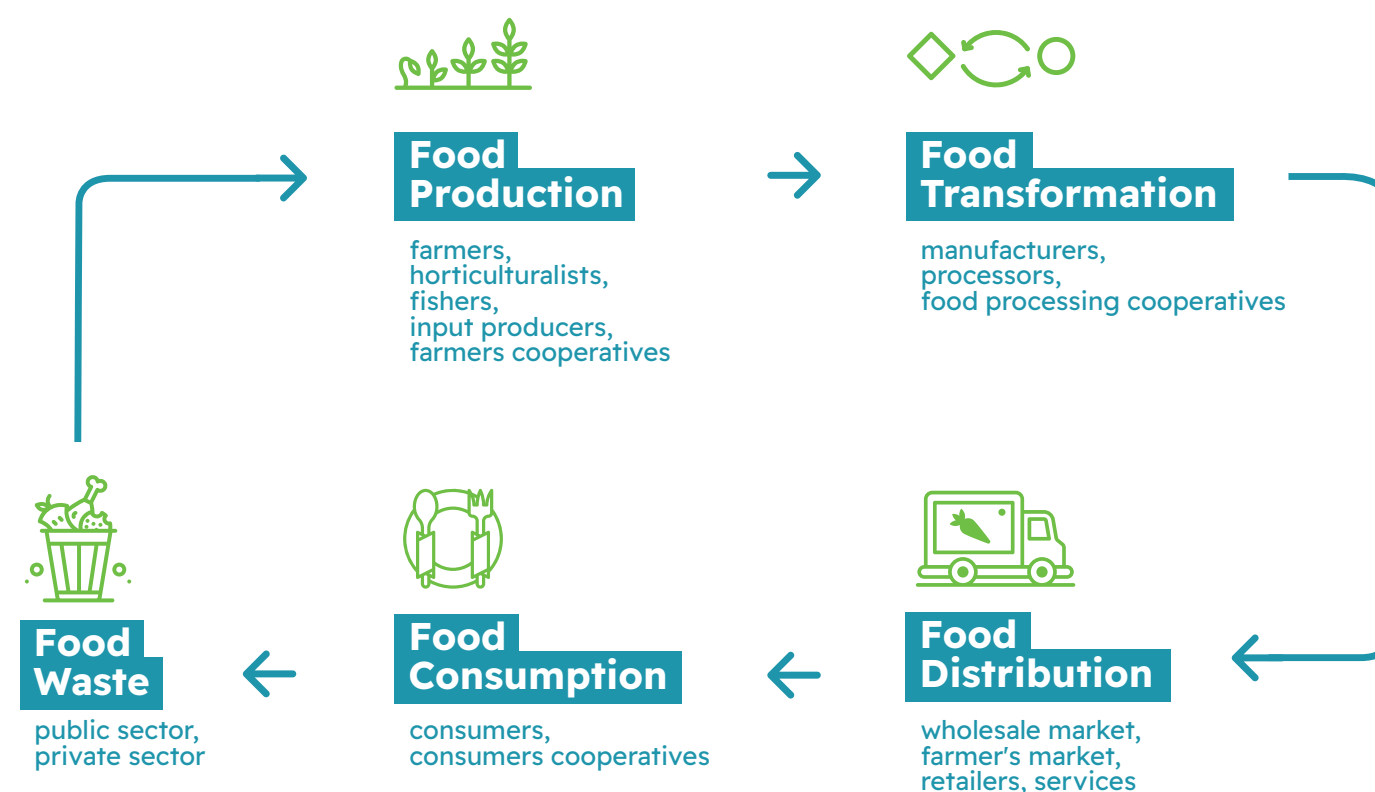
A food strategy should ideally be led by public institutions, such as municipalities and the union of municipalities as elected representatives of the area's inhabitants. This should be done in collaboration with active local civil society, the chamber of agriculture where it exists, professionals from the food sector, other public institutions, and inhabitants in general. A national policy can regulate this work, providing a specific framework for food strategies (objectives, approach, etc.) in Lebanon and ensuring a global view of the food situation in the country.

In the case of this pilot project, Jibal aimed to build a network of interested institutions and professionals in the sector, in dialogue with the local inhabitants. We hope that this approach, if not the strategy itself, will be adopted by local institutions to enhance a food sovereign dynamic locally.

FOOD SYSTEM COMPONENTS

Food governance and policies

researchers, policymakers, governmental bodies, municipalities, ministries, civil society, NGOs

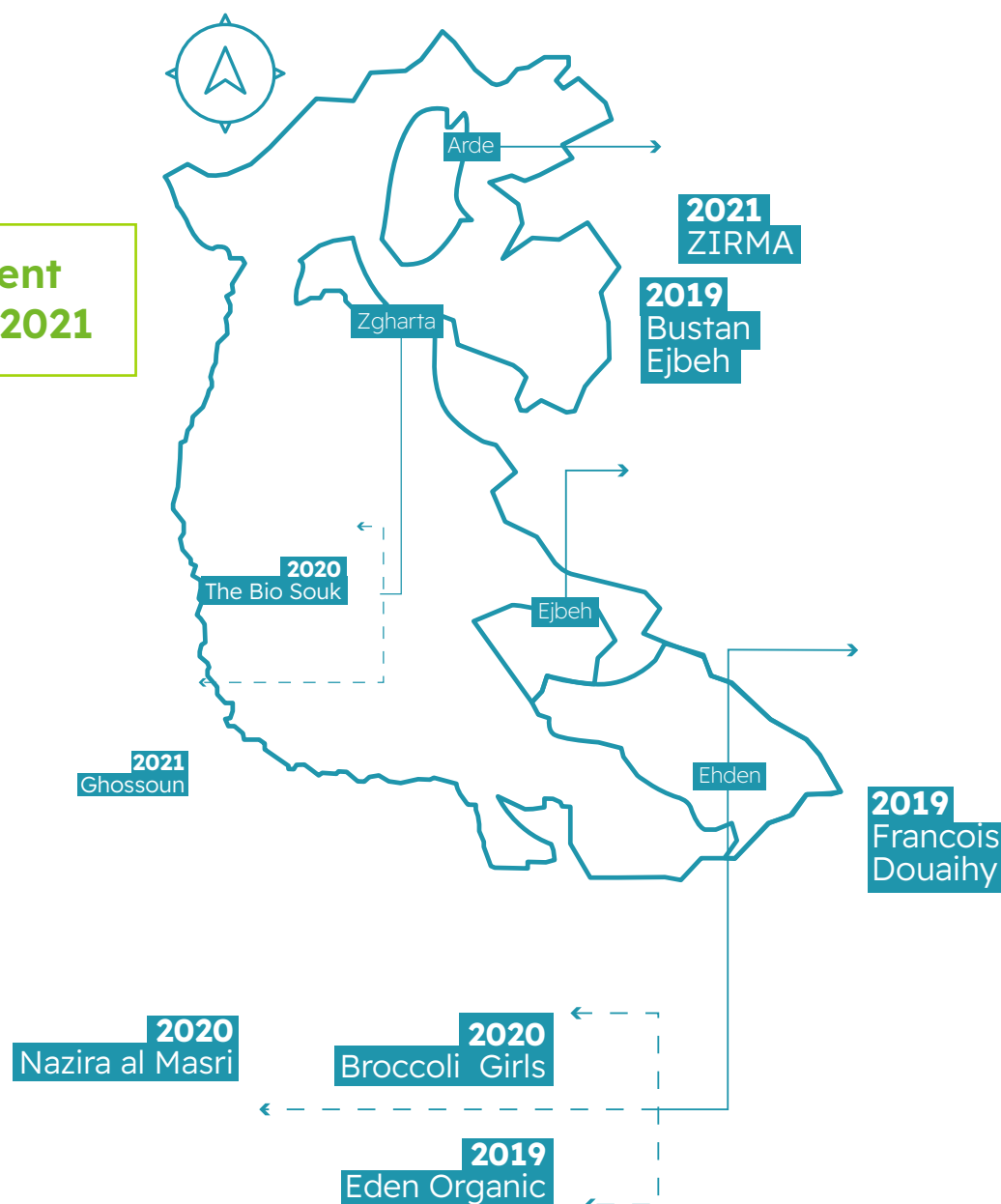


b.

The choice of Zgharta Caza area for the pilot project

When deciding to work on a territorial food strategy, one of the first questions that arose was the choice of the geographical area. One of the criteria was the importance of working in an area where the team had some existing knowledge and connections. Zgharta and the broader Northern Caza made sense since several team members come from different northern areas such as Zgharta/Ehden, Tripoli, Danniye, Bcharre, and Batroun. Moreover, a year ago, Jibal supported the start of an agroecology and education project at the Ghossoun permaculture farm located in Zgharta suburbs between Zgharta and Tripoli. Therefore the team decided that Zgharta Casa would be the starting point.

Assessment
made in 2021



However, the question of the scale emerged as the second issue: should the area include only the town of Zgharta or expand to the city of Tripoli or even the whole Northern Muhafaza, which includes Akkar and Danniye, some of the main agricultural areas of the country?

After several internal reflections and researching food strategies around the world, the team decided to restrict the work to Zgharta Caza for the following reasons:

- The importance of choosing an area that makes sense according to its own inhabitants, where people can take ownership when building a strategy. This means that the area should build on existing links and ties. Zgharta and Ehden, both located in the Caza, are the main urban agglomerations of the area. Both of them have the same municipality and many common inhabitants.
- The already existing delimitations of the caza as an administrative area.
- The limitation of resources for this pilot work, not allowing us to extend the area too much (the muhafaza would have been too big, for example).
- The Caza includes mountain and coastal areas, making it already quite diverse in terms of agriculture production, at the same time it includes towns and rural areas where agriculture could grow.
- Including Tripoli would have required the automatic inclusion of a wider area around the city because of the centrality of the city and its density. This would have been more challenging considering the above criteria.

However, it is important to note that Jibal built its approach based on:

- The principles of food sovereignty, which emphasize the importance of agency and control of the local inhabitants and food producers on the food chain.
- The broader context of climate change and energy limitation that requires reducing carbon emissions and transportation as much as possible;
- The importance of agroecology as both an approach and technique.

The strategy aims to diversify crops, use environmentally friendly techniques, localize the food chain as much as possible, protect agricultural lands, and use the land potential while ensuring the presence of wild and biodiverse areas. Jibal plans to build collectively with the local community, and link actors for more collaborations, including the support for cooperatives. However, the aim is not to push for a closed cycle, independent from the surroundings. While it is important to localize the food chain, this is not limited to an administrative border. In some cases, villages might be closer to other towns physically and culturally than they are to others within the Caza. Also, some areas of Lebanon have characteristics that others don't, and therefore the exchanges between them would remain.



3.

Where We Are Today?

Jibal conducted a study to evaluate the current food system in Zgharta Casa, with all its components, which resulted in an extensive report that can be accessed upon request along with supporting infographics in English and Arabic. The main findings of this assessment, along with some updates from ongoing work and focus groups, are summarized next:

Photo: Fouad el Hajj

a.

Background General in Lebanon

From field to fork, Lebanon’s food system heavily relies on imports with 65 to 80 percent of its national food supply comes from abroad. The imported food items filling supermarket shelves are not limited to luxury goods; they include many of the basic food items such as sesame seeds and fried fish from Sudan, fava beans from Britain or Australia, chickpeas from Mexico, and the list goes on. The local production of wheat in Lebanon can only supply 25% of the demand, and the dairy only 30%⁹. The agriculture sector in the country mainly practices conventional methods, and therefore relies heavily on the use of imposed synthetic pesticides and fertilizers which are becoming increasingly difficult to obtain due to the ongoing economic crisis and the shortage of dollars in the country. This situation has further exacerbated the existing poverty conditions among agricultural workers. In the North governorate, where the majority of the population relies on this sector, one in every four farmers lives below the poverty line¹⁰. Moreover, seasonal workers are often overworked and underpaid, spending long hours in the field.

ORIGINS OF AGRICULTURAL INPUTS

>90% imported chemical pesticides, fertilizers and seeds



ORIGIN OF THE VARIOUS CATEGORIES OF FOOD CONSUMED IN THE ZGHARTA CAZA



100% self sufficiency

Apple	230
Grapes	146
Banana	145
Oranges	138
Grapefruit	131
Peach	123
Cherries	116
Tangerines	110
Lettuce	110
Potato	109
Apricot	107
Lemons	103
Almond	101

90% self-sufficiency

Olives	100
Tomato	100
Cucumber	98
Melon	98
Watermelon	95
Zucchini	92

Cereals

Wheat	17
Corn	1

Medium and low self sufficiency

Peas (dry)	90
Beans (green)	89
Onion (dry)	89
Pepper (green)	80
Strawberry	73
Peas (green)	70
Walnuts (with shell)	49
Beans (dry)	48
Garlic	25
Chickpeas	19
Lentil	7
Broad Beans	3

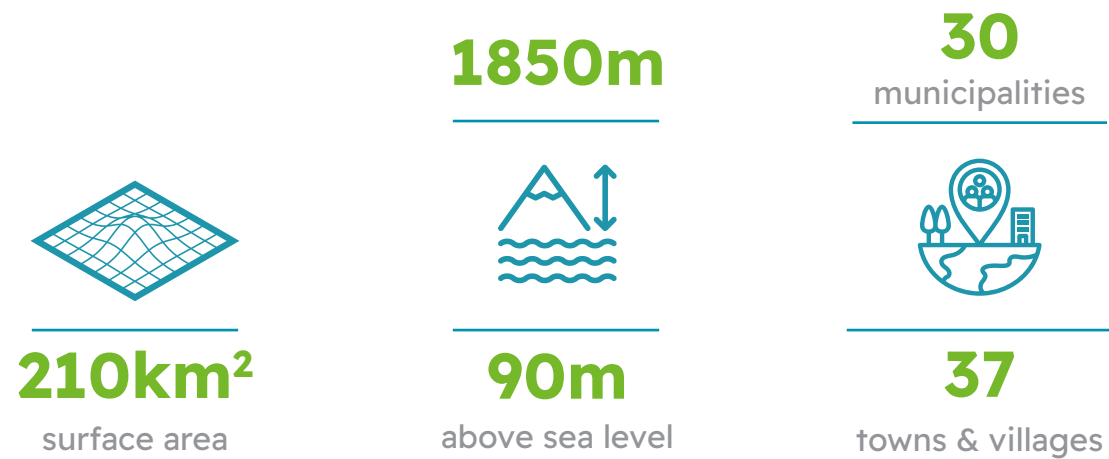
Source: FAO, Addressing Food Security Challenges in Lebanon: A Water-Energy-Food-Health Nexus Approach

9. الشوفي, ف. (2020). لبنان والسيادة الغذائية: القمح والفاصولياء أبقى من اللحم والدولار. الأخبار.
10. Jeanmougin, C. (2017). You reap what they sow, Understanding the issues linked to the agricultural sector in Lebanon. Heinrich Böll Foundation.

b.

Zgharta Casa: Situation, Data

General data about Zgharta



88,000¹¹
residents



15,000
non-Lebanese

75%



of the
inhabitants
make their
own mouné.

The Zgharta caza holds a majority of Christian Maronites, some amongst them that practice the Lent, during which they don't consume meat for a period of 40 days. There is hence a rich plant-based culinary tradition in the region.

11. Central Administration of Statistics (CAS), 2018-2019

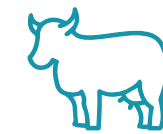
12. Douaihy (Chawki), Organisation politique à Zghorta (Liban-Nord), Contribution à l'étude de la 'ayli, thèse pour le doctorat de 3e cycle, Paris, Université René-Descartes, 1979, cited in COMMUNAUTÉS VILLAGEOISES ET MIGRATIONS DE MAIN-D'ŒUVRE AU MOYEN-ORIENT | Élisabeth Longuenesse, Gilbert Beaugé, Michel Nancy, Presses de l'IFPO, 1st publication, 1986



Economy:

The main economic activities of the caza are:

- Agriculture (olives and fruits, more details in the report)
- Agribusiness (dairy, olive oil production, honey) (more details in the report)
- Services: tourism, entertainment
- Local crafts, professions such as construction, blacksmithing, cane baskets manufacturing, sewing, and carpentry
- Healthcare and health-related services



Political situation:

30
years

political
dominance

The last 30 years have been largely dominated by the Frangieh family and its current leader, Sleiman Frangieh, head of the Marada party. A familial community system (very similar to the Lebanese community¹² system plays a big role in local power dynamics, influencing decision making and collaboration beyond family belongings.

After failed trials in the 60's and 70's, a timid but growing grassroots and local opposition started re-emerging in 2015 after the Lebanese garbage revolution (the "you stink" movement). This opposition intensified following the October 19 revolution denouncing the archaic, corrupted and completely locked political system, the movement is known as "Zgharta Zewye Tantafer" (the Zgharta Caza Uprising) recently renamed "Osos" (grounds)¹³.

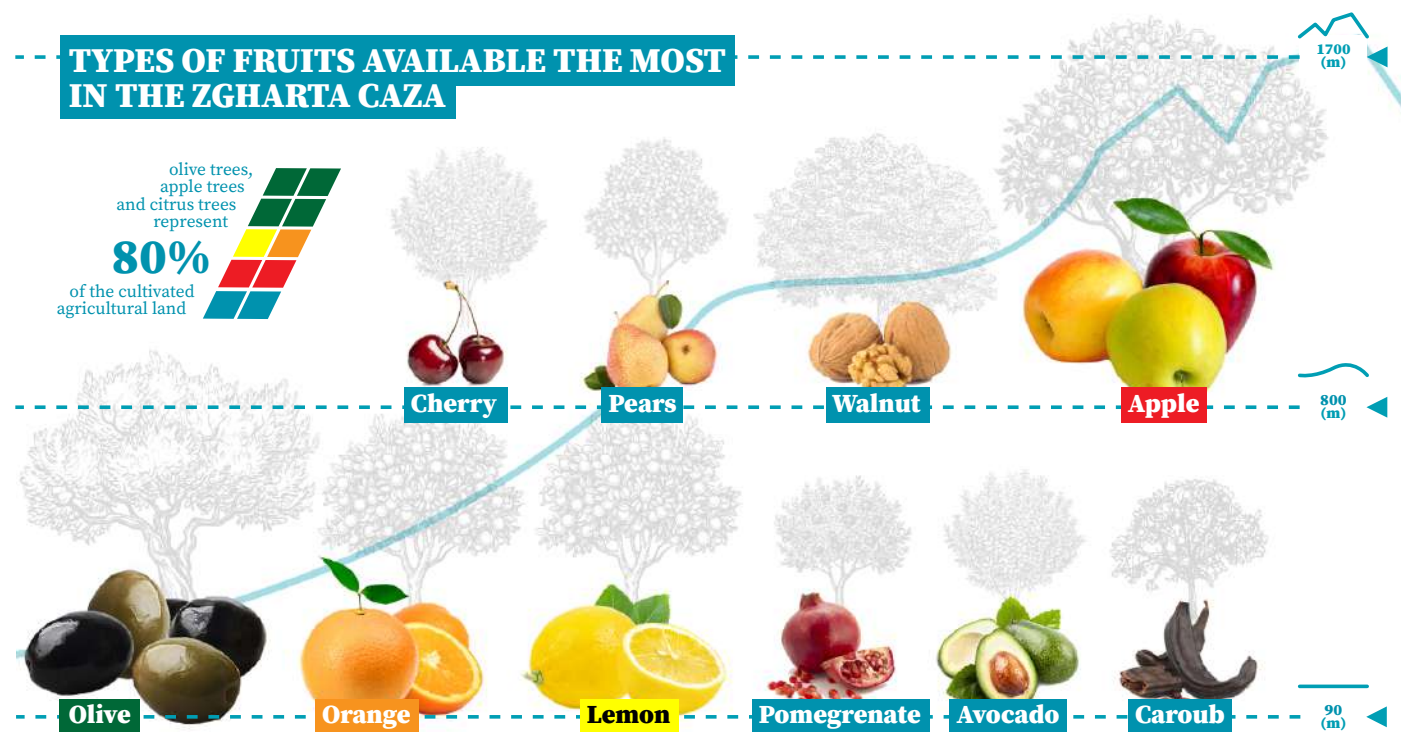
13. Interviews conducted with local activists Ounsi Daif and Marina Araigy

Food System

1) Food Production

- **Land use:**
25 to 40% of the total surface of the caza is used for agriculture¹⁴. The average size of a farm is situated around 27 dunums (2.7 hectares).
- **In terms of crops:**
80 % of the planted surface area is mostly permanent crops, olive and citrus trees being more prominent.
- Grains are planted in very limited quantities due to lack of large surfaces, organization, and planning, as well as absence of local political will to push for such initiatives despite the willingness of some to invest and develop the wheat production in the region¹⁵.
- **Vegetable production**
is limited, and not meeting local demand. Vegetable retailers in Zgharta specifically mentioned that the quantities of vegetables planted in the Zgharta caza were insufficient to meet the local demand. This is one of the reasons that pushes the retailers to go to the wholesale market of Tripoli instead of buying directly from farmers (local produce coming from Denniye/Akkar/Bekaa, as well as imported from Syria, Jordan, Egypt). However, a survey of 120 people¹⁶ in the casa found that 49% of respondents planted their own vegetables. The vegetables planted are also the ones most commonly consumed: tomatoes, lettuce, beans, potatoes, zucchini, cucumber, lemon, and garlic.

TYPES OF FRUITS AVAILABLE THE MOST IN THE ZGHARTA CAZA



14. According to the latest census of the Ministry of Agriculture, MoA census of 2010

15. Ibit

16. Cite the Zgharta groundwork report

Agricultural practices:

Most of the farmers interviewed practice monoculture and conventional agriculture, using pesticides, herbicides and fertilizers¹⁷. However, most are interested in transitioning to sustainable agriculture for financial reasons. In terms of local agroecology initiatives, 5 new initiatives have been established in the past 3 years (Ghossoun, Broccoli girls, zirna, Biosouk Farm, and Francois Yammine)

Inputs:

There are no compost providers in the area. An NGO recently founded close to Tripoli provides a limited collection of heirloom seeds: Seed in a box.

Livestock:

90% of animal feed is imported.

Labor:

most agricultural workers have low salaries and have no social protection.

ANIMAL FEED COMPOSITION & ORIGIN

the animal feed is composed of barley, corn, rye, soybean, cotton seed, beet pulp, that are 100% imported, and alfafa, wheat, roughage, straw that are partially grown in lebanon.



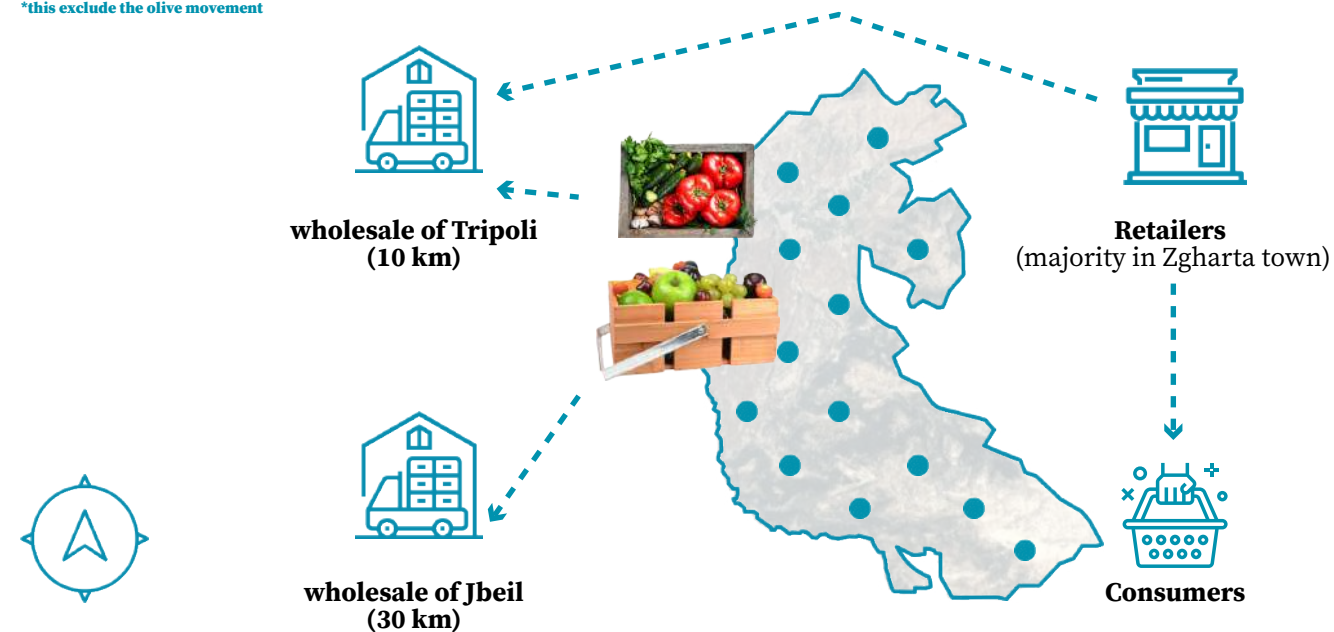
17. Based on interviews held with 17 farmers

2) Food Distribution

- Most vegetables and fruits are sold through the wholesale market.
- Retailers: 90% of their products are bought from the wholesale market of Tripoli
- Restaurants: 55% of their products were sourced from Zgharta area and 45% came from other regions or were imported
- Consumers: more than 90% of consumers buy their products locally, either from Zgharta town (70%) or from surrounding villages.

THE MOVEMENT OF FOOD FROM FARMERS TO CONSUMERS

*this exclude the olive movement



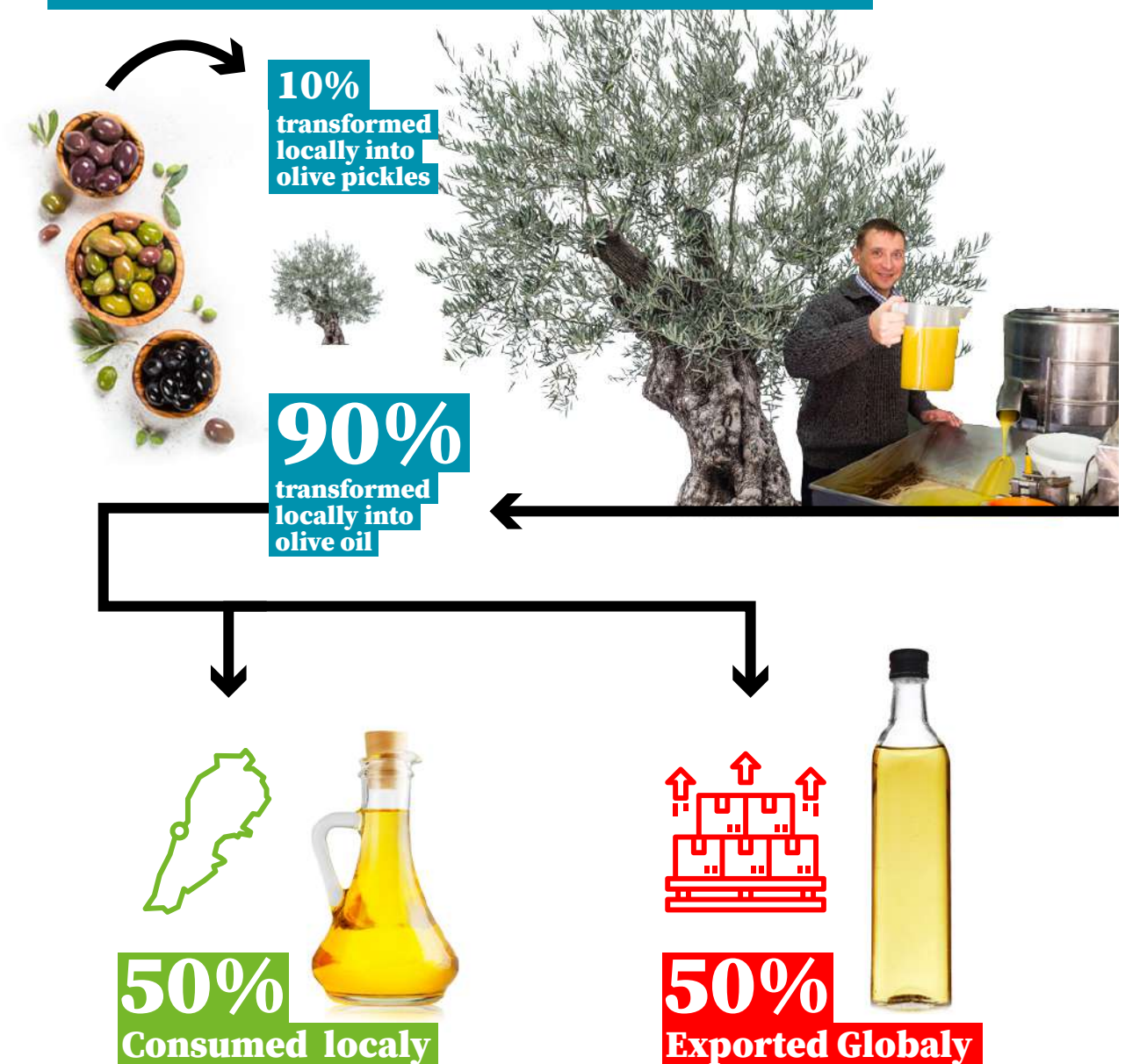
OVERVIEW OF THE MOST DYNAMIC AGROBUSINESSES IN THE ZGHARTA CAZA



3) Food Transformation

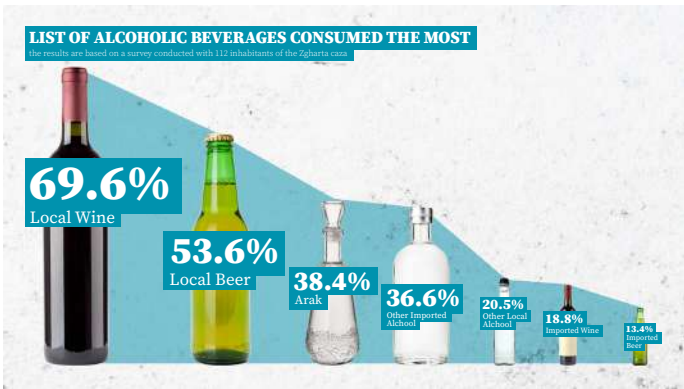
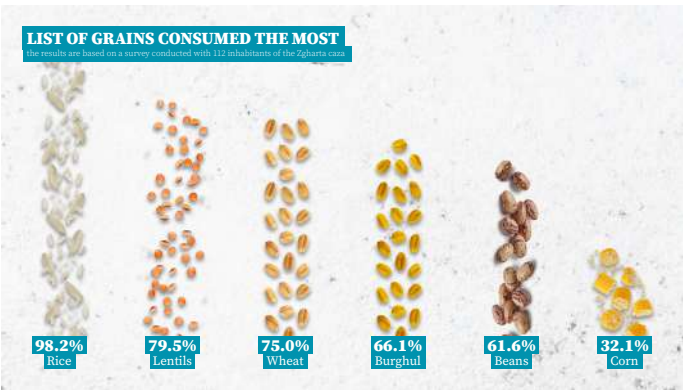
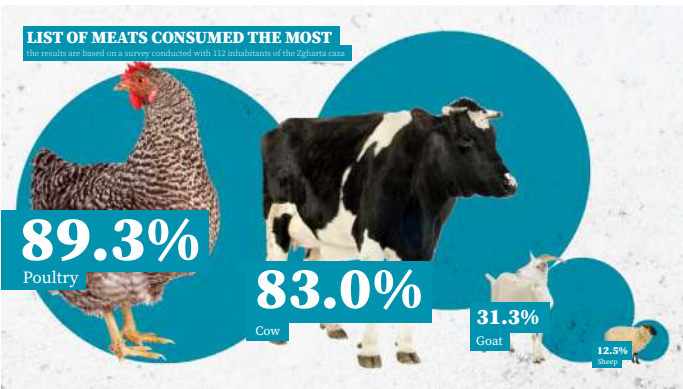
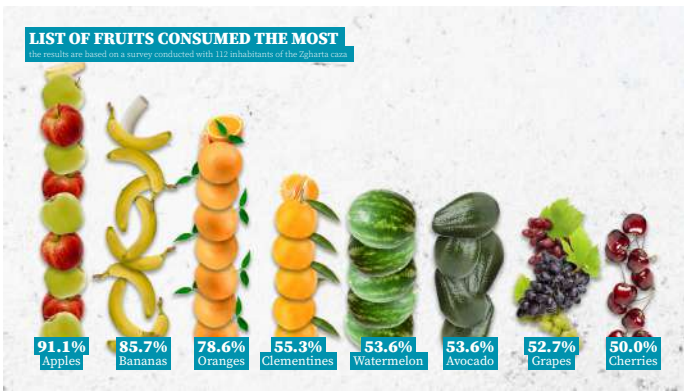
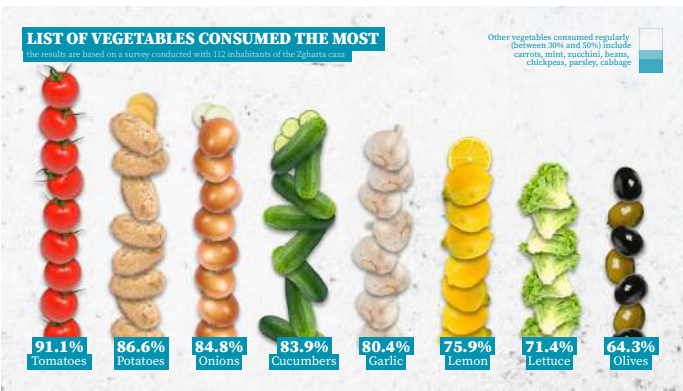
- Lebanon still imports ~82% of its milk
- The caza is self-sustainable when it comes to olive oil and the producers export to foreign countries an average of 20-30% of their oil.
- Honey: Assuming all 3 producers produce a total of 9 tons per year ie 9,000kg of honey, they can cover the yearly needs of ~10,000 consumers
- Mouneh: more than 80% of participants do their own mouné at home. There are also 10 companies in Zgharta making mouneh.

OLIVES & OLIVE OIL PRODUCTION & TRANSFORMATION



4) Food Consumption

- As we can see in the infographics above, most primary vegetables consumed are produced locally, except for a few that are imported from Syria, Jordan and Egypt. However, when it comes to beans, cereals, milk and meat, primary foods in the diet of Zgharta inhabitants, the majority are not produced locally and are imported from different parts of the world (Brazil, Mexico, USA, Ukraine, etc...).



5) Food Waste

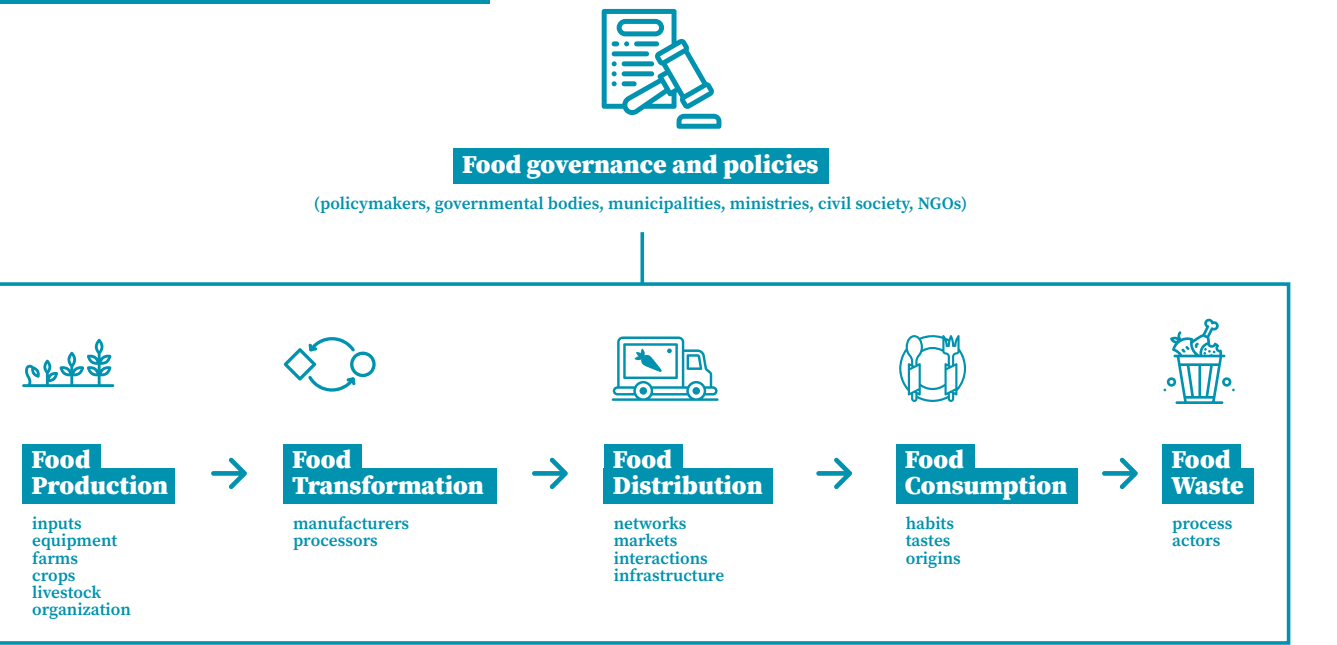
- Regarding waste, there are no facilities in Zgharta for composting organic food waste. It is dumped in a landfill located near the Abu Ali river, mixed with other non-organic waste.



6) Food Governance

- Amongst the various actors involved: there is a lack of common direction or agreed upon roadmap, coordination, centralization of data, and sharing of information and communication among the various stakeholders.

FOOD SYSTEM COMPONENTS



4.

Goals, Objectives and Action Points of the Zgharta Food Strategy

In order to improve the situation, and following the methodology described above, we have identified the following strategic Goals and objectives:

Main Goals



Transition towards sustainable agro-ecological farming practices.



Empower producers and local residents to determine and shape their own food system.



Objectives

Food Production

- 1. Promote agroecology farming practices.
- 2. Promote cooperation and fair working conditions among food producers.
- 3. Ensure crop diversification to satisfy more of the local demand.
- 4. Ensure access to sustainable energy and clean water.

Food Processing

- 5. Support existing and new cooperatives for local food transformation.
- 6. Support food processors to integrate a circular economy.
- 7. Ensure health and quality standards in food processing to provide access to quality food.

Food Distribution

- 8. Support a short circuit, low carbon footprint food system that ensures fresh quality produce for all consumers.
- 9. Ensure a fairer benefits distribution model amongst all actors of the value chain (farmer, wholesaler, retailer).
- 10. Ensure health and quality in the food distribution chain (chaîne du froid, etc)

Food Consumption

- 11. Support a culture around sustainable food practices.
- 12. Reduce food insecurity.

Food Governance

- 13. Improve data collection and sharing
- 14. Establish a committee to develop and Implement a multi-year food strategy for the caza, ensuring monitoring & follow up
- 15. Empower all inhabitants to become actors in their food system and health

Economic Model

- 16. Develop a territorial economic activity linked to sustainable food
- 17. Encourage the local workforce
- 18. Foster collaboration among all players involved in production, processing, distribution, and catering
- 19. Support the establishment and growth of cooperatives (Farmers coops, Food Processing coops...)
- 20. Encourage the adoption of Community Supported Agriculture models among enterprises and consumers

Promote agroecological and climate-resilient farming practices

To establish a more resilient food system capable of withstanding the impacts of climate change and agro-industrial practices (chemical inputs, hybrid seeds...) it is imperative to adopt environmentally sustainable farming practices within a given territory. However, according to the food situation assessment conducted by Jibal in Zgharta, it was revealed that most farmers in the caza rely on conventional agricultural practices, which include excessive use of chemical inputs such as fertilizers, pesticides, herbicides, and fungicides; they also use hybrid seeds that cannot be multiplied and saved, and require seasonal purchase, as well as monoculture systems (planting 1 type of crop) that rely on regular tilling. These practices contribute to soil degradation, and compel the application of even more chemical inputs year after year, perpetuating the farmers' dependence on imported agricultural products.

The susceptibility of the food system to climate change and to external turbulence, is heightened by this reliance on imported inputs as 95% of agricultural inputs in Lebanon are imported¹⁸. It is therefore crucial to shift towards more regenerative and localized farming models to enhance the resilience of our food system, accessibility, and health.

- Experts estimate that Lebanon imports approximately 65 to 80 percent of its food needs.
- Import of agricultural inputs: a total of 95 M USD¹⁹
- Seeds: 31 M USD, including 17 M USD for potato seeds
- Pesticides: 19 M USD
- Fertilizers: 45 M USD²⁰



18. Diagnostic note - Lebanese Agriculture in crisis by By Philippe Grondier and Kanj Hamade for the Agence Française du Développement, 2020

19. Idem

20. Idem

Possible Action Points:

- 1) Access to local sustainable inputs
 - Support the production of compost and seeds in the caza to meet the needs of farmers, while promoting the circular economy at the local level.
- 2) Access to training and knowledge about agroecological practices
 - Work with farmers to promote more responsible pest control methods;
 - Focus on a few model farms that can serve as references in agroecology in the region, to encourage others to make the transition.
 - Provide the necessary biological inputs during the first year (plants, manure, and biopesticides) by offering diversified plant options to encourage farmers to diversify.
 - Support farmers in transitioning toward agroecological practices.
- 3) Research
 - Conduct research to determine which crops are best suited to develop resilience to climate change, taking into account water availability, in order to provide guidance to farmers.

Role of public institutions:

- 1) Access to a demo plot by the municipality to promote agroecology
 - The municipality and the Church offer land for collective planting using agroecology as a tool for those who don't have access to land.
- 2) Access to land for farmers practicing agroecology
 - Landowners provide land to farmers and people interested in growing food. The farmer or the individual would plant and enhance the land to make it more productive (through sustainable practices that build soil and increase biodiversity) and then return it to the owner after a set amount of years.
- 3) Urban planning for the protection of agricultural lands
 - Ensure that urban planning protects agricultural lands from other uses, such as residential or commercial construction.
- 4) Ministry of Agriculture:²¹
 - This objective is in line with the pillars 1, 2, and 4 of the National Agriculture Strategy 2020-2025.

Role of private sector (NGOs, Companies)

- Offer agroecology training sessions
- Moderate meetings with actors in the field of agroecology in the region

21. See Appendix.

Promote cooperation and fair working conditions amongst farmers

Cooperation among farmers is an essential prerequisite for a fairer and more effective food system. By working together, farmers can strengthen their position in the food supply chain and benefit from these collaborations to process and market their products. Collaborations can increase profit by reducing costs through sharing equipment and splitting roles on what to plant in order to maximize efficiency. This reduces operational expenses and expert costs, as well as maximizing yields. Additionally, cooperatives foster a collaborative mindset among their members allowing them to gain bargaining power over tradespeople, who often decide on the market prices. This community-based approach is what makes this system more sustainable.

- Only 4.5% of registered farmers are members of a cooperative²².
- It is important and necessary to help terminate or reclaim old non-functioning cooperatives.
- In the Cooperatives legal tables, in Zgharta district, although 9 cooperatives exist on paper, effectively none of them are functioning in reality.
- The Fruit trees cooperatives in Zgharta #95
- The fruit trees and vegetables cooperative in the Zgharta Zawiye Casa #879
- The Cattle and cattle production coop in Zgharta and Denniye #891
- The Beekeepers coop in Zgharta #906
- The Zgharta Zawiye ladies production cooperation #1077
- The olive coop in Hraikess-Zgharta #1585
- The agricultural coop of Kfarchakhna Zgharta #1792
- The cattle and dairy products coop in Zgharta CA Sa #1798

22. FAO and ministry of Agriculture agricultural census 2010. The 2015-2019 Strategy of the Ministry of Agriculture has set as one of its objectives to raise the number of farmers that are members of a cooperative to 7 per cent.



Possible Action Points:

- Develop existing or new cooperatives of farmers to support local production such as sharing common tools like the “Harvester” for wheat.
- Provide support beyond tools, including agricultural engineering, expertise, and veterinary services, by establishing a team of technicians and experts dedicated to serving a particular region, promoting agriculture in that area.
- Establish a local seed bank to promote the use of locally adapted seed varieties and ensure their availability.
- Develop a communal compost unit to reduce waste and ensure the availability of locally produced compost.

Role of public institutions:

- Ensure decent income and working conditions for farmers.
- Support the creation of a mutual aid fund .
- Create a Food card so that workers can benefit and buy local products from the market.

Role of private sector (NGOs, Companies)

- Offer training sessions on collaborative work and cooperatives
- Moderate meetings with other collectives or cooperatives

Ensure crop diversification to get closer to local demand

The cultivation of a single crop in a given area (monoculture) is commonly used in conventional agriculture. However, monoculture systems are water intensive and are more susceptible to pest infestations and diseases, requiring hence the application of heavy chemical agricultural inputs²³. They are also intrinsically related to the use of hybrid seeds, which are designed to work in intensive systems to increase yield, but contribute to the lack of sovereignty of farmers. The use of these practices is leading directly to the decline of biodiversity in the soil as well as in our diets, and hence contribute to a vulnerable food system and puts food security at risk²⁴. On the other hand, crop diversification is ecologically feasible, cost-effective, and a rational way of reducing uncertainties in agriculture, especially among smallholder farmers²⁵. It leads to improved food security and sovereignty, as farmers transition from overproducing commodity crops to a diversified range of fruits and vegetables essential to our diets. Also, by diversifying products in the form of rotations and/or intercropping, farmers will not only increase the fertility of their soil but also ensure more various sources of income instead of placing all their eggs in one basket.

- In the last century, 75% of the plant genetic diversity has been lost since local farmers and food producers have left their local farms for more industrialized and high-yielding varieties²⁶.
- Of 250 000 to 300 000 known plant species that are edible, only 150 to 200 are used by humans, whereas only three (rice, maize, and wheat) make up for 60% of calories and proteins obtained by humans from plants²⁷.

In Zgharta:

- 80% of planted surface area are permanent crops (monocultures of olive and citrus)
- Very limited production of grains: not meeting the local demand
- Limited production of vegetables: not meeting the local demand

23. Balogh, A. and Balogh, A. (2021) The rise and fall of monoculture farming, Horizon Magazine.

Available at: <https://ec.europa.eu/research-and-innovation/en/horizon-magazine/rise-and-fall-monoculture-farming> (Accessed: 15 November 2023).

24. Global Farming Trends Threaten Food Security (2019) ScienceDaily. (Accessed: 15 November 2023).

25. Joshi P (2005) Crop diversification in India: nature, pattern and drivers. In: New Delhi India: Asian Development Bank

26. FAO (2000) What is happening to Agrobiodiversity? Available at: <https://www.fao.org/3/y5609e/y5609e02.htm> (Accessed: 15 November 2023).

27. Borpuzari, P. (2023) Wheat, rice and corn feed the world. it is also causing a food crisis, The Economic Times. Available at: <https://economictimes.indiatimes.com/small-biz/sme-sector/wheat-rice-and-corn-feed-the-world-it-is-also-causing-a-food-crisis/articleshow/91953533.cms> (Accessed: 15 November 2023).



Possible Action Points:

- 1) Planning: Create and implement a plan at the level of the caza related to the production:
 - Determine what crops should be planted locally, in what quantities, taking into account the nutrition elements of a healthy diet and consumption habits, etc (i.e. following a food system approach).
 - Follow a stakeholder approach to ensure the plan takes into account the needs and interests of all relevant parties.
- 2) Subsidies: provide subsidies to support the farmers' transition into other types of crops based on the established plan. This can also apply to farmers transitioning from conventional to sustainable farming.
- 3) Increase the local production: through intercropping (for animal feed, lentils, chickpeas, and wheat but also garlic which is also good for pest control).
- 4) Promote agroforestry: According to the FAO, "Agroforestry can be defined as a dynamic, ecologically based, natural resource management system that, through the integration of trees on farms and in the agricultural landscape, diversifies and sustains production for increased social, economic and environmental benefits for land users at all levels." In the case of Zgharta, since 80% of the planted surface area is permanent crops (trees and shrubs), integrating agroforestry practices can increase income diversity for farmers, improve soil fertility by planting nitrogen-fixing legumes such as beans, lentils, chickpeas, and alfalfa, and ensure local production of primary foods for the farmers themselves, as well as the local population.
- 5) Encourage wheat cultivation, particularly in mountainous areas.

Role of public institutions:

- 1) Establish a 'planning/steering committee' for matching production and needs.

Role of private sector (NGOs, Companies)

- 1) Offer training on crop planning
- 2) Conduct research on market demand (done)

Access to sustainable energy and clean water

Agroecological practices ensure better use of resources, including water. However, agriculture still requires access to energy. Currently, most of the energy used is from fossil fuels for activities such as water pumping or food processing. Renewable energies, such as solar photovoltaic and hydroelectricity can be utilized. It is recommended that these technologies be implemented collectively, as it would lower the cost of access.



Possible Action Points:

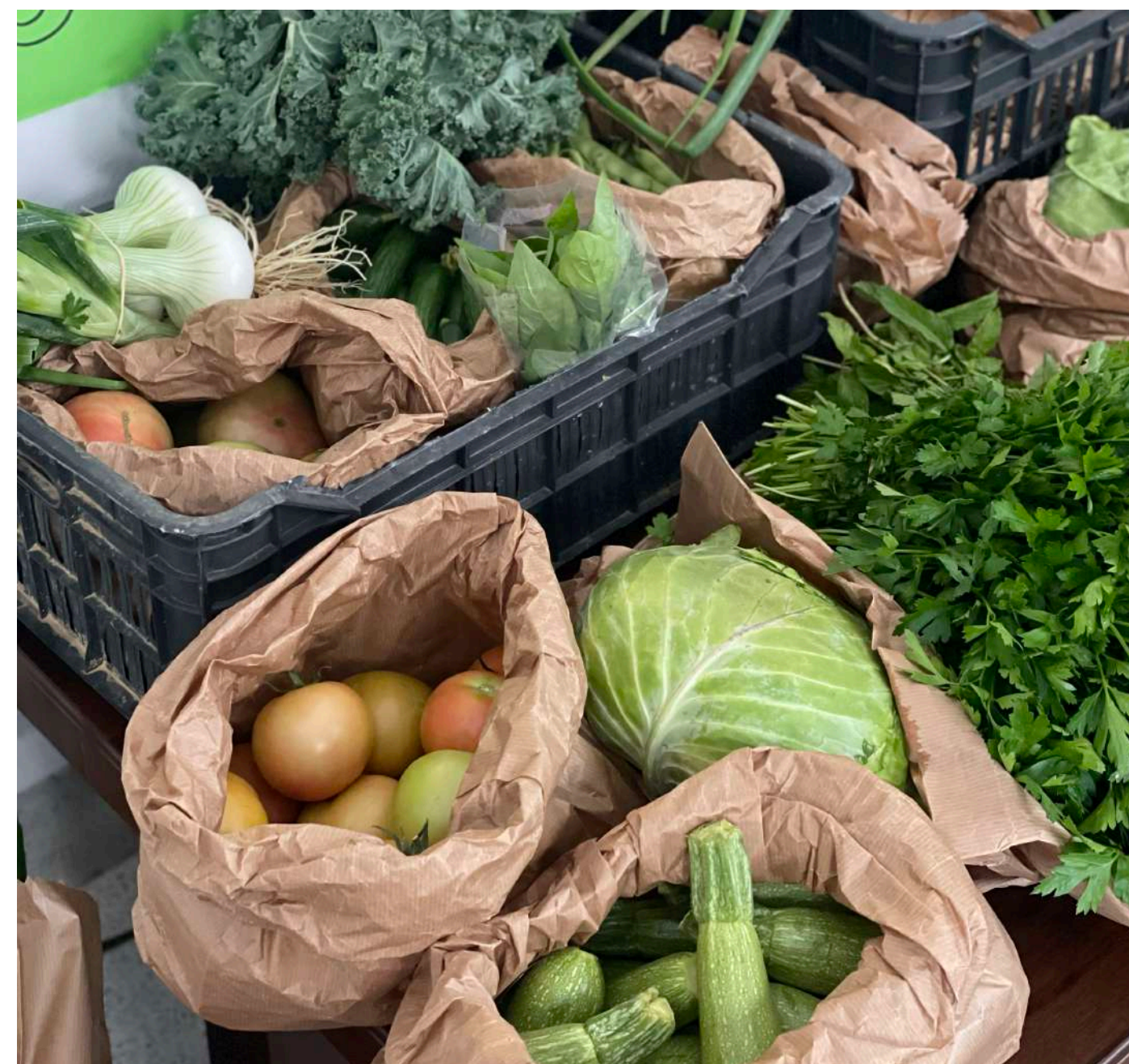
- 1) Support farmers in investing in renewable resources.
- 2) Facilitate collective technical primary studies of needs, and negotiation of prices for material, to lower the price per system.
- 3) Produce renewable energies on the buildings of municipal facilities, and allow the usage of electricity for local actors (such as food actors) at low prices.

Role of public institutions:

- 1) Offer lands for renewable energy sources.
- 2) Reactivate the water treatment factories.

Role of private sector (NGOs, Companies)

- 1) Study the option of microgrids to enhance solidarity in terms of energy between farmers and neighborhoods.
- 2) Work on natural water treatment, high investment but very low maintenance costs for farmers.



Support existing and new cooperatives to transform food locally

Changing our food system requires looking into the economic power dynamics under which it falls. In a capitalist system, the capital can easily concentrate in the hands of a few, giving them more power in decision-making and maximizing their profit, leaving the less-powerful smaller players at a disadvantage. In the North governorate, where the population relies mostly on this sector, one out of four farmers lives below the poverty line²⁸. Agriculture and food processing cooperatives provide a framework for members to pool their resources and collaborate on certain activities. By building a support system, farmers and food processors are better able to face hardships. Cooperatives embody a solidarity economy system. Such models built on cooperation instead of competition, allow the smaller actors to be part of the economic (food) chain. The most successful cooperatives in the food sector have focused on processed food goods which are able to achieve more added value than fresh produce cooperatives. Food transformation and processing cooperatives can contribute to mitigating the current crisis in Lebanon, specifically by supporting rural livelihoods and maintaining food security through the shelf-life extension of fresh produce²⁹.



28. Jeanmougin, C. (2017). You reap what they sow, Understanding the issues linked to the agricultural sector in Lebanon. Heinrich Böll Foundation

29. Rita Jalkh, Marc Dedeire, and Melanie Requier Desjardins. "An Introduction to Food Cooperatives in the Bekaa Valley, Lebanon: Territorial Actors and Potential. Levers to Local Development Through Culinary Heritage." Food Ethics 5, no. 1 (2020): 1-18



Possible Action Points:

- 1) Support existing cooperatives
 - Facilitate access to funding for needed missing material.
 - Provide access to expertise on specific technical aspects.
 - Provide support for accessing markets and communication.
- 2) Support the development of new cooperatives covering needs in food processing and transformation for the local market
- 3) Terminate old cooperatives that are not functional anymore

Role of public institutions:

- Ministry of Agriculture: This objective is in line with the pillar 3 of the National Agriculture Strategy 2020-2025³⁰.

30. See Appendix.

6.

Food
Processing

Support food processors to integrate a circular economy

A circular economy is a model that aims at localizing production and consumption while reducing waste to a minimum. This allows for reducing transportation costs as well as reusing and recycling products. When it comes to food, many farmers do not make use of the unsold produce or those who usually don't even go to the markets because they do not fit the "standards". It is essential to push for changing these standards and utilizing local resources available in the territories. By doing so, it is possible to maximize farmers' profits and reduce transportation costs for producers, as well as building resilience to dependency on imports and food markets.



Possible Action Points:

- 1) Buy the food from local producers
 - Connect local producers with food processors.
 - Facilitate such economic models and promote transformation and processing of unsold local vegetables and fruits.
 - Support the marketing of such products by building specific labels, while building a culture of local consumption (see below section on Food Consumption).
- 2) Manage waste and clean energy resources
 - Implement waste collection to produce compost.
 - Improve post-harvesting processes to reduce waste.
 - Utilize renewable energy sources for food processing.

7.

Food
Processing

Ensure health and quality in the processing (so people can have access to quality food)

The promotion of agroecological practices can improve the quality of the food produced. Additionally, healthy practices need to be followed all along the food supply chain, including the processing and recycling of food waste.



Possible Action Points:

- 1) Empower local food specialists, and hire them for Health and safety checks.
- 2) Possibly found a cooperative of food actors in order to hire and train a health specialist

Role of public institutions:

- 1) Activate a system of fines, in collaboration with the actors of the food supply chain

Role of private sector (NGOs, Companies)

- 1) Train staff: Both international funding and private sector funding can be channeled in order to train properly food health experts

Support a short food supply chain, low carbon footprint food system that ensures fresh quality produce for all consumers

(extends to 50 km from Zgharta)

Shorter food system involve fewer intermediaries between the consumer and the producer, resulting in a series of benefits such as healthier and less processed food, knowledge of where the food comes from, more direct support for farmers instead of intermediaries, and buying products at fairer (usually reduced) prices as products as not subject to multiple markups by middlemen. Short circuits also encourage local production, thereby benefiting the local economy since it is directly benefiting the farmers from the area. Environmentally, short circuits have a lower carbon footprint as they focus primarily on local production and transformation instead of imported goods. In fact, long-distance, large-scale transportation of food consumes large quantities of fossil fuels. Short supply chains enable access to cleaner products, provide fairer benefits to the producers, reduce environmental damages, and reduce the dependency on imports by building local resilience.



Possible Action Points:

- 1) Create and support direct links between producers and retailers/restaurants.
- 2) Create and support direct links between producers and consumers by setting up local producers markets.

Role of private sector (NGOs, Companies)

- 1) Offer training sessions on circular economies

Role of public institutions:

- 1) Support the establishment of a broad diversity of players, through land lending (with no charge) for a startup period. Focus on players of the food supply chain not present in the region:
 - Food waste management and compost production
 - Not-for-profit direct sales market
- 2) Establish a tax related to the distance crossed and to the carbon footprint of food.
- 3) Establish taxes and limitation on imported food that can be produced locally



9.

Food
Distribution

Ensure fairer benefits distributions amongst all actors of the value chain (farmer, wholesaler, retailer)

The current primary method for farmers to sell fresh produce is through the wholesale market system. In Zgharta Caza, food producers sell their products mainly to Tripoli and Byblos wholesale markets, and recently a wholesale market started in the casa of Zgharta (in Beseb'el, no information yet on the volume sold there). These markets typically operate on consignment (for both local and export markets) and are managed as private enterprises with little transparency for producers and buyers alike. This reliance leaves farmers in a very weak bargaining position and often leads to the acceptance of whatever price set by the intermediary.



Possible Action Points:

- 1) Monitor and ensure transparency of food distribution (wholesale market, like the app, setting criteria...)

Role of public institutions:

- 1) For the Ministry of Agriculture: This objective is in line with the pillar 3 of the National Agriculture Strategy 2020-2025³¹.
- 2) Tax categories of fruits and vegetables in order to price differently and allow some categories to be more affordable than others.
- 3) Unification of prices at the level of the municipality: the municipality fixes the prices of vegetables and fruits for each season.

31. See Appendix.

10.

Food
Distribution

Ensure health and quality in the food distribution

Promoting healthy practices for food production needs to be accompanied by healthy and safe food practices in food transformation. Both hygiene and cleanliness must be combined with a moderate-to-no use of potentially harmful cleaning and disinfecting techniques. For a certain number of products like meat, the continuity of the cold storage needs to be ensured.



Role of public institutions:

- 1) Ministry of Agriculture: This objective is in line with the pillar 2 of the National Agriculture Strategy 2020-2025³².
- 2) Municipal level: A system of tracking of food and its storage conditions should be established in collaboration with the private sector, and possible with citizens' collaboration

32. See Appendix.

Support a culture around sustainable food practices

To transition towards a more sustainable food system, making informed and responsible choices is crucial. However, people often lack access to information on farming practices, toxicity of agricultural inputs, and their impact on health. Even information on quality criteria and the environmental footprint of products is still difficult to obtain. Communicating about the way our food is being grown, processed, and distributed is essential to have the right tools for making informed decisions. In the case of Lebanon, a country that is passing through a significant crisis, people are forced to prioritize price over quality. Promoting direct contact between producer and consumer might make people more aware of the importance of eating seasonally and locally.



Possible Action Points:

- 1) Encourage direct selling farmer to consumer (farmer stand/ farmers market)
 - Support the development of farmers markets, basket models and community supported agriculture amongst other ways of linking farmers and consumers directly.
- 2) Create spaces of thought and reflection on these topics
 - Organize public events such as talks, festivals...
- 3) Establish demo plot offered by the municipality in the city where people can come plant, learn, be in contact with farmers
 - Create an urban space where people can plant on small lands. This will make agroecology visible and reachable.

Role of public institutions:

- 1) Access to a demo plot by the municipality to promote agroecology.
- 2) The municipality offers lands.
- 3) The municipality facilitates the organization of public events.

Role of private sector (NGOs, Companies)

- 1) Support the creation of a direct farmers' Market



Reduce Food Insecurity

Since 2019, Lebanon has been passing through a severe economic crisis. According to UNESCWA, the poverty rate in Lebanon has nearly doubled from 42% in 2019 to 82% in 2021³³. With the cost of food increased by 396%³⁴. Food diversity became a social justice issue and integrating it into a food strategy became essential. Recruiting those who live in economically challenged communities to learn how to run their own food businesses, allowing people to plant their own food, and building skills on becoming more resilient and autonomous mark the main differences between food security and food sovereignty. By relying on international aid to feed the underprivileged during every crisis, we are not building a sovereign and resilient population, but rather fostering dependency on external aid.



33. Escwa warns: Three-quarters of Lebanon's residents plunge into poverty (2023). United Nations Economic and Social Commission for Western Asia.

Available at: <https://www.unescwa.org/news/escwa-warns-three-quarters-lebanon%E2%80%99s-residents-plunge-poverty> (Accessed: 15 November 2023).

34. Half of Lebanese children now need support due to food, healthcare shortages - new data - Lebanon (2022) ReliefWeb.

Available at: <https://reliefweb.int/report/lebanon/half-lebanese-children-now-need-support-due-food-healthcare-shortages-new-data#:~:text=New%20UN%20figures%20released%20today,enough%20money%20to%20buy%20food.> (Accessed: 15 November 2023).

Possible Action Points:

- 1) Monitor the food insecurity situation
 - Collect data on food security on a regular basis and build the appropriate monitoring tool in order to analyze it. The data should include information such as the number of meals a person consumes a day, and the quality and diversity of nutrients available in their diet.
- 2) Support access to land/plots for farming, especially for underprivileged groups
 - Facilitate access to land for agroecological farming for people with small revenues. Such initiatives will increase the local production, while providing the opportunities for some to become less food insecure. Public and Wa'f land can serve for this purpose.
- 3) Develop local currency and subsidies
 - It is often the case that people with low income cannot buy quality local products. They have to instead buy cheaper food from big supermarkets often imported. On the other hand, local currencies can be used to promote the consumption of local goods as this currency would be subject to specific conditions. Therefore offering subsidy schemes for underprivileged people through the distribution of local currency vouchers would allow on one hand to support access to quality food while supporting local production.
- 4) Develop social consumer groceries
 - A social consumer grocery is a shop where people from different social classes can buy their goods and pay according to their means. One way to achieve this is through a membership model such as the one used by the "Dekkan el Mazraa" social grocery in Beirut. Customers pay a quarterly membership fee and can then purchase goods at wholesale prices. The amount paid for membership is based on the customer's income, with two different levels available. This system allows people with lower income to access quality goods at almost wholesale price.

Role of public institutions:

- 1) Facilitate the implementation of social consumer groceries by for example giving access to a space owned by the municipality.
- 2) Promote the existence of such solutions through the municipality's communication to the locals.

Role of private sector (NGOs, Companies)

- 1) Offer training sessions on models of consumer groceries
- 2) Facilitate meeting with other consumer groceries

13.

Governance

Data collection and accessibility

- 1) Create an observatory acting as focal point at the level of the caza with active NGOs and public officials to centralize data and coordinate actions on the ground, facilitating collaboration between local authorities and initiatives towards a resilient food system, and among food actors to avoid inefficiency.
- 2) Conduct an in-depth assessment of the situation to obtain detailed data on the current situation, such as location, quantity, and types of crops being planted, availability of groundwater, number of livestock, etc. Additionally, the assessment should include an evaluation of the knowledge and gaps among community members regarding agriculture and the food system.
- 3) Create a focal point in each municipality in charge of continuously updating the data collected and verifying the information on a daily basis. This person can be in charge of monitoring the changes in agricultural practices and respecting the guidelines and criteria previously selected by the municipality. Create a committee at the level of the union of the municipalities to coordinate the work.



14.

Governance

Enable all inhabitants to become actors of their food system and health

Facilitate, support, and offer regular spaces for exchanges and consultation around food production and access

Role of public institutions:

- 1) Ministry of Agriculture: This objective is in line with the pillar 5 of the National Agriculture Strategy 2020-2025³⁵.

35. See Appendix.

15.

Governance

Create a committee to develop and Implement a multi-year food strategy for the caza, while ensuring monitoring & follow-up

- 1) Establish a multi-stakeholder committee to oversee the effective implementation and progress tracking of this strategy towards food sovereignty. The committee should build on the existing 'food security' committee that stopped meeting in 2020. The committee will convene regularly to develop and implement the strategy in Zgharta. It should include institutions (LARI, ministry local office, water establishments), local authorities, farmers, representatives of cooperatives, NGOs, and experts amongst others.
- 2) Disseminate information deemed important through municipalities and Qaimaqam (Head of Caza, public servant nominated by the government). This can be done through the identification of key people: from the 52 villages in the caza, having a key person representing each village for example.



16.

Economic
models

The transition towards a more sustainable food system also means a transition in the economic model towards a fairer and circular economy, based on cooperation and solidarity.



36. See Appendix.

16.

Economic
models

Develop a territorial economic activity linked to sustainable food

- 1) Develop a cultural gastronomy tourism program in the Zgharta area that highlights the local food products and promotes their market value. These products, often produced by local women producer groups, carry traditional and cultural identities, and it is essential to ensure the economic autonomy and independence of these producer groups (see below part on cooperatives).
- 2) Transform unsold fresh products locally into value-added products can reduce waste while providing extra income to farmers

Role of public institutions:

- 1) Ministry of Agriculture: This objective is in line with the pillar 4 of the National Agriculture Strategy 2020-2025³⁶.

17.

Economic
models

Encourage local workforce

The daily rates need to be more attractive to the locals.



18.

Economic
models

Promote the cooperation of players in production- processing- distribution- catering

Supporting the development of a local economy also means a close collaboration among local actors: Producers, processors, distributors and caterers. It is possible to develop local incentives for this. For example, supporting local food factories can be conditioned to buying the raw products from local producers.



19.

Economic
models

Community-Supported Agriculture at the level of enterprises and consumers

The FAO describes community-supported agriculture as a model where consumers agree to provide their local farmer up-front monetary support for an entire season and farmers in return provide them with sufficient quality and quantity of weekly produce (FAO, 2016). Such a system would guarantee to the farmer that his products will be bought, providing them with a more stable income and allowing them to focus on producing high-quality, sustainable food.

Possible Action Points:

- Pilot CSA Model in the area with possible moderation by the private or public sector.

20.

Economic
models

Support cooperatives (Farmers coops, Food Processing coops...)

Organizing collectively in the sector in order to access better working conditions remains a major challenge. The cooperative model is one of the most common tools for small and medium-scale farmers to organize and overcome the challenges in the sector in a collective way. They are an important contributor to the economy. These cooperatives can improve production, provide storage, harvesting, and marketing services, and diversify farmers' economic activity. Their value and governance systems have allowed them to overcome many of the challenges of small-scale economic actors in both rural and urban settings. However, they remain weak in Lebanon. In 2018, it was estimated that only 4.5% of the farmers are members of cooperatives³⁷. Cooperatives are often perceived as channels for government and international donor grants rather than as businesses owned and managed by members³⁸. These challenges should be looked at more carefully in order to support the development of new cooperatives and support the existing ones.



Possible Action Points:

- Facilitate sessions between farmers, cultivators, and food processors to have a better understanding of the challenges they face to work together, and then, if there is the motivation, facilitate cooperation. (facilitation possibly done by NGOs)
- Hold One on One meetings with those who can have an influence on other members, to set goals.
- Follow up with clusters who are about to create and form cooperatives.
- Schedule meetings with already formed clusters or cooperatives.
- Meet with the head of the cooperatives sector in Lebanon, and propose Zgharta as a pilot project for the agricultural cooperative sector (this may include neutralizing non-active cooperatives, supporting youth to enter and renew the cooperatives, and creating new active cooperatives).

37. THE COOPERATIVE SECTOR IN LEBANON (2018) International Labor Organisation. Available at: https://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_240134.pdf (Accessed: 15 November 2023).

38. FAO - EU - CIRAD, Food systems profile Lebanon, 2022

Appendix:

References to the National Agriculture Strategy 2020-2025³⁹:

Objective 1 of the Zgharta Food Strategy is in line with the following sections of the NAS:

Pillar 1. Restoring the livelihoods and productive capacities of farmers and producers

- Facilitate the access to productive inputs for farmers including women, especially women headed households, while aiming to enhance livelihoods and food security
- Support access to financial instruments for the most vulnerable, facilitate access to inputs such as seeds, plants...

Pillar 2. Increasing agricultural production and productivity

- Specific requests were raised by farmers organizations to subsidize land reclamation and irrigation schemes for expanded production; to map agriculture zones and apply protective measures to limit land fragmentation, and prevent further urbanization expansion; and .protect local markets.
- Priority interventions include: increasing the cultivated areas (investing in abandoned lands and in land reclamation and increase the cultivated areas for cereals and legumes); this to be associated with updating land use/ land cover, land fragmentation analysis, increase production of seeds and seedlings (mother trees/seed bank); seed certification systems, surveying and controlling quarantine pests and transboundary pests and developing an early warning system for crop pests;
- Support the adoption of good agricultural practices and good livestock management. Priority interventions include: Implement a nationwide program for the adoption of good agriculture practices, supporting and training farmers on the use of biological pest control (BPC) and integrated control with the aim of decreasing the use of chemicals and pesticides and mitigating pollution; improving livestock management practices including implementing national vaccination programs, and improving animal nutrition and health and veterinary services.
- facilitating platforms for knowledge sharing between farmers/ producers and the research centres, improved extension/technical assistance, bridging R&D with agrifood production needs; and enhanced access to credit for investment in innovative and modern technologies.

39. Ministry of Agriculture, National Agriculture Strategy 2020-2025, 2020 <http://www.agriculture.gov.lb/getattachment/Ministry/Ministry-Strategy/strategy-2020-2025/NAS-web-Eng-7Sep2020.pdf?lang=ar-LB>

Pillar 4. Improving climate change adaptation and sustainable management of agrifood systems and natural resources

- Interventions throughout the agrifood system aiming to responsible production and consumption practices, and to enhance production and protection of ecosystem services. Substantial efforts will also be on reverting land, soil, water and other natural resources degradation, reducing pollution, and adopting more energy efficient techniques, hence increasing adaptation and mitigation to climate change including carbon sequestration in forests and wooded lands
- Adoption of innovative technical solutions, improved access to climate finance and insurance, and better extension/technical assistance, in order to promote climate smart agriculture techniques such as conservation agriculture, smart planting, afforestation and reforestation (including continuing the implementation of the Forty Million Trees Programme), and regulating and enforcing the management of forests, pest management and common forest property and developing fire prevention and early warning systems.
- Promote sustainable use of natural resources (soil, pastures, forests and fisheries), reducing environmental and natural resource degradation because of more sustainable farming, food processing and logistics practices (e.g. smart agriculture, organic farming), better skilled and more aware operators.
- Encourage and support the use of renewable energy in the agricultural sector. Priority interventions include promotion of low carbon emission technologies, reduction of agricultural pollution (at farm level), encouraging the re-use of agricultural waste, production of compost from animal farms and agricultural products including via setting related regulatory framework, and via more effective awareness and communication campaigns on responsible food consumption.

Objective 5 of the Zgharta Food Strategy is in line with the following section of the NAS:

Pillar 3. Enhancing efficiency and competitiveness of agrifood value chains

- Provide enabling conditions to promote agricultural and food industries and enhance utilization of locally produced primary products.
- Promote and organize cooperative work and farmers' associations and groups at the level of the value chains (targeting smallholders producers). By stimulating cooperative work, farmer groupings, this programme will increase farmers' participation in agrifood value chains. This will allow benefitting value chain player's negotiation capacity including as policy influencers, and more equal generation of value addition throughout the value chain. Benefits will come from the removal of constraints to participation (transaction costs, risk, lack of market information), and better horizontal and vertical integration (especially for producers).

Objective 9 of the Zgharta Food Strategy is in line with the following section of the NAS:

Pillar 3. Enhancing efficiency and competitiveness of agrifood value chains

- The highlighted priorities spanned from the need for improving market infrastructure and establish new ones to protect local industry, open to new export markets by enhancing the coordination with exporters, cooperatives and farmers' groups, and ensuring promotion of organic production (also as a way to reduce the use of chemicals).
- Support the modernization of value chain infrastructure and postharvest handling systems, wholesale and local markets. Priority interventions include: organizing the wholesale markets and enhance transparency of transactions (e.g. via epayments, developing blockchains, etc.); establishing permanent and seasonal agricultural farmers' markets for direct sale; investing in the infrastructure and information system of post-harvest handling systems to reduce food loss and waste; establish incubators and promote marketing through agricultural service centres. This programme will aim to reduce market fragmentation and increase farmers' participation in the agrifood value chains through better producers' organization, multistakeholders' platforms, value chain agreements and contract farming.

Objective 10 of the Zgharta Food Strategy is in line with the following section of the NAS:

Pillar 2. Increasing agricultural production and productivity

- Improve the quality and safety of agricultural and food products. Priority interventions include: enhancing food quality and safety assurance system based on improved traceability tools, improved lab capacities (e.g., tracking chemical residues and contaminants in food products from plant and animal origin), strengthening control over local production, as well as imports and exports of plant and animal origin, in accordance with international health and phytosanitary standards (according to the risk based assessment/analysis system), establishing a system of denomination of origin of Lebanese products (including Geographic Indications), labelling/branding and better certification (link to Pillar 5 for enabling stronger certification bodies).

Objective 15 of the Zgharta Food Strategy is in line with the following section of the NAS:

Pillar 5. Strengthening the enabling institutional environment
this is the pillar that guarantees the inclusion of vulnerable people, as well as unlocks the potential of participation in the sector for women and youth, ensuring a widespread mainstreaming of a gender-sensitive and inclusive approach

- Support access to credits, develop the enabling environment for investments, develop PPP, update the legal framework for agriculture, listen and include farmers group priorities, and ensure accountability in the implementation of the strategy were amongst the main requests. The importance of evidence in planning was also highlighted, including the definition of priorities according to comparative advantages and agro-ecological vocation of the territories. Improving agricultural statistics, data collection and processing and establishing a farmers' registry were also mentioned
- Enhance the effectiveness of MoA services and affiliated institutions and developing staff capacities. Priority interventions include: developing and modernizing extension capacities through a farmer – focused service orientation
- Establishing agricultural data systems and statistics and enhancing research; establishing and organizing a Farmers' Registry; promote adoption of ICT within MoA, promoting preparedness to deal with crises and disasters; developing research and networking with LARI-LEB smart app and extension services with the universities; establishing new stations and labs for LARI and connecting them with the extension centres.
- Create enabling conditions for the development of agricultural insurance also to mitigate the impacts of natural disasters.
- Develop a social protection system for vulnerable farmers, farm workers, producers and fishers. In particular, interventions will aim at ensuring the coverage of all concerned actors by the Social Insurance system, including medical insurance, in addition to ensuring the coverage of eligible farmers by the National Poverty Targeting Programme (NPTP); and fostering combatting child labour in agriculture.

Objective 16 of the Zgharta Food Strategy is in line with the following section of the NAS:

Pillar 4: Improving climate change adaptation and sustainable management of agrifood systems and natural resources
Opportunities related to the linkage existing between sustainable agriculture and preservation of ecosystem services and or eco-tourism (responsible rural tourism), emerging in Lebanon also as fruit of the highly valued cultural and culinary heritage, and the increasing awareness for healthy and organic food.



Photos: Fouad el Hajj

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