



# **Policy Approaches to Supporting Food Sovereignty in the Levant**

**The Hashemite Kingdom of Jordan, the Republic  
of Lebanon and Occupied Palestine**

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## Introduction

The right to access food is considered a fundamental human right essential for achieving human dignity. The *Universal Declaration of Human Rights*, in Article 25, affirms the right of every individual to an adequate standard of living that ensures the health and well-being of themselves and their family, including food, clothing, housing, healthcare, and essential social services.<sup>1</sup> Similarly, the *International Covenant on Economic, Social and Cultural Rights*, in Article 11, emphasizes the right to a decent standard of living, encompassing the provision of adequate food, housing, and clothing, as well as the right to continuously improve living conditions. In addition, *General Comment No. 12*, issued in 1999, provides detailed guidance on this right and its components.<sup>2</sup>

Despite the milestones and achievements attained by humanity over the past century, the issues of food and hunger remain at the top of the agenda for governments worldwide. In 2015, the United Nations set the *Sustainable Development Goals* (SDGs), also known as the Global Goals, as a universal call to action to end poverty, protect the planet, and ensure peace and prosperity for all people by 2030.<sup>3</sup> Among these goals, the second one – “Zero Hunger” – was established with the ambition of achieving a world free from hunger by 2030. However, by 2022, nearly 735 million people – representing 9.2% of the world’s population – suffered from chronic hunger, a shocking increase compared to 2019.<sup>4</sup>

Between 2007 and 2008, the world witnessed a food crisis, coinciding with the global economic recession and exposing the fragility of the international food trade system. The repercussions of this crisis affected hundreds of millions of people, particularly in low-

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<sup>1</sup> The Universal Declaration of Human Rights. Adopted and publicly proclaimed by the United Nations General Assembly Resolution 217 A (III) on 10 December 1948. <https://www.un.org/en/about-us/universal-declaration-of-human-rights>

<sup>2</sup> The International Covenant on Economic, Social and Cultural Rights. Adopted and opened for signature, ratification, and accession by the United Nations General Assembly Resolution 2200 A (XXI) on 16 December 1966. Entry into force: 3 January 1976, in accordance with Article 27. <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights>

<sup>3</sup> United Nations Development Programme. “What Are the Sustainable Development Goals?” UNDP. 2015. [www.undp.org/sustainable-development-goals](http://www.undp.org/sustainable-development-goals).

<sup>4</sup> United Nations Sustainable Development. “Goal 2: Zero Hunger - United Nations Sustainable Development.” UN. 2 Oct. 2025. [www.un.org/sustainabledevelopment/hunger](http://www.un.org/sustainabledevelopment/hunger).



income countries, though countries ranging from lower-middle-income to high-income<sup>5</sup> were not spared, as the sharp rise in food prices led to widespread challenges.

This crisis can be traced back to several factors, most notably: the profound dysfunction of the global trade system and its reliance on long-distance transport; the rising costs of energy and agricultural inputs such as electricity, water, and fertilizers; the persistence of policies flooding low-income countries' markets with subsidized surpluses from the capitalist West; the concentration of control over grain, seeds, and essential foods in the hands of multinational corporations; speculative activity in futures markets; and finally, the expansion of the conversion of forests and small, diverse farmlands into areas for biofuel production.<sup>6</sup>

Even after this dilemma was exposed and the world had moved in 2015 toward the *Sustainable Development Goals*, the global COVID-19 crisis soon followed. This crisis revealed that globalization and the prevailing world economic system—often viewed by some as having created a wealth of opportunities—had significant vulnerabilities. On the one hand, while globalization fostered greater economic interdependence and facilitated rapid economic growth in many countries and regions, it also underscored systemic fragilities. During this period, Global Gross Domestic Products (GDPs) grew from around 50 trillion US dollars in 2000 to 75 trillion US dollars in 2016.<sup>7</sup> On the other hand, the *United Nations Department of Economic and Social Affairs* (UNDESA) noted that globalization has also created significant challenges, including the unequal distribution of its benefits and costs.<sup>8</sup> This was clearly revealed during the COVID-19 pandemic, which can be more accurately described as a shift from a 'globalization of opportunities' to a 'globalization of crisis.'<sup>9</sup> The state of emergency and the resulting disruption of supply chains led to a massive increase in the number of households experiencing food insecurity and its impacts.

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<sup>5</sup>United Nations. "World Economic Situation and Prospects 2014." UN. 2014. [https://www.un.org/en/development/desa/policy/wesp/wesp\\_current/2014wesp\\_country\\_classification.pdf](https://www.un.org/en/development/desa/policy/wesp/wesp_current/2014wesp_country_classification.pdf)

<sup>6</sup>Kurzam, George. "National Sovereignty over Food." Ramallah: MA'AN Development Centre (Arabic Version), 2015, pp. 11-12 <https://shorturl.at/XHqav>

<sup>7</sup>United Nations. "New Globalization Report: Three Mega-trends Expected to Impact Our Future | United Nations." UN. 2017. [www.un.org/en/desa/new-globalization-report-three-mega-trends-expected-impact-our-future](http://www.un.org/en/desa/new-globalization-report-three-mega-trends-expected-impact-our-future).

<sup>8</sup> *Ibid.*

<sup>9</sup> Mousa, Amal. "Globalization of Crises and the Role of World Leaders." Asharq Alawsat (Source in Arabic) 5 Jan. 2023. <http://aawsat.com/home/article/4082911/%D8%AF>.



Furthermore, inflation reached an average of around 8% in 2022, roughly two years after the pandemic, marking the highest inflation rate recorded since the early 1980s following the second oil shock.<sup>10</sup> Just as the world was beginning to recover from the impact of COVID-19, the Russia-Ukraine war erupted, generating global inflationary pressures—particularly in food and energy prices—and causing further disruptions in global supply chains.<sup>11</sup>

For instance, from one perspective, the Russia-Ukraine war had a significant negative impact on global agricultural markets, as the value of agriculture as a share of Ukraine’s GDP fell by 39% in 2022 compared to 2021.<sup>12</sup> At the same time, the cost of addressing these challenges rose dramatically due to simultaneous shocks in global energy and fertilizer markets, triggered by the war. As a result, the cost of delivering humanitarian aid reached unprecedented levels due to surging food and fuel prices required for operations.<sup>13</sup>

From another perspective, October 2023 saw a drop in imports and exports in the Middle East, particularly within the context of the target region of this policy paper - the Hashemite Kingdom of Jordan, the Republic of Lebanon, and Occupied Palestine. The Israeli war against the Palestinians and the military escalation in Lebanon—which persisted through 2024 and intensified by June 2025, culminating in several days of direct strikes between Iran and Israel—had a significant impact on regional navigation and trade.

## Overview of Key Indicators

All these events had significant repercussions on trade and the supply of essential goods, particularly food, legumes, - such as beans and lentils - and wheat. The combination of increased demand and limited supply, along with higher supply chain costs resulting from repeated disruptions of maritime, land, and air routes, led to a sharp rise in consumer goods prices, including basic food items. Economically, this is referred to as ‘inflation in

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<sup>10</sup> Brooks, Robin, et al. “COVID-19 Inflation Was a Supply Shock.” Brookings. 15 Aug. 2024. [www.brookings.edu/articles/covid-19-inflation-was-a-supply-shock](http://www.brookings.edu/articles/covid-19-inflation-was-a-supply-shock).

<sup>11</sup> The United Nations Economic and Social Commission for West Asia and League of Arab States. “Second Arab Multidimensional Poverty Report.” UN ESCWA. 2023. [www.unescwa.org/sites/default/files/pubs/pdf/second-arab-multidimensional-poverty-report-english.pdf](http://www.unescwa.org/sites/default/files/pubs/pdf/second-arab-multidimensional-poverty-report-english.pdf).

<sup>12</sup> Welsh, Caitlin, and Joseph Glauber. “Food as the ‘Silent Weapon’: Russia’s Gains and Ukraine’s Losses.” Center for Strategic & International Studies. October 15, 2024. <https://www.csis.org/analysis/food-silent-weapon-russias-gains-and-ukraines-losses>.

<sup>13</sup> *Ibid.*



commodity prices,' and a substantial portion of the current imported inflation can be attributed to these factors.<sup>14</sup>

This policy paper examines food-related issues with a particular focus on employment opportunities, aiming to reduce unemployment rates in the target communities. It further explores the use and protection of arable land in ways that align with the concept of food sovereignty—encompassing both plant- and animal-based production—and the mechanisms for implementing these practices.

The concept of '*food security*' is closely linked to various economic and social indicators. For instance, poverty serves as a key indicator of individuals' access to food. On that topic, *the United Nations Economic and Social Commission for Western Asia* (ESCWA) reported that poverty levels in the Arab region rose in 2022 compared to previous years, reaching approximately 130 million people—about one-third of the population (excluding the Gulf Cooperation Council countries and Libya)—based on national poverty lines.<sup>15</sup> In addition to these trends, the Arab region recorded the world's highest unemployment rate in 2022, at 12%.<sup>16</sup> These figures are particularly noteworthy because they follow the COVID-19 pandemic, highlighting the region's heightened vulnerability and fragility during crises, both in terms of purchasing power and employment capacity.

Turning to country-specific indicators relevant to this policy paper, the population of the **Hashemite Kingdom of Jordan** - at the time of this paper - was approximately 11,883 million, of whom 30.2% fall within the 'youth category' - according to the broad definition of youth.<sup>17</sup> The unemployment rate among Jordanians reached approximately 21.3% in the first quarter of 2025, with women accounting for 31% of the unemployed population.<sup>18</sup>

According to the latest reports by the *World Food Programme* (WFP) on food security in Jordan, the country's food deficit stems from limited local resources, including constrained

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<sup>14</sup> Increases in the prices of imported final goods directly influence expenditure-based measures of inflation. Additionally, higher costs of imported fuel, raw materials, and production inputs raise domestic production expenses, which are then reflected in the prices of locally manufactured goods. Imported inflation may result from upward pressures on international prices or from a depreciation of the domestic currency, highlighting the economy's vulnerability to external shocks

<sup>15</sup> The United Nations Economic and Social Commission for West Asia. "ESCWA in Its Annual Survey of the Arab Region: One Third of Its Population Living Below Lines Despite Positive Growth." UN ESCWA. 30 December. 2022. [www.unescwa.org/news/escwa-its-annual-survey-arab-region-one-third-its-population-living-below-lines-despite](http://www.unescwa.org/news/escwa-its-annual-survey-arab-region-one-third-its-population-living-below-lines-despite).

<sup>16</sup> *Ibid.*

<sup>17</sup> Population Pyramids. "Population Pyramid of Jordan in 2025." Population Pyramids. 2025. [population-pyramid.net/en/pp/jordan](http://population-pyramid.net/en/pp/jordan).

<sup>18</sup> Jordan Department of Statistics. "Homepage as of September 2, 2025." Department of Statistics. 2 Sept. 2025. <http://dosweb.dos.gov.jo>





energy and water supplies and restricted arable land.<sup>19</sup> Jordan also hosts the world’s second-highest proportion of refugees relative to its population, with approximately 3 million refugees residing in the country. As of July 2025, it included over 2 million Palestinian refugees and approximately 511,000 registered Syrian refugees, along with refugees from other countries.<sup>20</sup>

Looking at the **Republic of Lebanon**, the most recent census data from 2022 shows that the country’s population reached approximately 4.8 million, of whom 79.8% were Lebanese and 20.2% were non-Lebanese.<sup>21</sup> Meanwhile, based on the *Population Division tool of the United Nations Department of Economic and Social Affairs* (UNDESA), some sources indicate that Lebanon’s population was estimated at 5.49 million at the end of June 2022, compared with 5.59 million at the end of June 2021.<sup>22</sup> This difference in statistics implies that there are people entering the country but not captured in the official census.

In regard to the unemployment rate, according to the *Central Administration of Statistics* in Lebanon, it reached approximately 29.6% in 2022, up from 11.4% in 2019.<sup>23</sup> Youth in Lebanon constitute approximately 25.6% of the population, – around 1,496,732 people – while the working-age population—defined by labor statistics as those aged 15 and above—accounts for about 63.97% of the total population.<sup>24</sup>

Furthermore, UN reports issued in mid-2025 indicate that 21% of the population is suffering from severe food insecurity, and the situation is expected to worsen over the summer. This is reinforced by the report “*Lebanon: Acute Food Insecurity IPC Analysis*,”<sup>25</sup> covering April to October 2025, which shows that one in five people in Lebanon—around 1.17 million individuals—experienced severe or emergency levels of food insecurity between April and June 2025. Although this figure represents an improvement compared to the beginning of

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<sup>19</sup> World Food Program. “WFP Jordan Country Brief.” WFP. July 2025. <http://docs.wfp.org/api/documents/WFP-0000168395/download/? ga=2.198483695.1752226352.1756807958-94144891.1756807958>

<sup>20</sup> *Ibid.*

<sup>21</sup> Lebanese Republic Central Administration of Statistics (CAS), et al. “Labor Force and Household Living Conditions Survey 2018-2019 Lebanon.” ILO. 2020. <http://www.cas.gov.lb/images/Publications/Labour%20Force%20and%20Household%20Living%20Conditions%20Survey%202018-2019.pdf>

<sup>22</sup> Lebanon News Network. “By the numbers: What is the population of Lebanon? Here are the most important statistics!,” January 18, 2023. <https://lebanonnews.net/%D8%A3%>

<sup>23</sup> Lebanon Republic Central Administration of Statistics. “Central Administration of Statistics - Key Indicators.” Accessed 3 Sept. 2025. [www.cas.gov.lb/index.php/key-indicators-en](http://www.cas.gov.lb/index.php/key-indicators-en).

<sup>24</sup> Population Pyramids, “Population Pyramid of Lebanon in 2025,” 2025. <https://population-pyramid.net/en/pp/lebanon>.

<sup>25</sup> UN World Food Programme (WFP). “Food Insecurity in Lebanon Returns to Near Pre-conflict Levels - but Gains Remain Fragile, New Report Shows | World Food Programme,” June 13, 2025. <https://www.wfp.org/news/food-insecurity-lebanon-returns-near-pre-conflict-levels-gains-remain-fragile-new-report-shows>.





the year - when 1.65 million people were affected following the 2024 conflict - the situation remains fragile and could deteriorate in the absence of sustained humanitarian support.<sup>26</sup>

Finally, in Occupied Palestine, the situation remains complex, largely compounded by the Israeli occupation, which controls resources and hinders progress in food production. *The Palestinian Central Bureau of Statistics* estimates that the population of Palestinians in the West Bank and Gaza Strip was approximately 5.6 million in July 2025. However, these figures continue to shift amid the ongoing genocide in the Gaza Strip and ethnic cleansing in the West Bank, as Gaza's population has already decreased by 10% when compared to projections for mid-2025.<sup>27</sup>

Unemployment rates in the Gaza Strip reached approximately 68% in the fourth quarter of 2024, up from around 45% in the third quarter of 2023. In the West Bank, the number of unemployed rose to 313,000 in 2024, up from approximately 183,000 in 2023, corresponding to an unemployment rate of about 31% among labor force participants, compared with around 18% in 2023.<sup>28</sup> By mid-2025, Palestinian youth aged 18–29 numbered about 1.2 million, making up roughly 21% of the total population in the West Bank and Gaza Strip (22% in the West Bank and 21% in Gaza). Unemployment among this age group was particularly severe. Notably, in 2024, unemployment rates were about 49% among females and 38% among males in the West Bank, while in the Gaza Strip they reached 80%.<sup>29</sup> By October 2025, the unemployment rate in Palestine had risen to 50% amid the Israeli occupation's aggression against the West Bank and the Gaza Strip.<sup>30</sup>

Evaluating food security in Occupied Palestine is highly complex, given the ongoing acts of violence and forced displacement, especially in the Gaza Strip and, to a lesser degree, in the West Bank. In Gaza, data from late November 2023 indicates that between November 24 and

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<sup>26</sup> *Ibid.*

<sup>27</sup> Palestinian Central Bureau of Statistics. "Palestinian Central Bureau of Statistics (PCBS) Presents the Conditions of the Palestinian Population on the Occasion of The World Population Day," July 7, 2025. <https://www.pcbs.gov.ps/post.aspx?lang=en&ItemID=6022>.

<sup>28</sup> Palestinian Central Bureau of Statistics. "On the occasion of the International Workers' Day, H.E. Dr. Ola Awad, President of the Palestinian Central Bureau of Statistics (PCBS), presents the current status of the Palestinian labor force in 2024." PCBS. April 30, 2025. <https://www.pcbs.gov.ps/post.aspx?lang=en&ItemID=5980>.

<sup>29</sup> Palestinian Central Bureau of Statistics, "On the Occasion of the International Youth Day, the Palestinian Central Bureau of Statistics (PCBS) Issues a Press Release Highlighting the Situation of the Youth in the Palestinian Society," PCBS. August 12, 2025. <https://www.pcbs.gov.ps/post.aspx?lang=en&ItemID=6038>.

<sup>30</sup> Palestinian Central Bureau of Statistic. "The Palestinian Central Bureau of Statistics Issues a Press Release on the Occasion of World Statistics Day, Observed on October 20, 2025 - Between Challenges and Reality... Statistics as a Mirror of Truth in Palestine". <https://www.pcbs.gov.ps/site/512/default.aspx?lang=en&ItemID=6085>





December 7, over 90% of the population—approximately 2.08 million individuals—experienced severe levels of malnutrition due to acute food insecurity. This situation corresponds to Phase 3 or higher in the *Integrated Food Security Phase Classification* (IFSC)<sup>31</sup> indicating crisis conditions or worse. Within this context, more than 40% of the population—939,000 individuals—were classified as being in an emergency situation (Phase 4 IPC), while over 15% - 378,000 individuals—were in a catastrophic situation (Phase 5 IPC).<sup>32</sup> By early September 2025, about 361 people had died of starvation in the Gaza Strip due to the Israeli occupation, of whom 130 were children.<sup>33</sup>

It is noteworthy that, in all three countries, the *Ministries of Agriculture* receive budgets amounting to no more than 1% of the total general budget. Firstly, in the Hashemite Kingdom of Jordan, the *Ministry of Agriculture's* budget accounts for roughly 0.7% of the total estimated general budget, which is approximately 12.510.761.000 Jordanian dinars.<sup>34</sup> Secondly, in the Republic of Lebanon, the *Ministry of Agriculture's* budget accounts for roughly 0.43% of the total general budget for 2025—estimated at approximately 445.214.000.000 Lebanese pounds—up from 0.31% in 2024, according to the 2025 Citizen's Budget.<sup>35</sup> Thirdly, in Occupied Palestine, the *Ministry of Agriculture's* 2025 budget represented 0.82% of the total general budget, totaling 152,243,750 shekels.<sup>36</sup>

## Purpose of the Paper

This policy paper seeks to explore strategies and policy measures that could enhance the concept of *food sovereignty*, as distinct from *food security*, within the contexts of the Hashemite Kingdom of Jordan, the Republic of Lebanon, and Occupied Palestine. While these contexts differ, the three countries exhibit remarkably similar structural

<sup>31</sup> The IPC famine refers to a classification system that defines famine conditions based on specific criteria, indicating severe food insecurity and malnutrition. <https://www.ipcinfo.org/famine-facts/>

<sup>32</sup> Integrated Food Security Phase Qualification. "Gaza Strip: Acute Food Insecurity Situation for 24 November - 7 December 2023 and Projection for 8 December 2023 - 7 February 2024." IPC, 2023. <https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1156749/?iso3=PSE>.

<sup>33</sup> Al Jazeera. "Gaza Records the Highest Number of Starvation Victims in a Single Day." *Al Jazeera*, September 2025. <https://www.aljazeera.net/news/2025/9/2/غزة-شهداء-الإفادة>

<sup>34</sup> Jordan Ministry of Finance, "Draft General Budget Law for the Year 2025," Jordan - General Budget Department, November 25, 2024, <https://gbd.gov.jo/en/releases/draft-min>.

<sup>35</sup> Basil Fuleihan, Institute of Finance, and Ministry of Finance, "Citizen Budget," *Republic of Lebanon - Ministry of Finance*, 2025, p.21. <https://www.finance.gov.lb/en-us/Finance/BI/ABDP/Annual%20Budget%20Documents%20and%20Process/Citizen%20Budget%202025%20en.pdf>.

<sup>36</sup> Moayad Afanah, "Citizen's Budget 2025- Ministry of Agriculture," *Fiscal Justice*, June 17, 2025, <https://www.miftah.org/PublicationDetails2020.cfm?id=3431>



characteristics and relevant indicators. The paper provides a detailed analysis of the challenges unique to each context and concludes with a set of harmonized recommendations on food sovereignty, with particular emphasis on strengthening societal-level autonomy in food production decision-making across the three countries.

## **I- Dialectical problem: The Enduring Absence of Food Security and the Systematic Marginalization of Food Sovereignty**

Since its emergence in the 1970s, the concept of *food security* has undergone multiple developments. Initially, focusing on purely economic and quantitative dimensions, it has evolved to incorporate rights-based, humanitarian, and qualitative approaches. In 1996, the *World Food Summit* adopted a comprehensive definition of food security. It emphasized that all individuals should always have physical and economic access to sufficient, safe, and nutritious food that meets their dietary needs and preferences, allowing them to lead healthy and active lives.<sup>37</sup>

In contrast, the movement *La Via Campesina (International Peasant's Movement)*, which brings together agricultural organizations from around the world, has proposed an alternative concept of *food sovereignty*. This concept is grounded in each country's right to preserve and strengthen its capacity to produce staple foods, while considering the cultural diversity and specific agricultural characteristics of its communities.<sup>38</sup> The initiative was advanced under the farmers' social movements, in conjunction with the *1996 World Food Summit*, which occurred one year after the establishment of the *World Trade Organization*. During this period, *food sovereignty* was articulated as a strategic alternative to neoliberal policy frameworks and as a more effective instrument for addressing hunger. Concurrently, it embodied a critical stance against the hegemony of global capitalism over agricultural and trade systems amid accelerating globalization.<sup>39</sup>

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<sup>37</sup> Mahjoub, Azzam, and Mohammed Mondher Belghith. "Right to Food and Food Sovereignty, Background Document," *Arab Watch on Economic and Social Rights, Right to Food from Arab NGO Network for Development*. 2019 pp. 50-107, <https://www.annd.org/data/file/files/7%20Shifting%20the%20paradigm-%20%20moving%20towards%20food%20sovereignty%2C%20theoretical%20and%20practical%20reflections.%20.pdf>

<sup>38</sup> Giuliano Martinello. "Shifting the paradigm: moving towards food sovereignty, theoretical, and practical reflections," *Arab Watch on Economic and Social Rights, Right to Food from Arab NGO Network for Development*. 2019. pp.146-157, <https://www.annd.org/data/file/files/7%20Shifting%20the%20paradigm-%20%20moving%20towards%20food%20sovereignty%2C%20theoretical%20and%20practical%20reflections.%20.pdf>

<sup>39</sup> Mahjoub, Azzam, and Mohammed Mondher Belghith. "Right to Food and Food Sovereignty, Background Document," *Arab Watch on Economic and Social Rights, Right to Food from Arab NGO Network for Development* 2019 pp.50-107,



Since that period, the development of what is now recognized as the ‘food sovereignty paradigm’ has become increasingly prominent as a critical alternative to the prevailing *food security framework*. This orientation emerged in the late twentieth century as a pointed critique of agricultural neoliberalism, which institutionalized the dominance of large multinational corporations and subordinated human welfare to profit motives. In contrast, the *food sovereignty approach* emphasizes the need to restructure food systems in ways that align with local cultural particularities, are environmentally sustainable, and uphold fundamental human rights.<sup>40</sup>

Additionally, this concept is seen as more comprehensive than *food security*, as it centers on a state’s autonomous control over food production, distribution, storage, consumption, and trade policies in line with its needs and cultural context. It is grounded in the principle of full control over the national food system, free from external economic or political pressures or interventions. In contrast, *food security*—associated with the so-called ‘liberal world paradigm’—does not require domestic food production. Rather, it emphasizes ensuring access to food at an affordable cost and in a convenient manner, regardless of its source. Consequently, as long as a state possesses the necessary financial resources, it can procure the required food from global markets. Thus, this concept places greater emphasis on the availability and accessibility of food than on reliance on local production.<sup>41</sup>

The concept of *food sovereignty* also differs from the one of *self-sufficiency*, which emphasizes a state’s ability to produce all food requirements independently, a goal considered difficult to achieve given the complexities of international relations, trade agreements, and broader economic and political challenges. Its realization appears more feasible at the level of smaller local communities within states where the necessary components can be practically ensured.<sup>42</sup>

Although the fundamental distinction between the two concepts of *food sovereignty and food security*—or schools of thought—is clear, they are often conflated in many societal

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<https://www.annd.org/data/file/files/7%20Shifting%20the%20paradigm-%20%20moving%20towards%20food%20sovereignty%2C%20theoretical%20and%20practical%20reflections.%20.pdf>

<sup>40</sup> Interview with Hind Al-Batta – Researcher at the Social and Economic Policy Observatory (SEPO) | Conducted on June 30, 2025.

<sup>41</sup> *Ibid.*

<sup>42</sup> *Ibid.*



contexts.<sup>43</sup> The distinction between *food sovereignty* and *food security* lies in the fact that *food security* focuses on ensuring citizens’ ability to access and purchase food with ease, whereas *food sovereignty* emphasizes the state’s full autonomy and its capacity to control all aspects of its food system in accordance with its needs and cultural traditions.<sup>44</sup>

The paradox between the two concepts can be summarized by contrasting the provisions of the *Rome Declaration on Food Security*, which reflects the policies of the states that endorsed it, with the concept of food sovereignty adopted by the *Forum of Civil Society Organizations* parallel to the official *World Food Summit* (See *Table 1*).

**Table 1: The Paradox Between the Dimensions of the Rome Declaration Commitments and the Elements of the Food Sovereignty Concept**

Rome Declaration Commitments <sup>45</sup>	Elements of the Food Sovereignty Concept <sup>46</sup>
Establish a favorable political, social, and economic environment to create optimal conditions for eradicating poverty and achieving lasting peace, based on the full and equal participation of men and women, as this is considered the most effective path to sustainable food security for all.	Uphold each country’s right to freely determine its agricultural policies.
Implement policies aimed at eliminating poverty and inequality, while improving material and economic opportunities to ensure that all people have access, at all times, to sufficient, nutritious food that can be effectively utilized.	Protect smallholder farmers from the adverse effects of international trade.
Monitor progress in food, agricultural, fisheries, forestry, and rural development in both high- and low-potential areas through sustainable and participatory policies and practices, essential for providing adequate and reliable food supplies at household, national, regional, and global levels, and for combating pests, drought, and desertification, while recognizing the multifunctional nature of agriculture.	Prevent dumping practices in global markets.
Ensure that policies related to trade in food and agricultural commodities, as well as trade exchanges more broadly, contribute to enhancing food security for all through a fair global trade system based on market principles.	Address structural fluctuations in global commodity prices.
Strive to prevent natural disasters and human-induced emergencies, prepare for them, and respond to cross-border and emergency food needs in ways that promote recovery, revitalization, development, and capacity building to meet future needs.	Commit to the principles of sustainable agriculture.
Encourage the optimal allocation and use of public and private sector investments to strengthen human resources, sustainable food systems, agriculture, fisheries, forestry, and rural development in both high- and low-potential areas.	Assert the right to reject inappropriate practices or technologies, including genetically modified products.
Implement, monitor, and follow up on this plan of action at all levels, in cooperation with the international community.	

Food sovereignty can be regarded as a fundamental framework with implications across multiple dimensions, including the economic, political/social, health, and environmental spheres.<sup>47</sup> (See Table 2)

Table 2: Aspects of National Food Sovereignty<sup>48</sup>

Field	Aspects
Economy	Achieve food self-sufficiency, ensuring that locally produced food is consumed locally.
	Prioritize collective benefit for all, including both farmers and consumers.
	Ensure that agricultural production is carried out by smallholder farmers, cooperatives, or publicly owned enterprises. Food distribution and consumption should follow fair pricing mechanisms that consider the rights and welfare of both farmers and consumers.
Political & Social	Uphold the right of individuals to determine dietary patterns in both production and consumption, considering rural diversity and production variety.
	Challenge international trade patterns imposed on individuals.
	Reduce monopolistic control over seeds, which primarily serves the profit-driven agendas of corporations.
	Rebalance the relationship between rural and urban areas, addressing the ongoing erosion of agricultural economies.
Health	Eliminate the practice of commodity dumping by Israeli and other foreign monopolistic companies, which flood local markets with artificially cheap, subsidized agricultural products, continuously undermining small farmers.
	Revive cultural heritage through traditional and local agricultural techniques, which embody extensive knowledge, skills, and inherited wisdom, reflecting the historical balance between human society and the biosphere.
	Produce healthy, high-quality food consistent with local heritage and culture, while minimizing reliance on foreign or highly processed foods (e.g., fast food).
Environmental	Reject industrial agriculture based on genetic engineering and the chemically intensive practices of the ‘Green Revolution.’

<sup>43</sup> Ibid.

<sup>45</sup> Food and Agriculture Organization, “Rome Declaration and Plan of Action,” FAO, November 13, 1996, <https://www.fao.org/4/w3613e/w3613e00.htm>.

<sup>46</sup> Adib Nehmeh. “General Overview, Conceptual Framework and Practical Suggestions for Civil Society, Arab Watch on Economic and Social Rights, Right to Food from Arab NGO Network for Development (2019): 18-  
<https://www.annd.org/data/file/files/7%20Shifting%20the%20paradigm-%20%20moving%20towards%20food%20sovereignty%2C%20theoretical%20and%20practical%20reflections.%20.pdf>

<sup>47</sup> Abdalaziz Al-Salehi. “Palestinian National Food Sovereignty in the Context of Occupation,” *Dalia* from Heinrich-Böll-Stiftung (2021): 6-73. [https://www.dalia.ps/sites/default/files/reports/palestinian\\_national\\_food\\_sovereignty-en.pdf](https://www.dalia.ps/sites/default/files/reports/palestinian_national_food_sovereignty-en.pdf)

<sup>48</sup> Interview with Hind Al-Batta – Researcher at the Social and Economic Policy Observatory (SEPO) | Conducted on June 30, 2025

According to national indicators in the Hashemite Kingdom of Jordan, the Republic of Lebanon, and Occupied Palestine, several key areas highlight the necessity of prioritizing *food sovereignty* over *food security*— especially in terms of its social and economic implications at the local level, rather than focusing exclusively on macroeconomic considerations. For instance, Jordan has demonstrated progress according to the *Food Security Index* adopted by the Ministry of Agriculture, <sup>49</sup> improving its global ranking from 49 to 47 in 2022, with projections placing it between 43 and 45 in the forthcoming report. <sup>50</sup>

In that regard, the researcher concurs with the perspective that *food sovereignty* does not necessarily equate to food self-sufficiency or domestic food production. Within the framework of what can be termed a ‘*world of food democracy*’, *food sovereignty* constitutes a foundational prerequisite for achieving *food security*. This implies that policies ensuring *food security* in any given country should be derived from the choices and priorities of local communities, which determine patterns of production and consumption in alignment with environmental sustainability and principles of social and economic justice.<sup>51</sup>

Hence, it can be argued that the most salient issues intersecting with the objectives of this paper, and central to the debate on *food sovereignty* versus *food security*, include unemployment rates—particularly among youth—underutilized agricultural holdings, the balance of exports and imports, and the budget allocated to the agricultural sector.

## II- Mobilization of the Agricultural Workforce

It is worth recalling that the Arab region recorded the highest global unemployment rate in 2022, at approximately 12%. <sup>52</sup> It is important to clarify that these figures pertain to formal employment, specifically full-time jobs. Indeed, when considering informal or unregulated

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<sup>49</sup> This Index was created as part of Jordan’s National Food Security Strategy 2021-2030 <https://jordan.un.org/sites/default/files/2022-10/Document%202%20-%20The%20National%20Food%20Security%20Strategy.pdf>

<sup>50</sup> Interview with Imran Sawalha – Engineer at the Jordanian Ministry of Agriculture (Technical Follow-up Department) | Conducted on August 24, 2025.

<sup>51</sup> Hossam Hussein. “Jordan, Jordan’s Food Security: Heavy reliance on food imports while civil society promotes food sovereignty” *Arab Watch on Economic and Social Rights, Right to Food* from Arab NGO Network for Development (2019): 242-252, <https://www.annd.org/data/file/files/7%20Shifting%20the%20paradigm-%20%20moving%20towards%20food%20sovereignty%2C%20theoretical%20and%20practical%20reflections.%20.pdf>

<sup>52</sup> Adib Nehmeh. “General Overview, Conceptual Framework” 2019. pp.18- 44 <https://annd.org/data/file/files/3%20General%20Overview%20%20.pdf>

work, the numbers are significantly higher. According to the *International Labor Organization* (ILO), by 2020 there were approximately 2 billion informal workers worldwide, representing 62% of the global workforce. In countries with very low wages, informal workers constitute 90% of the labor force, with women comprising the majority.<sup>53</sup> In the countries of our study, – the Hashemite Kingdom of Jordan, the Republic of Lebanon and Occupied Palestine – agricultural employment accounts for a high proportion of informal labor, due to several factors, including family-based and seasonal agricultural production and the general absence of representative organizations for farmers.

## 2.1 JORDAN

In the case of the Hashemite Kingdom of Jordan, Dr. Akef Al-Zoubi<sup>54</sup> emphasized that the agricultural sector records the highest share of informal employment among all economic sectors. According to him, women working informally constitute around 16% of the labor force, compared with approximately 5% among men. Employment in agriculture is largely seasonal, temporary, or family-based.

The formal agricultural sector employs roughly 35,000 workers. The informal sector, which is not precisely measured, includes an estimated 65,000 permanent workers—both Jordanians and foreign laborers—plus seasonal workers, bringing the total workforce in agriculture to about 80,000. *The Ministry of Agriculture* had aimed to increase this number to 120,000, but Jordanian labor alone only accounts for about 35,000 workers, approximately 4–5% of the total workforce.

## 2.2 LEBANON

In the Republic of Lebanon, a 2021 *International Labor Organization (ILO)* report assessing informal labor conditions and vulnerabilities among marginalized groups revealed striking

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<sup>53</sup> International Labor Organization. “COVID-19 Crisis and the Informal Economy Immediate Responses and Policy Challenges.” ILO. May 2020. [https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed\\_protect/@protrav/@travail/documents/briefingnote/wcms\\_743623.pdf](https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_protect/@protrav/@travail/documents/briefingnote/wcms_743623.pdf).

<sup>54</sup> Dr. Akef Ahmad Al Zoubi is a prominent Jordanian figure, best known as the former Minister of Agriculture (2013–2016), holding significant roles in agricultural policy, economics, and food security, with advanced degrees in agricultural sciences and economics, and a career spanning government, academia, and the private sector.

figures for the agricultural sector. About 8.8% of the workforce was employed in agriculture, among them 95.3% were engaged in informal employment.<sup>55</sup>

Literature indicates that in 2004, the agricultural sector in Lebanon employed approximately 6.5% of the country's labor force, with early warnings that this figure was on a downward trajectory. Nevertheless, according to the 2010 *Agricultural Census* conducted jointly by the *Food and Agriculture Organization* (FAO) and the *Lebanese Ministry of Agriculture*, there were around 170,000 agricultural holdings in Lebanon, suggesting that 15% of Lebanese households derived either cash or in-kind income from agriculture.<sup>56</sup>

Ultimately, these concurring figures warrant deeper scrutiny and qualitative investigation to better understand the nature of Lebanon's agricultural sector and its workforce, both within formal and informal structures.

Commenting on this issue, Dr. Ziad Yaghi<sup>57</sup> explained that 'the majority of the labor force in Lebanon's agricultural sector consists of foreign workers, particularly Syrian laborers. Agricultural labor is therefore organized mostly through intermediaries and non-institutional arrangements, with virtually no forms of unionization. This phenomenon has historical roots, as agricultural workers in Lebanon were traditionally excluded from trade unions and social networks.'<sup>58</sup>

Indeed, when the *National Social Security Fund* (NSSF) was established in 1959, farmers were excluded from the social security system—a crucial factor in understanding the structure and dynamics of agricultural labor today. This exclusion resulted in a heterogeneous and fragmented labor framework, largely governed by family and tribal relations, and in some cases, reinforced by patriarchal and coercive dynamics.<sup>59</sup>

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<sup>55</sup> International Labor Organization. "Assessing Informality and Vulnerability among Disadvantaged Groups in Lebanon: A Survey of Lebanese, and Syrian and Palestinian Refugees. June 2021, Page 52. <https://www.ilo.org/publications/assessing-informality-and-vulnerability-among-disadvantaged-groups-lebanon>

<sup>56</sup> Kanj Hamade, "Lebanon's Agriculture: Dynamics of Contraction in the Absence of Public Vision and Policies." *Arab Watch on Economic and Social Rights, Right to Food* 2019, pp.256-271 <https://www.annd.org/data/file/files/7%20Shifting%20the%20paradigm-%20%20moving%20towards%20food%20sovereignty%2C%20theoretical%20and%20practical%20reflections.%20.pdf>

<sup>57</sup> Dr Ziad Yaghi is a Researcher, writer, and editor. He earned a PhD in History from the University of California, San Diego, in June 2024, and is currently a postdoctoral fellow at the Orient Institute in Beirut. His interests broadly encompass the modern history of the Middle East, the global history of planning, development, and architecture, and the political economy of urban and rural spaces across the Mediterranean.

<sup>58</sup> Interview with Dr. Ziad Yaghi – Lecturer at the American University of Beirut | Conducted on September 8, 2025.

<sup>59</sup>*Ibid.*



During the 1950s and 1960s, nearly 50% of Lebanon’s labor force was engaged in agriculture, and the state played an active role in supporting agricultural development projects. However, this figure declined to around 25% due to shifting political and economic transformations, accompanied by a significant reduction in the agricultural sector’s contribution to the national GDP.<sup>60</sup>

## 2.3 PALESTINE

Finally, in **Occupied Palestine**, data from the *Palestinian Central Bureau of Statistics* (PCBS) show that in 2022, among individuals aged 15 and above in the West Bank and Gaza, 4.4% of men and 2.7% of women were employed in agriculture and fisheries.

This represents a significant decline in agricultural participation compared to previous years. The current genocidal war has further devastated the agricultural sector, particularly in Gaza, while it has continued to face systematic targeting and disruption in the West Bank. With respect to informal agricultural labor, data until 2021 shows that agriculture accounts for about 23% of all unregulated enterprises, compared with only 2% of regulated ones.<sup>61</sup> As a result, approximately 95% of agricultural enterprises operate informally, implying that the vast majority of workers in this sector are employed outside formal structures.

Ultimately, these figures underscore the urgent need for broader regulation and union representation in the agricultural labor systems across the three countries to foster *food security*. When considered alongside the unemployment indicators previously discussed—21.3% in Jordan, 29.6% in Lebanon, and approximately 50% in Occupied Palestine—these figures highlight the potential for strategically mobilizing human capital toward the agricultural sector, particularly considering the vast underutilized arable land, as will be examined in the following section.

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<sup>60</sup>*Ibid.*

<sup>61</sup> Al-Surani, Ghazi. The Unregulated Economic Sector in Palestine, Also Known as the Shadow or Hidden Economy. Published on Al-Hadaf News Portal on September 9, 2021.



### III- Underutilized agricultural holdings

Building on the availability of human capital, agricultural land constitutes a fundamental asset for development and for strengthening agricultural production, particularly in support of smallholder farmers.

#### 3.1 JORDAN

National indicators show that, in Jordan, the most recent *Agricultural Census* (2017) reported approximately 2,818,000 dunums<sup>62</sup> under agricultural use.<sup>63</sup> The total number of agricultural holdings is approximately 107,000. Of these, around 7,000 are dedicated to crop production, covering a total area of 2,204,000 dunums. Livestock holdings number between 25,000 and 27,000, spanning roughly 61,000 dunums.<sup>64</sup> Additionally, about 6,495 holdings combine both crop and livestock production, occupying an estimated 552,000 dunums (see *Table 3*).<sup>65</sup>

In this context, the *Minister of Environment* and the *Acting Minister of Agriculture* reported that the previously estimated agricultural land resources in the Kingdom—assessed at 9 million dunums, or roughly 10% of the country’s total area—have been thoroughly reviewed and reassessed. The updated findings suggest that up to 52 million dunums could potentially be suitable for cultivation, provided that irrigation water is available and appropriate land reclamation measures are implemented.<sup>66</sup>

Furthermore, experts have observed a gradual decline in smallholder agricultural holdings, increasingly supplanted by large-scale investors. This trend is exacerbated by the widespread conversion of agricultural land to residential use. For instance, extensive wheat-cultivated areas in Irbid -Northwest of Jordan - have been transformed into housing developments and villas. Similarly, in Amman, - particularly in Wadi Al-Seer, a historically significant agricultural valley in the West of Amman—cultivation has largely ceased,

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<sup>62</sup> 1 dunum ≈ 1,000 square meters (0.1 hectares, or about 0.247 acres). A dunum (also spelled dunam, donum, or donam) is a unit of land area used in several countries of the Middle East, including Palestine, Israel, Jordan, Lebanon, and Syria.

<sup>63</sup> Jordan Department of Statistics. “General Results of the Agricultural Census 2017 - Number and Area of Agricultural Holdings by Type of Holding and Governorate.” Department of Statistics, 2017. [https://dosweb.dos.gov.jo/censuses/agriculture-census/census2017\\_tables/](https://dosweb.dos.gov.jo/censuses/agriculture-census/census2017_tables/).

<sup>64</sup> *Ibid.*

<sup>65</sup> *Ibid.*

<sup>66</sup> “Agriculture: 52 million Dunams Suitable for Cereal and Fodder Cultivation.” *Jordan Minister of Agriculture*, February 9, 2025, <https://www.moa.gov.jo/AR/NewsDetails/%D8%A7>

persisting only in limited, small plots. Consequently, smallholder farms are undergoing a sustained decline, and if current trends persist, they could disappear entirely within the coming decades.<sup>67</sup> (See Table 3)

Hence, as of today's factors, small-scale farmers often rely on agriculture as a seasonal source of income. However, due to climate change and the declining reliability of rainfall, this practice is no longer economically viable and has become unprofitable. Consequently, many farmers are hesitant to continue farming unless the *Ministry of Agriculture* implements substantial policy reforms.<sup>68</sup>

**Table 3: Distribution of Agricultural Holdings in Jordan by Type of Holding Across Governorates<sup>69</sup>**

Governorate	نباتية وحيوانية Crops and Livestock		حيوانية Livestock		نباتية Crops		المجموع Total		المحافظة
	مساحة Area	عدد No.	مساحة Area	عدد No.	مساحة Area	عدد No.	مساحة Area	عدد No.	
Amman	233829	1 013	8060	3 021	200 603	7 239	442492	11 273	العاصمة
Balqa	4061	202	2487	1 713	201 668	6 314	208215	8 229	البلقاء
Zarqa	17804	219	22459	1 968	233 584	1 755	273847	3 942	الزرقاء
Madaba	9645	409	3790	1 161	65 845	3 329	79280	4 899	مادبا
Irbid	24566	1 353	16912	5 109	398 185	28 427	439662	34 889	اربد
Mafrq	55420	605	3704	3 658	498 240	4 544	557364	8 807	المفرق
Jerash	8331	488	317	1 004	89 451	6 906	98099	8 398	جرش
Ajloun	3529	268	294	706	56 552	6 166	60376	7 140	عجلون
Karak	106385	1 015	2281	2 451	162 439	6 759	271105	10 225	الكرك
Tafielah	19976	279	591	822	36 691	1 925	57258	3 026	الطفيلة
Ma'an	65040	473	411	2 313	169 069	1 620	234520	4 406	معان
Aqaba	4194	171	399	1 869	91 787	433	96380	2 473	العقبة
<b>Total</b>	<b>552781</b>	<b>6 495</b>	<b>61705</b>	<b>25 795</b>	<b>2204111</b>	<b>75 417</b>	<b>2818598</b>	<b>107 707</b>	<b>المجموع</b>

In response, the *Ministry of Agriculture* has launched a new electronic platform, the "Agricultural Holdings System," designed to provide regularly updated data. However, no official reports have been issued from the system to date.<sup>70</sup> Recognizing the presence of highly productive yet underutilized agricultural land, the Ministry has also sought to strengthen "Agricultural Lending." The total volume of loans granted has increased from

<sup>67</sup> Interview with Abdullah Al-Khawaldeh – Agricultural Engineer and activist in local and international projects | Conducted on September 22, 2025.

<sup>68</sup> *Ibid.*

<sup>69</sup> Interview with Imran Sawalha – Engineer at the Jordanian Ministry of Agriculture (Technical Follow-up Department) | Conducted on August 24, 2025.

<sup>70</sup> *Ibid.*



approximately 50 million Jordanian dinars to 110 million in recent years, including 60 million in interest-free loans, specifically aimed at supporting young farmers with very small holdings of 3–4 dunums.<sup>71</sup> Applicants are in the phase of submitting a feasibility study, and successful projects may have their loans converted into grants.

Additionally, the Ministry has supported food industry projects, aiming to establish around 30 factories across various regions, provided that these facilities employ local residents. Support can include rent subsidies, financing for production lines, or partial coverage of electricity costs. For certain projects, annual support may reach up to one million Jordanian dinars in exchange for employing 20–25 local workers.<sup>72</sup>

This does not imply that the Agricultural *Lending Institution*<sup>73</sup> is without shortcomings. Accessing financing involves complex procedures, and the loans themselves carry risks, as beneficiaries may lose their projects without any safety net from the Risk Fund. While some small-scale farmers have benefited from these loans, for young entrepreneurs seeking to establish new agricultural ventures, the Fund's impact remains limited.<sup>74</sup> What small-scale farmers need is not only financial support but also technical assistance to help them select crops suited to local climatic conditions, water scarcity, and high temperatures. Moreover, providing organized marketing channels would have a significant impact, particularly if agricultural marketing institutions assist in introducing high-value crops that move beyond traditional, low-yield cultivations.<sup>75</sup>

In this context, the absence of effective agricultural extension services is particularly evident. Although the *Ministry of Agriculture* maintains extension stations and personnel across various governorates, most of these staff members are not up to latest updates and do not receive ongoing updates or training aligned with climatic and technological developments. Even the initiatives that are occasionally organized tend to be concentrated in specific areas or the capital and therefore fail to reach all farmers.<sup>76</sup>

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<sup>71</sup> *Ibid.*

<sup>72</sup> *Ibid.*

<sup>73</sup> مؤسسة الإقراض الزراعي Government of Jordan. (n.d.). <https://www.acc.gov.jo/index.php>

<sup>74</sup> Interview with Abdullah Al-Khawaldeh – Agricultural Engineer and activist in local and international projects | Conducted on September 22, 2025.

<sup>75</sup> *Ibid.*

<sup>76</sup> *Ibid.*



Some experts also contend that the loss of fertile agricultural land represents one of the most serious threats to Jordan’s food security. Areas such as Bayader, Marj Al-Hamam, and Umm Al-Summaq in Amman Governorate were once among the most productive wheat-growing regions in the country, but they have since been transformed into residential zones.<sup>77</sup>

Despite the efforts made through the *Agricultural Credit Fund* and support for industrial projects to employ youth and small farmers, the impact of these initiatives remains limited due to complex procedures, insufficient technical and advisory support, and a lack of effective marketing channels. Additionally, the loss of fertile agricultural land also poses a long-term threat to *food security*.

### 3.2 LEBANON

In the **Republic of Lebanon**, the *Food and Agriculture Organization* (FAO) reports that the country has over 683,000 hectares of arable land. According to the *United Nations Economic and Social Commission for West Asia* (ESCWA), about 33% of Lebanon’s total territory is suitable for agriculture. However, less than 200,000 hectares are currently cultivated, and of this cultivated area, only 48% is irrigated.<sup>78</sup> A review of the number of agricultural holdings by type indicates that there are 169,512 holdings, of which 15,799 are engaged in livestock rearing.<sup>79</sup> (*See Table 4*)

Large agricultural holdings are uncommon in Lebanon, representing only 10–12% of total agricultural land. Most of the land is divided into small to medium-sized holdings, with a maximum area of approximately 10,000 m<sup>2</sup> (about one hectare), and the majority comprising small holdings of up to five dunams (less than 5,000m<sup>2</sup>).<sup>80</sup>

<sup>77</sup>Interview conducted with Rabi’ Azriqat – Farmer and Agricultural Activist | Conducted on September 21, 2025.

<sup>78</sup> Ayoub, Nada. “Agricultural Strategy 2025: I Hear Your Words, I Believe You.” *Al Akhbar*, April 24, 2021. <https://www.al-akhbar.com/Community/304747/استراتيجية-الزراعة-2025-أسمع-كلامك-أصد-فك>.

<sup>79</sup> Lebanese Ministry of Agriculture – Number of agricultural holdings, livestock by species, and size of cultivated land. <https://short-link.me/1dcs1>

<sup>80</sup> Interview with Nabil Nemer – Lecturer in Plant Protection and Climate Change Impact Studies at Holy Spirit University | Conducted on August 25, 2025.

**Table 4: Distribution of Agricultural Holdings in Lebanon by Size of Holding** <sup>81</sup>

Cultivated area (in dunums)	Number of holdings	
	Practicing livestock farming	Total
<b>Dunum of cultivated land</b>	3,044	4,142
Less than 1	137	929
From 1 to 2	975	26,490
From 2 to 5	2,329	51,622
From 5 to 10	2,442	35,682
From 10 to 20	2,662	26,269
From 20 to 40	2,187	13,977
From 40 to 60	838	4,412
From 60 to 80	404	1,998
From 80 to 100	177	902
From 100 to 150	298	1,409
From 150 to 200	111	557
From 200 to 500	142	835
More than 500	53	288
<b>Total</b>	<b>15,799</b>	<b>169,512</b>

Overall, several studies indicate that the agricultural sector in Lebanon remains stagnant and faces multiple structural challenges. These include land fragmentation; lack of effective cooperatives; weak agricultural extension services; poor infrastructure and post-harvest practices; the dominance of traders over agricultural value chains; the aging farming population; slow modernization and adaptation to new technologies; and the absence of coherent agricultural policies capable of supporting the sector’s development and growth.<sup>82</sup>

Based on field interviews, experts estimate that approximately 250,000 hectares of land in Lebanon are arable. However, the actual cultivated area—including seasonal and permanent crops such as fruit trees, greenhouses, and other agricultural uses—reached around 270,000 hectares according to 2021–2022 statistics. This represents roughly 25% of Lebanon’s total land area.<sup>83</sup>

<sup>81</sup> Lebanese Ministry of Agriculture – Number of agricultural holdings, livestock by species, and size of cultivated land. <https://short-link.me/1dcs1>

<sup>82</sup> Kanj Hamade, “Lebanon’s Agriculture: Dynamics of Contraction” pp.256-271

<sup>83</sup> Interview with Lara Wakim – Director of the Continuing Learning Center at Holy Spirit University (Kaslik); formerly Deputy Director of the Higher Research Center (2019–2021) and Dean of the Faculty of Agricultural and Food Sciences (2013–2019) | Conducted on August 29, 2025.

Nevertheless, when considering only arable land as the reference point, it can be concluded that around 50% of it is effectively utilized. In general, arable land constitutes about 14% of Lebanon's total surface area, meaning that at the time of the study, just over half of this arable portion is currently under cultivation.<sup>84</sup>

Eventually, Lebanon's agricultural sector suffers from stagnation and structural challenges, including land fragmentation; weak advisory services; and slow technological adoption, resulting in only about half of the arable land being utilized. This highlights the urgent need for policies and institutional support to enhance productivity and fully capitalize on the country's agricultural potential to maximize food security conditions.

### 3.3 PALESTINE

According to the 2021 *Agricultural Census in Occupied Palestine*, the total number of agricultural holders in the West Bank and Gaza Strip was 140,568 for the 2020/2021 agricultural year, before the onset of the genocidal war and ethnic cleansing. The West Bank comprised most agricultural holders, totaling 115,814 and representing 82.4% of all holdings (*See Table 5*).<sup>85</sup> By comparison, the Gaza Strip had 24,754 holders, accounting for 17.6% of the total.<sup>86</sup>

As of 1 October 2021, agricultural holdings in Palestine covered approximately 1.21 million dunums, with 1.14 million dunums - 94.2% of the total - under cultivation. This area comprised permanent crops (tree horticulture); temporary crops (vegetables and field crops); temporary pastures and meadows; fallow lands; and permanent pastures. The area of uncultivated land was 70,671 dunums, including buildings used for holding purposes, forests and woodland areas, and other spaces such as gardens, yards, and pathways, with 82 dunums used for aquaculture.<sup>87</sup> (*See Table 5*)

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<sup>84</sup>*Ibid.*

<sup>85</sup>Palestinian Central Bureau of Statistics. "Agricultural Census 2021 - Final Results." PBCS, 2023, p.4. <https://www.pcbs.gov.ps/Downloads/book2646.pdf>

<sup>86</sup>*Ibid.*

<sup>87</sup> Palestinian News & Information Agency - Wafa. "Agricultural Statistics." [2021 - 2020 إحصائيات زراعية](#)

**Table 5: Agricultural Holdings by Holder's Gender in the West Bank and Gaza Strip, 2021**

Type / Holding	Males	Females
Crop Holdings	92,925	8,430
Livestock Holdings	17,887	1,620
Mixed Holdings (Crop and Livestock)	16,520	693
Number of Livestock and Mixed Holdings with Cattle and/or Camels	2,324	135
Number of Livestock and Mixed Holdings with Sheep and/or Goats	25,549	1,685
Livestock and Mixed Holdings with Poultry Farms	3,372	111
Beehives	2,162	85
Crop and Mixed Holdings with Field Crops	13,388	790
Crop and Mixed Holdings with Vegetables	23,444	1,124
Crop and Mixed Holdings with Horticultural Trees	100,427	8,706

Source: Palestinian Central Bureau of Statistics, 2022, *Agricultural Census 2021. Final Results – Palestine. Unpublished data.*

It is crucial to highlight the specificity of the Palestinian context in this section of the paper. One must distinguish the historical dimensions under the colonial framework, which vary from one stage to another. These can broadly be divided into two main periods: from 1948 to 1993 (pre-Oslo) and from 1993 to the present (post-Oslo).

Prior to the 1948 Palestinian displacement, approximately 550,000 people, or 55% of the population, were employed in agriculture, including both farmers and laborers.<sup>88</sup> Following the establishment of the *Palestinian Authority*, and the signing of the *Oslo Accords*, the West Bank was divided into Areas A, B, and C. This classification, particularly for Area C—which covers 3,375,000 dunams—was largely intended to consolidate control over Palestinian lands. Of this, around 2,642,000 dunams (76.3%) are directly controlled by the Israeli occupation, with regional councils of settlements overseeing 63% of that area.<sup>89</sup>

By the end of 2021, the total area under the influence of Israeli settlements in the West Bank—including closed areas and land reserved for settlement expansion—was approximately 542 km<sup>2</sup>, representing about 10% of the territory. Lands confiscated for military bases and training sites accounted for another 18%, while the Separation Barrier<sup>90</sup>

<sup>88</sup>Al-Soursani, Ghazi. “Social and Class Transformations in the West Bank and Gaza Strip – A Critical Perspective.” 2009, p. 101

<sup>89</sup>Palestinian Central Bureau of Statistics. “H.E. Ms. Awad Highlights the 43rd Annual Commemoration of Land Day in Statistical Figures.” PCBS, March 28, 2019. <https://www.pcbs.gov.ps/post.aspx?lang=en&ItemID=3429>.

<sup>90</sup> The 2002 Separation Barrier was built in the style of a border barrier. For the most part, it consists of an electronic fence with paved paths, barbed-wire fences and ditches flanking it on either side. [https://www.btselem.org/separation\\_barrier](https://www.btselem.org/separation_barrier)

and its expansion isolated over 10% of West Bank territory, affecting more than 219 Palestinian communities. Since 1967, the Israeli authorities have also confiscated around 353,000 dunams, designating them as nature reserves in preparation for eventual seizure.<sup>91</sup>

Regarding the other classifications, Area A covers about 1.000.000 dunams, Area B approximately 1.035.000 dunams, and “Other” areas around 250.000 dunams, which include nature reserves as well as H1 and H2 in Hebron under the Hebron Protocol.<sup>92</sup> Additionally, in 2018, Israel approved the confiscation of approximately 508 dunams of Palestinian land in both Areas, alongside the expropriation of hundreds of dunams due to the expansion of checkpoints and military observation points protecting Israeli settlers.<sup>93</sup>

As for Gaza, prior to October 7, 2023, the Israeli occupation imposed a buffer zone along the eastern border of the Strip, exceeding 1.500 meters in width, thereby controlling roughly 24% of Gaza’s total area of 365 km<sup>2</sup>.<sup>94</sup> Furthermore, from the successive wars and attacks on Gaza from 2008 to the present day, vast agricultural areas have been destroyed—approximately 50,000 dunams in one instance and 34,500 dunams in another—alongside near-total destruction of infrastructure, irrigation networks, and wells. Around 75% of agricultural lands were repeatedly targeted, particularly in the so-called ‘restricted access zone.’<sup>95</sup>

In addition, the agricultural sector has been subjected to multiple forms of direct interference, including chemical pesticide spraying and the opening of dams east of Gaza, which flooded farmlands. For example, according to the *Ministry of Agriculture*, in January 2020, spraying destroyed vegetable crops on 2,000 dunams, resulting in estimated losses of

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<sup>91</sup> Palestine Central Bureau of Statistics. “H.E. Dr. Awad highlights The Forty- Sixth Annual Commemoration of Land Day, 30, March, 2022, in Statistical Figures.” PCBS, March 30, 2022. <https://pcbs.gov.ps/post.aspx?lang=en&ItemID=4208>.

<sup>92</sup> Before the beginning of 1997, Israel controlled all of the Hebron area. On January 17th The Hebron Protocol was signed, concerning partial redeployment of Israeli military forces from the city. Under this agreement, Hebron was divided into two areas: H1 and H2. Control of H1 shifted to the Palestinian Authority and H2 remained under Israeli military control. <https://www.hebronapartheid.org/index.php?glossary=area-H1-H2>

<sup>93</sup> Palestinian Central Bureau of Statistics. “H.E. Ms. Awad Highlights the 43rd Annual Commemoration of Land Day in Statistical Figures.” PCBS, March 28, 2019. <https://www.pcbs.gov.ps/post.aspx?lang=en&ItemID=3429>.

<sup>94</sup> Palestinian Central Bureau of Statistics (PCBS). “Dr. Awad Reviews the 44th Anniversary of Land Day with Figures and Statistics.” Ramallah, Palestine, published on March 29, 2020. [PCBS | H.E. Dr. Awad, highlights the Forty Four Annual Commemoration of Land Day in Statistical Figures](https://www.pcbs.gov.ps/post.aspx?lang=en&ItemID=3429)

<sup>95</sup> Since 2000, Israel has implemented ‘Access Restricted Areas’ (ARA) on land for ‘security concerns’. In 2014, these Areas were already covering 17% of the Gaza Strip and 35% of the arable lands. [https://www.europarl.europa.eu/meetdocs/2014\\_2019/documents/dpal/dv/4c\\_pui\\_ara\\_factsheet\\_final\\_2016/4c\\_pui\\_ara\\_factsheet\\_final\\_2016en.pdf](https://www.europarl.europa.eu/meetdocs/2014_2019/documents/dpal/dv/4c_pui_ara_factsheet_final_2016/4c_pui_ara_factsheet_final_2016en.pdf)



\$1.25 million. Similarly, flooding from dams caused the destruction of 920 dunams of vegetable crops, with estimated losses of \$500,000.<sup>96</sup>

The Palestinian context highlights a highly specific agricultural context. The occupation and restrictive policies since 1948, including land division and confiscations; the Separation Barrier; settlements; repeated wars; and the extensive control and destruction of agricultural infrastructure and arable lands have significantly reduced agricultural production. Consequently, the future of the Palestinian agricultural sector is left undetermined and in urgent need of financial, technical, and infrastructural interventions once the hostilities cease.

At present, the situation in Gaza remains highly uncertain, particularly regarding future losses and sectoral needs after the recent attacks on civilians following October 7. Consequently, all sectors—including financial, agricultural, health, and educational—will remain in a state of uncertainty until the conflict ends and a comprehensive needs assessment can be conducted.

## **IV- Exports, Imports, and Trade Balance**

### **4.1 JORDAN**

On the one hand, if Palestine and Lebanon exhibit similar patterns in agricultural imports, exports, and their impact on the trade balance, the **Hashemite Kingdom of Jordan**, on the other hand, shows a qualitative - yet insufficient - improvement in self-sufficiency for certain commodities. This enhancement can be reflected despite, the country's agricultural trade deficit approached 2 billion Jordanian dinars during 2016–2017.<sup>97</sup> (*See Table 6*).

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<sup>96</sup>Ali Wafi and Saad Eddin Ziadeh, "The necessity for food sovereignty in Gaza in the context of the Corona pandemic, Advocating environmental rights in Gaza during the Covid-19 pandemic" Palestinian Environmental NGOs Network, pp.1-21, [https://ps.boell.org/sites/default/files/2021-02/FINAL\\_PENGO\\_N\\_Tech.%20Paper\\_EN\\_Food%20Sovereignty%20.pdf](https://ps.boell.org/sites/default/files/2021-02/FINAL_PENGO_N_Tech.%20Paper_EN_Food%20Sovereignty%20.pdf)

<sup>97</sup> Ministry of Agriculture, Jordan. Agriculture in Numbers: Agricultural Statistics 2008–2018. Directorate of Agricultural Information and Statistics, 2018, p.25 <https://bit.ly/3kwGrCM>



**Table 6: Exports and Imports in Jordanian Trade, Including Food and Agriculture** <sup>98</sup>

<b>Exports</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
Total Exports	4,674,706	4,504,224	4396,514
Agricultural and Food Exports	710,892	792,914	809,704
<b>Imports</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
Total Imports	14,420,27	14,488,61	13,720.37
Agricultural and Food Imports	2,674,785	4,319,45	4,167,10
<b>Trade Balance</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
Total	-9,745,564	-10014,382	-9323,86
Agricultural	-1,963,893	-3526,532	-3357,396

The agricultural sector in Jordan comprises approximately 55% livestock and 45% crops. The Jordanian government has historically pursued a strategy focused on domestic production, or food self-sufficiency, aiming to meet national food needs internally. In the 1970s, the country maintained a degree of food self-sufficiency alongside limited food imports. Since then, domestic production has gradually declined due to constraints on water resources, population growth, and urban expansion, which has collectively reduced the availability of arable land. <sup>99</sup>

Regarding the principal agricultural products, a 2022 report from the Department of Statistics and the Jordanian Ministry of Agriculture indicates that self-sufficiency has been attained for several items (*See Table 7*). Indeed, sources from the *Jordanian Ministry of Agriculture* indicate that the country’s overall self-sufficiency rate stands at approximately 65%.<sup>100</sup> It is noteworthy that based on the 2018 Agricultural Census in Jordan, raw agricultural products directly contributed around 5.6% to the national GDP.<sup>101</sup> However, while considering the broader impact of agro-processing and food industries, transportation, export activities, and related value chains, the sector’s total contribution increases to approximately 20% of the national GDP. <sup>102</sup>

<sup>98</sup> Interview with Nabil Nemer – Lecturer in Plant Protection and Climate Change Impact Studies at Holy Spirit University | Conducted on August 25, 2025.

<sup>99</sup>Hossam Hussein. “Jordan, Jordan’s Food Security: Heavy reliance on food imports” pp.242-252

<sup>100</sup> Interview with Imran Sawalha – Engineer at the Jordanian Ministry of Agriculture (Technical Follow-up Department) | Conducted on August 24, 2025.

<sup>101</sup> Ministry of Agriculture, Jordan. Agriculture in Numbers: Agricultural Statistics 2008–2018. Directorate of Agricultural Information and Statistics, 2018, p. 3 <https://bit.ly/3kwGrCM>

<sup>102</sup> Interview with Imran Sawalha – Engineer at the Jordanian Ministry of Agriculture (Technical Follow-up Department) | Conducted on August 24, 2025.

**Table 7: Key Jordanian Agricultural Products Achieving Self-Sufficiency, 2018<sup>103</sup>**

Product	Self-Sufficiency (%)	Domestic Production (tons)	Exports (tons)	Imports (tons)
Apricot	206	18,955	9,763	–
Dill (Fresh)	176	88,929	38,332	11
Spinach	151	606,837	204,483	8
Zucchini	143	80,351	24,322	1
Okra	115	54,250	6,927	56
Watermelon	114	111,759	13,622	–
Cauliflower	112	52,597	5,724	22
Table eggs	108	51,975	3,926	90
Cucumber	107	133,290	8,530	–
Preserved Olives	106	31,700	3,414	1,762
Olive Oil	104	25,421	1,077	0
Eggplant	103	64,162	1,644	–
Onion	101	108,572	1,266	29
Olives	101	162,661	1,805	2
Green Beans	101	8,836	139	49
Goat Meat	100	4,232	–	–
Beef	100	408,059	–	–
Lamb Milk	100	97,080	–	–
Goat Milk	100	13,744	–	–
Labneh (Strained Yogurt)	100	16,861	–	–
Hatching Eggs	100	30,760	–	–

However, in practice, this does not necessarily translate into widespread availability for consumers as highlighted by the agricultural trade deficit. Furthermore, the challenges extend beyond consumption and food security to include the sustainability and long-term continuity of agricultural production, especially concerning the protection of smallholders, the efficiency of marketing mechanisms, and the availability of agricultural production inputs.

Firstly, due to the exploitation of small-scale farmers by larger producers, smallholders are frequently constrained to sell their crops at minimal prices to major suppliers in central markets. In practice, it leads to significant undervaluation and economic harm. In certain instances, farmers must either discard their produce or sell it as animal feed instead of

<sup>103</sup> Directorate of Agricultural Information and Statistics. Agriculture in Numbers 2008-2018.



bringing it to market, since the costs of transportation outweigh the expected returns. It represents a serious crisis that undermines the capacity of small farmers to sustain their livelihoods.<sup>104</sup>

According to local experts who interact directly with farmers, official reports do not accurately reflect the situation of small-scale farmers.<sup>105</sup> While these reports portray the agricultural sector as a productive economic sector, they fail to reveal the real struggles of smallholders, including their limited capacity to endure and sustain production compared to large-scale landowners with substantial investments. As a result, a substantial segment of farmers experiences ongoing losses, with many accumulating debts, while others leave agriculture entirely to pursue alternative occupations.<sup>106</sup>

Secondly, Jordan faces marketing and export constraints, exacerbated by water scarcity, as Jordan possesses solely a single, relatively small seaport at Aqaba, located at a considerable distance from key consumer markets such as Europe.<sup>107</sup> If prior to 2011, products were exported to Europe via Syria and Turkey, the political events of that year and subsequent border closures rendered this route highly complex.<sup>108</sup>

This impact on exports is aggravated notably as Gulf countries have sought to enhance their food security by boosting domestic production, reducing their reliance on Jordanian products—particularly those with a production surplus, such as tomatoes, cucumbers, peppers, and eggplants. Both shifts have contributed to the agricultural trade deficit and decline in agricultural holdings between 2011 and 2016.<sup>109</sup> As a result, overdependence on exports and the prioritization of this strategy within the agricultural sector could jeopardize the long-term sustainability and value of agricultural land.

Hence, despite the government continuing to support elements of food self-sufficiency and to invest in the agricultural sector through economic incentives, particularly via subsidies for food designated for local consumption and purchase price support for domestically

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<sup>104</sup> Interview with Abdullah Al-Khawaldeh – Agricultural Engineer and activist in local and international projects | Conducted on September 22, 2025.

<sup>105</sup> *Ibid.*

<sup>106</sup> *Ibid.*

<sup>107</sup> *Ibid.*

<sup>108</sup> *Ibid.*

<sup>109</sup> Interview with Imran Sawalha – Engineer at the Jordanian Ministry of Agriculture (Technical Follow-up Department) | Conducted on August 24, 2025.



produced food,<sup>110</sup> a study published in 2019 indicates that over 90% of the food consumed in Jordan is imported. This highlights the country's heavy reliance on external sources for its food supply despite increasing self-sufficiency.<sup>111</sup>

This framework illustrates the tension between Jordan's historical aim of achieving *food sovereignty* and the contemporary structural challenges that necessitate continued reliance on imports, while highlighting the role of state policies in sustaining domestic agricultural capacity.

## 4.2 LEBANON

In the case of the **Republic of Lebanon**, data for 2024 show exports totaling \$2.7 billion and imports \$16.9 billion, highlighting a pronounced trade deficit. In this context, the food industry represented \$1.2 billion and animal products \$840 million, while total food import needs approached \$3 billion.<sup>112</sup> Experts describe this scenario as indicative of Lebanon's significant dependence on imports, as approximately 80% of essential food commodities are obtained from foreign sources.<sup>113</sup> This assessment highlights the current structural vulnerabilities of the Lebanese agricultural sector and underscores the urgent necessity for strategic interventions to mitigate climatic, economic, political, and security-related risks.<sup>114</sup>

The principal imported agricultural commodities include wheat, animal feed, and other grains.<sup>115</sup> Lebanon attains relative self-sufficiency in vegetables during spring and early summer, at times exporting surplus produce. However, during other periods –periods, especially between summer and winter –the country relies heavily on imports to satisfy domestic vegetable demand.<sup>116</sup>

Lebanon also exhibits significant dependence on imports in the livestock sector, mainly due to the scarcity of adequate grazing land to sustain red meat production. Poultry and egg

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<sup>110</sup>*Ibid.*

<sup>111</sup>*Ibid.*

<sup>112</sup> Wahbe, Muhammad. "Food Needs Are Not of the Same Cost, as They Do Not Exceed \$3 Billion of the Total Import Bill." Published on the website of Al-Akhbar Newspaper, Lebanon. Published on March 11, 2025. [مليار دولار عجز الميزان التجاري في عام 2024: المزيد من تشوّه الاقتصاد والمجتمع](#)

<sup>113</sup> Interview with Nabil Nemer – Lecturer in Plant Protection and Climate Change Impact Studies at Holy Spirit University | Conducted on August 25, 2025.

<sup>114</sup> *Ibid.*

<sup>115</sup> *Ibid.*

<sup>116</sup> *Ibid.*

production fluctuate from year to year, influenced primarily by producers' cost structures.<sup>117</sup> By comparison, fisheries imports remain relatively limited, whereas imports of vegetables, fruits, and legumes constitute a disproportionately larger share of total supply than domestic livestock production.<sup>118</sup>

In that regard, it should be noted that, to distinguish between crop production and livestock production, crop production accounts for approximately 60–65% of the agricultural output, while livestock production represents about 35–40%.<sup>119</sup> Crop production primarily focuses on staple and cash crops such as potatoes and tomatoes, along with olives, and fruits such as grapes and apples.<sup>120</sup>

Nevertheless, the issue of agricultural policies extends beyond mere import and export regulations as current agricultural policies have also weakened local production by allowing imported products to enter during periods of domestic production. For example, in Lebanon, the agricultural calendar—which should ideally regulate the entry of imported products according to local production seasons—is often disregarded. Practically, imported tomatoes may enter the market at the same time Lebanese farmers are producing tomatoes, undermining local production and rendering the agricultural calendar ineffective.<sup>121</sup>

Dr Ziad Yaghi has commented on this phenomenon, stating that ‘What occurs in Lebanon is similar to what we see in Tunisia. Vast areas are dedicated to olive cultivation, yet these are not primarily intended to meet domestic demand but rather for export, particularly to markets like Spain. This reflects a longstanding pattern in which land and farms in Lebanon are rented or tied to external markets. Agricultural policy prioritizes support for exportable products because this generates income for both farmers and the state.’<sup>122</sup>

Additionally, experts also emphasize that Lebanon's mountainous terrain and diverse topography, ranging from coastal areas to highlands, makes it difficult to adopt a uniform agricultural model nationwide. Variations in local climates, soil types, and rainfall levels

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<sup>117</sup> *Ibid.*

<sup>118</sup> *Ibid.*

<sup>119</sup> Interview with Lara Wakim – Director of the Continuing Learning Center at Holy Spirit University (Kaslik); formerly Deputy Director of the Higher Research Center (2019–2021) and Dean of the Faculty of Agricultural and Food Sciences (2013–2019) | Conducted on August 29, 2025.

<sup>120</sup> *Ibid.*

<sup>121</sup> *Ibid.*

<sup>122</sup> Interview with Dr. Ziad Yaghi – Lecturer at the American University of Beirut | Conducted on September 8, 2025.

create distinct agricultural realities across regions, directly affecting the types of crops grown and feasible farming methods.<sup>123</sup>

Consequently, adopting a regionalized agricultural strategy emerges as the most suitable approach to achieve balanced and sustainable agricultural development. Lebanese policies should be tailored to the specific characteristics and natural resources of each region, while considering the geographical and climatic diversity of each area, as well as the needs of local populations and traditional farming practices. This approach would allow for more efficient resource utilization and enhance the potential for achieving balanced and sustainable agricultural development at the national level.<sup>124</sup>

### 4.3 PALESTINE

By 2024, the trade balance deficit in **Occupied Palestine** had grown nearly sixfold, with exports amounting to approximately \$1,521,388 and imports totaling around \$8,270,535, yielding a deficit of \$6,749,147.<sup>125</sup> The disparity is especially marked in food commodities, where the deficit reaches approximately 5.78, equivalent to roughly 579%.<sup>126</sup> (*See Table 8*)

**Table 8: Imports and Exports of Agricultural and Food Production in Occupied Palestine, 2024**<sup>127</sup>

HS Code	Section	Exports	Imports
01	Live animals; animal products	8.557	581.023
02	Vegetable products	139.327	472.817
03	Animal or vegetable fats and oils, their cleavage products, prepared edible fats, and animal or vegetable waxes.	46,146	68.574

<sup>123</sup> *Ibid.*

<sup>124</sup> *Ibid.*

<sup>125</sup> Palestinian Central Bureau of Statistics. "Total Value of Goods and Services Imports and Exports, Net Balance, and Trade Volume in Palestine for 2023." Published on November 20, 2024. [https://www.pcbs.gov.ps/statisticsIndicatorsTables.aspx?lang=en&table\\_id=3843](https://www.pcbs.gov.ps/statisticsIndicatorsTables.aspx?lang=en&table_id=3843)

<sup>126</sup> *Ibid.*

<sup>127</sup> Interview with Imran Sawalha – Engineer at the Jordanian Ministry of Agriculture (Technical Follow-up Department) | Conducted on August 24, 2025.



This situation prompts several questions about agricultural production, both crop and livestock-based, that could be prioritized for local production to better satisfy market demand.

## **V- Key Challenges**

A review of the literature on the agricultural sector in the three countries examined in this study—the Hashemite Kingdom of Jordan, the Republic of Lebanon, and Occupied Palestine (West Bank and Gaza Strip)—along with the challenges they face in achieving *food security* and the opportunities for transitioning toward national *food sovereignty*, reveals that these challenges are largely similar, despite differences in political and economic contexts.

Insights from in-depth interviews further revealed a set of shared challenges that limit smallholder farmers, specialized researchers, and policymakers in implementing equitable and sustainable agricultural policies. From this review and comparative analysis, a number of core obstacles to achieving national *food sovereignty* in the three countries were identified, highlighting the necessity of formulating clear recommendations organized around several principal pillars.

### **1. Agricultural Production Inputs & Water Scarcity**

Farmers in the Hashemite Kingdom of Jordan, the Republic of Lebanon, and Occupied Palestine face high costs for agricultural production inputs, with water scarcity constituting the most pressing challenge.

#### **5.1.1 Jordan**

In the Hashemite Kingdom of Jordan, water is extremely scarce, making it the most critical agricultural input. Limited water resources and increasing pressure on underground reserves render water access a strategic challenge for agriculture, particularly given the rising costs of extraction and pumping.

The total water resources in 2017 amounted to approximately 1,053,6 million m<sup>3</sup>, representing an increase of about 852 million m<sup>3</sup> compared to 2008, primarily due to the



overexploitation of groundwater resources. Of these resources, 59% were surface water, 27% groundwater, and 14% treated wastewater.

More than 50% of the total water resources are used for irrigation purposes. Two-thirds of the water allocated for agriculture is consumed in the highlands, relying heavily on overexploited groundwater, while farmers in the Jordan Valley use the remaining one-third, sourced primarily from surface water.<sup>128</sup>

Hence water scarcity is the most pressing challenge for farmers in Jordan, with heavy reliance on overexploited groundwater in the Jordanian highlands and surface water in the Jordan Valley, increasing production costs and making water access a strategic factor for agriculture.

### 5.2.1 Lebanon

In the Republic of Lebanon, although water resources are relatively abundant compared to other countries in the region, the country faces significant challenges, including widespread water source pollution, mismanagement, and weak infrastructure for water provision and access. Notably, river discharge has sharply declined—by over 60% of the annual average—primarily due to human activities such as excessive pumping from rivers, groundwater recharge areas, and springs, compounded by the effects of climate change.<sup>129</sup>

Lebanon is endowed with significant water resources, notably 14 rivers, which are characterized by small catchments and short lengths, with an estimated average annual discharge of 2.800 million m<sup>3</sup>. However, due to the country's sloping terrain, over 75% of river water remains unexploited, mostly flowing into the sea. Most of the river water is used for domestic and agricultural purposes, while some rivers contribute to hydropower production, covering approximately 20% of Lebanon's electricity needs.<sup>130</sup>

The agricultural sector is the largest consumer of water, using more than two-thirds of the country's total water demand.<sup>131</sup> According to the *Food and Agriculture Organization* (FAO), in 2020, approximately 113,000 hectares of irrigated land existed within agricultural

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<sup>128</sup> Hossam Hussein. "Jordan, Jordan's Food Security: Heavy reliance on food imports" 242-252

<sup>129</sup> *Ibid.*

<sup>130</sup> Shaban, Amin. "Rivers of Lebanon: Significant Water Resources under Threats." From the Edited Volume *Hydrology*, February 17, 2021. <https://www.intechopen.com/chapters/73655>

<sup>131</sup> Younes, Mariam. "Water Scarcity in Lebanon and Its Impact on the Agricultural Sector." *REVOLVE*, October 10, 2023. <https://revolve.media/features/water-scarcity-lebanon-agriculture>.



holdings, representing about half of the cultivated land, with irrigation sources distributed equally - 50% groundwater and 50% surface water- .<sup>132</sup> The FAO also notes that the agricultural sector consumes about 61% of available surface and groundwater resources.<sup>133</sup> Nevertheless, despite this high level of consumption, farmers increasingly face water shortages.

As Dr. Lara Wakim emphasizes ‘Water is the backbone of food sovereignty. There is no true self-sufficiency in Lebanon, nor is complete self-sufficiency the goal. What is required is ‘smart partial self-sufficiency’ – understanding which products should be prioritized for local production to secure the national food basket while reducing imports. I do not advocate stopping imports entirely but rather regulating them to complement domestic production and fill gaps, not as the primary source.’<sup>134</sup> Accordingly, the lack of effective water management increases costs for farmers, reducing their ability to produce essential crops, which leads back to reliance on imports to meet local demand.

Furthermore, Dr. Ziad Yaghi notes that regarding water pollution in Lebanon, ‘the water available to the agricultural sector, especially in the south and the Bekaa Valley, is heavily polluted. The recent Israeli war further increased contamination, including lead and phosphorus in soils. In some cases, the state misrepresents land quality to companies interested in leasing, claiming it is clean, whereas the reality is otherwise. Several foreign companies operate in these regions, and the *Ministry of Agriculture* has ignored multiple reports confirming pollution to maintain investment attractiveness. A recent report by the American University of Beirut revealed that pollution levels now exceed those before the war. Another report by the global platform ‘Magavon’ highlighted the severe water crisis in Bekaa, - in the Southeast of Lebanon - confirming acute water-related challenges for agriculture there.’<sup>135</sup>

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<sup>132</sup> Food and Agriculture Organization, “FAO and Sustainable Water Management in Lebanon,” FAO. 2020, <https://openknowledge.fao.org/server/api/core/bitstreams/efcde367-b64c-4d58-a6cf-b6d358c54754/content>.

<sup>133</sup> *Ibid.*

<sup>134</sup> Interview with Lara Wakim – Director of the Continuing Learning Center at Holy Spirit University (Kaslik); formerly Deputy Director of the Higher Research Center (2019–2021) and Dean of the Faculty of Agricultural and Food Sciences (2013–2019) | Conducted on August 29, 2025.

<sup>135</sup> Interview with Dr. Ziad Yaghi – Lecturer at the American University of Beirut | Conducted on September 8, 2025.



### 5.3.1 Palestine

In **Occupied Palestine**, water scarcity is exacerbated by colonial control over resources, as well as challenges in managing the water that is available. Water sources are primarily limited to underground wells, the quality of which has declined due to pollution and rising salinity driven by geological and climatic factors.

As the Israeli occupation controls water resources, comparisons of per capita consumption reveal gross inequities: an average Israeli consumes three times more water than a Palestinian, with settlers consuming over seven times more than the average Palestinian.<sup>136</sup> *B'Tselem*<sup>137</sup> reports that settlers use 100–230 liters per day, and according to *Mekorot* – the Israeli national water company–, settler consumption exceeds Palestinian daily use by nearly threefold.<sup>138</sup>

*In conclusion, across all three contexts, the costs of water go beyond mere access, including expenses for extraction and pumping, determined by factors such as wells depth and energy sources–fuel, electricity, or solar power. Consequently, water, as a key agricultural input, constitutes a significant financial burden, markedly affecting total production costs. This directly relates to the concept of food sovereignty, as high input costs limit farmers’ ability to produce independently and rely on local production, increasing dependence on external markets and reducing communities’ control over food production and access to affordable, sustainable food.*

## 2. Fertilizers and Pesticides

Regarding fertilizers and pesticides—which represent one of the costliest agricultural production inputs—they constitute a heavy burden on farmers in Jordan, Lebanon, and Occupied Palestine.

### 5.1.2 Jordan

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<sup>136</sup> “PCBS and the Palestinian Water Authority Issue a Joint Press Release on the Occasion of World Water Day.” Palestinian Central Bureau of Statistics (PCBS), 21 March 2023. <https://rb.gy/1w27ne>

<sup>137</sup> B'Tselem is an Israeli non-governmental organization (NGO) that documents human rights violations in the occupied Palestinian territories, including the West Bank, East Jerusalem, and the Gaza Strip. Its name means “In the Image of God” in Hebrew, reflecting its focus on human dignity. <https://www.btselem.org/>

<sup>138</sup> “Undeniable discrimination in the amount of water allocated to Israelis and Palestinians”. - B'TSELEM – The Israeli Information Center for Human Rights in the Occupied Territories, February 2014, <https://bit.ly/34DJ2TH>

In the Hashemite Kingdom of Jordan, farmers face similar challenges due to high fertilizer prices and heavy reliance on imports, with fluctuations in global market prices placing significant pressure on local producers in the absence of economically viable domestic alternatives.

As of today, Jordan hosts eighteen companies and twenty-one pesticide manufacturing plants that export their products to approximately seventy to eighty countries. For pesticide companies, 95% of raw materials entering Jordan are re-exported as finished products, with only 5% remaining for the domestic market.<sup>139</sup> Several companies also import pesticides and fertilizers from China, Turkey, Europe, and Japan.

Regarding the production of fertilizers, Jordan also has significant domestic production, particularly for potash and phosphate fertilizers, owing to the country's abundant potash and phosphate resources.<sup>140</sup>

These variations of situations are exacerbated by the *Ministry of Agriculture's* aim to limit monopolistic practices. For it, although imposing price ceilings or floors is not feasible, increasing the number of import licenses has been used to enhance competition among producers and importers, thereby reducing prices. According to the *Ministry*, efforts are underway to explore alternatives to chemical pesticides and fertilizers through organic methods. Currently, there is a registration system for fertilizers and soil amendments, including organic fertilizers. Additionally, a registration system for biological control agents was launched in 2021 and is undergoing major revisions to align with international standards, such as FAO and EU guidelines.<sup>141</sup>

In the case of Jordan, reducing reliance on chemical pesticides is justified for two reasons. Firstly, they are not a sustainable solution and secondly, the evolution of agricultural pests occurs much faster than the development of new pesticides. Indeed, developing a new pesticide takes approximately ten years and costs up to one billion dollars, whereas pest outbreaks can spread within one to two years.<sup>142</sup>

### 5.2.2 Lebanon

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<sup>139</sup> Interview conducted with Rabi' Azriqat – Farmer and Agricultural Activist | Conducted on September 21, 2025.

<sup>140</sup> *Ibid.*

<sup>141</sup> *Ibid.*

<sup>142</sup> *Ibid.*



In the Republic of Lebanon, despite the presence of a diverse market for fertilizers and pesticides, the severe economic crisis and the depreciation of the national currency have rendered these inputs prohibitively expensive, forcing farmers to choose between securing essential production inputs or reducing the scale of their agricultural activities.

Additionally, despite the presence of a variety of supplies, restrictions on certain dual-use products have driven farmers to seek alternatives on the black market, leading in recent years to the widespread use of hazardous and illegal products, with noticeable overuse of pesticides.

### 5.3.2 Palestine

In the Occupied Palestine, fertilizer availability is directly linked to the constraints of the occupation, - particularly concerning chemical fertilizers - placing Palestinian farmers in a constant state of depletion. As in Lebanon, these constraints have led farmers to search for illegal alternatives, increasing further the overuse of noxious pesticides.

*Thus, the issue of fertilizers and pesticides remains a central factor in the depletion of farmers in all three contexts—whether due to dependence on external markets in Jordan, economic collapse in Lebanon or to occupation control in Palestine, –affecting production costs and the overall sustainability of the agricultural sector.*

## 3. Local Seeds

Seeds from its trials to productions represent an asset for the countries as a major source of income.

### 5.1.3 Jordan

The Hashemite Kingdom of Jordan, according to its Ministry of Agriculture, is the leading country in the Middle East in terms of seed production. Indeed, the country serves as a pivotal hub for trials and production, even for major global companies. While most commercial seed production is concentrated in East Asian countries because of lower production costs, Jordan continues to serve as a pivotal hub for trials and production, even for major global companies, and is considered as the main center for research and the





development of new seed varieties in the region with a total export valued at around 20 million Jordanian dinars.<sup>143</sup> In addition, approximately twenty-four national companies specialize in seed production nationally, each with a capital exceeding one million Jordanian dinars. These companies primarily focus on producing seeds for the most widely consumed vegetables locally.

The seed market in Jordan is characterized by openness and competitiveness, free from monopolies or crises. For instance, companies offer a wide range of varieties differing in quality and price.<sup>144</sup> This is evident in the considerable range of tomato seed prices, spanning from \$0.15 to \$5 per seed, providing consumers with a variety of choices that align with their resources and requirements.<sup>145</sup>

Jordan is home to a *National Seed Bank*, inaugurated in 2024 by His Majesty King Abdullah II. Its primary mission is the conservation of plant genetic resources rather than commercial seed production, with emphasis on wild plants and heritage varieties that provide essential raw materials for genetic improvement programs.<sup>146</sup>

#### **4. Climate Transformations**

Experts consulted for this study concur that climate change is reshaping the agricultural landscape in the region in a decidedly adverse manner.

##### **5.1.4 Jordan**

In the Hashemite Kingdom of Jordan, mountainous areas such as Irbid, Ajloun, Jerash, and Shoubak, historically received rainfall of 400–500 mm, an excellent rate for wheat cultivation. Other areas, such as the Jordan Valley plains, used to receive approximately 300 mm, which was also sufficient.

However, as of today, when evaluating alternative strategies for cultivating wheat or barley at lower costs in Jordan, the *Ministry of Agriculture* highlighted climate change as the primary factor weakening the country’s agricultural capacity in these specific areas. This is

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<sup>143</sup> *Ibid.*

<sup>144</sup> *Ibid.*

<sup>145</sup> *Ibid.*

<sup>146</sup> *Ibid.*



due to a sharp decline of these rainfall levels in recent years. In the best seasons, local production reached 12–13%, but over the past three years, it has fallen to below 5%, and in some areas to less than 1%, making wheat cultivation economically unviable.<sup>147</sup>

Hence, this form of agriculture, despite having been an integral part of the rural agricultural and economic heritage, particularly in the northern and central regions of the kingdom, this traditional agricultural pattern is currently facing a significant decline due to weak government support, whether in terms of crop pricing, provision of incentives, or agricultural insurance to protect farmers from climatic fluctuations.

### **5.2.4 Lebanon**

In **Lebanon**, agricultural conditions have also changed drastically due to severe climate fluctuations. For example, the Bekaa Valley, in the East of Lebanon, known as Lebanon’s ‘agricultural basket,’ experienced a severe shortage of irrigation water this year, leading to a reduction in cultivated areas.

Historically, Lebanon cultivated around 330,000 hectares—approximately 33% of the country’s total land area.<sup>148</sup> However, in the current year of 2025, under 200,000 hectares were sown, accounting for less than 20% of the total agricultural land.<sup>149</sup>

*These trends directly impact food sovereignty, as declining local production undermines the ability of countries to control and sustain their own food supply. Reduced rainfall and crop yields increase dependence on imports, heighten vulnerability to global market fluctuations, and limit the capacity of farmers to maintain self-sufficient and resilient food systems. In both Jordan and Lebanon, the erosion of domestic agricultural productivity threatens long-term access to affordable and locally produced food, highlighting the urgent need for climate-adaptive strategies that safeguard national food security and reinforce farmers’ control over local food resources.*

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<sup>147</sup> *Ibid.*

<sup>148</sup> Interview with Nabil Nemer – Lecturer in Plant Protection and Climate Change Impact Studies at Holy Spirit University | Conducted on August 25, 2025.

<sup>149</sup> *Ibid.*

## 5. Free Trade Agreements

Most of the respondents interviewed for this study agree that free trade regimes require thorough review, as the agreements concluded often disadvantage the states involved. Undoubtedly, countries resort to increasing imports as part of strategies to raise tax revenues, which boosts state coffers—an approach frequently promoted by international organizations such as the *World Bank* and the *International Monetary Fund* as part of Economic Adjustment Programs.

### 5.1.5 Jordan

In the Hashemite Kingdom of Jordan, experts note that external interventions clearly affect local production, including international policies, global trade agreements, and conditions imposed by the *World Bank*. These factors increase the cost of local production and hinder self-sufficiency. Internally, additional challenges arise from fragmented agricultural landownership, conversion of farmland to commercial or residential uses, and support for cheap imports, which collectively reduce incentives for local production.<sup>150</sup>

### 5.2.5 Lebanon

In the Republic of Lebanon, specialists contend that existing trade agreements with other countries need to be reconsidered, as they frequently fail to safeguard the country's agricultural and economic interests.

While Lebanon's relationships with neighboring countries and import partners are essential, revisiting these agreements is necessary to empower the agricultural sector. With effective support, good governance, and sustainable agricultural policies, Lebanese farmers would not be forced to rely heavily on imports, and local production could be encouraged and expanded.<sup>151</sup>

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<sup>150</sup>Interview conducted with Rabi' Azriqat – Farmer and Agricultural Activist | Conducted on September 21, 2025.

<sup>151</sup>Interview with Lara Wakim – Director of the Continuing Learning Center at Holy Spirit University (Kaslik); formerly Deputy Director of the Higher Research Center (2019–2021) and Dean of the Faculty of Agricultural and Food Sciences (2013–2019) | Conducted on August 29, 2025.

### 5.3.5 Palestine

The context in **Occupied Palestine** is even more complex as the Israeli occupation fully controls all border crossings, severely restricting Palestinian trade and mobility. Furthermore, the economic agreement under the Oslo framework - *the Paris Protocol*<sup>152</sup> - is widely viewed as deeply unjust to Palestinians, exacerbating trade deficits and preventing the development of domestic production, particularly in agriculture. This is especially restrictive when Palestinians seek to import specific seeds, agricultural machinery, or equipment, limiting their capacity to maintain or expand agricultural self-sufficiency.<sup>153</sup>

*These findings indicate that trade policies and reliance on external imports are closely linked to the issue of food sovereignty. High import levels, trade restrictions, and international agreements that do not consider local production all reduce the ability of states and farmers to control their food production and ensure its sustainability, increasing dependence on external markets and undermining national food security.*

## VI- Conclusion

An assessment of the agricultural realities in **the Hashemite Kingdom of Jordan, the Republic of Lebanon, and Occupied Palestine** demonstrates that relying solely on a *food security* approach is inadequate for guaranteeing the right to food in an equitable and sustainable way, in light of various structural and policy-related challenges. It highlights the need to adopt the concept of *food sovereignty* as a more comprehensive framework, connecting the right to food with the right to manage resources and national agricultural policies in a manner that promotes social justice and economic independence.

The evidence outlined in this policy paper prompts inquiry into the equity of food production and distribution systems, situating the analysis within the framework of international Human Rights that enshrined the right to food as a fundamental aspect of human dignity. As affirmed by *Article 25 of the Universal Declaration of Human Rights* every individual has the right to an adequate standard of living that ensures the health and

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<sup>152</sup> The Paris Protocol was signed in 1994, incorporating amendments into the Oslo II Accords of 1995. Essentially, the Protocol integrated the Palestinian economy into the Israeli one through a custom union with a regulated relationship and interaction between Israel and the Palestinian Authority in six major areas: customs, taxes, labor, agriculture, industry and tourism. [https://unctad.org/system/files/information-document/ParisProtocol\\_en.pdf](https://unctad.org/system/files/information-document/ParisProtocol_en.pdf)

<sup>153</sup> Interview with Dr. Ibrahim Rubaiea – PhD in Political, International, and Development Studies | Conducted on July 2, 2025.



well-being of oneself and of their family, including access to food, clothing, housing, healthcare, and essential social services.<sup>154</sup> Similarly, *Article 11 of the International Covenant on Economic, Social and Cultural Rights* emphasizes the right to a decent standard of living, encompassing adequate food, housing, and clothing, as well as the continuous improvement of living conditions.<sup>155</sup> Finally, as the mobilized framework of the *Sustainable Development Goals (SDGs)* reinforces these commitments are more than ever global priorities, ranging from the eradication of poverty (Goal 1) to the elimination of hunger (Goal 2).<sup>156</sup>

Additionally, analysis of the indicators and data presented in this policy paper further signify that the economies of these countries remain in the process of development and confront substantial challenges in ensuring adequate food provision. This scenario can be attributed to multiple factors, including the configuration of the global food trade system, the conditions set by international financial institutions such as the *World Bank* and the *International Monetary Fund*; and trade regulations established under the *World Trade Organization (WTO)* framework. Besides, national policies in many of these countries require thorough review to ensure that support for essential food commodities is provided in a more equitable and sustainable manner.

Indeed, although public policies in all three countries focus on *food security*, the current stage calls for a conceptual shift toward *food sovereignty*, which places decision-making over food production directly in the hands of local communities, relies on equitable local resource management, and reduces dependency on external markets.<sup>157</sup> The three countries must officially adopt this concept in their national strategies and establish genuine partnerships with Civil Society Organizations (CSOs) and agricultural movements to ensure that agriculture functions as a tool of national sovereignty rather than merely an economic sector subordinate to import-driven policies.<sup>158</sup>

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<sup>154</sup> United Nations. "Universal Declaration of Human Rights," United Nations, 10 December 1948, <https://www.un.org/en/about-us/universal-declaration-of-human-rights>

<sup>155</sup> United Nations. "International Covenant on Economic, Social, and Cultural Rights," United Nations Human Rights Office of the High Commissioner, adopted 16 December 1966, <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights>

<sup>156</sup> United Nations Development Programme. "What Are the Sustainable Development Goals?" UNDP. 2015. [www.undp.org/sustainable-development-goals](http://www.undp.org/sustainable-development-goals).

<sup>157</sup> Interview with Dr. Ibrahim Rubaiea – PhD in Political, International, and Development Studies | Conducted on July 2, 2025.

<sup>158</sup> *Ibid.*





At another level, individual interviews also reveal that current generations have lost a significant portion of the authentic agricultural knowledge that once formed the core of the relationship between humans and their land. This knowledge was accumulated by ancestors over centuries of practice and experience in farming and food production.

In practice, as of today, younger generations lack traditional skills for managing local crops, particularly whole wheat, which historically was the staple of rural tables and the basis for various types of traditional bread. This agricultural heritage has been undermined by modern consumption patterns reliant on white flour and industrial products, leading to the erosion of local food culture and the loss of part of the agricultural and national identity connected to it. Reviving this knowledge is not merely a technical matter; it represents an act of resistance aimed at preserving food heritage and rebuilding the relationship between people and their natural resources.

Consequently, as of today, both food production and trade in these countries are marked by a persistent dependency, further compounded by a technological gap that limits their ability to access and utilize advanced tools. Within this context, the *Food & Agriculture Organization* (FAO) analyses of global risk levels in the food sector underscore structural imbalances in food production and distribution, even if not explicitly articulated. International reports also emphasize labor shortages in the agricultural sector—the main source of food—which are especially pronounced in low and lower-middle income countries, including the Hashemite Kingdom of Jordan, the Republic of Lebanon, and Occupied Palestine, thereby directly influencing *food security*.

**The policy paper identifies several key findings:**

***Persistent Food Insecurity:*** Food insecurity remains a prominent feature in all three countries, evident through high poverty rates, unequal access to food, and the direct impacts of economic crises, political instability, wars, and occupation. This reflects the fragility of current systems, which rely more on imports than on domestic production.

***Vulnerable Agricultural Labor Force:*** Although vital to the economy, the agricultural workforce predominantly functions under seasonal and unprotected employment arrangements, marked by extensive informal labor and minimal social protection or





stabilization programs, thereby constraining the development of a sustainable agricultural sector.

***Structural Transformations Experienced:*** Within the agricultural sector, structural transformations in all three countries since the 1960s have radically altered the orientation and priorities of agricultural policies. Whereas government support was once directed toward strengthening local production and ensuring food security for the population, it gradually shifted toward supporting export-oriented crops linked to external markets, such as citrus, potatoes, and apples, which require significant investments and high capital. This shift was not merely an economic choice; rather it reflects a political and economic orientation toward integration into the global market at the expense of rural development and self-sufficiency.

As a result, class disparities within the agricultural sector have widened, with a small group of large-scale farmers and agribusiness actors dominating support programs and export-oriented projects, while smallholders reliant on subsistence farming face rising production costs and diminishing government protection. This trajectory marginalized vulnerable rural populations, weakened agriculture's role as a foundation for social and economic cohesion, and rendered the agricultural sector more fragile in the face of internal and external crises, thereby reducing its capacity to ensure food sovereignty in the three countries.

***Underutilized Agricultural Land:*** Large areas of agricultural holdings remain uncultivated due to limited support; weak public investment; or challenges related to land ownership and valuation. This results in the wastage of natural and human resources that could otherwise enhance local production and reduce dependency on external markets.

***Trade Imbalances:*** Regarding exports, imports, and trade balance, all three countries face significant structural imbalances. The cost of importing food and production input exceeds agricultural exports, exacerbating trade deficits and reinforcing dependency on the global economy rather than fostering a self-sufficient production base.





**Limited Agricultural Budgets:** A review of the budgets of ministries of agriculture reveals that the sector's share remains very limited. Consequently, programs and policies aimed at strengthening agricultural infrastructure or supporting small-scale producers remain weak, reflecting the limited political priority afforded to the agricultural sector.

**Challenges in Production Inputs:** Inputs such as water, fertilizers, feed, and local seeds face dual challenges—scarcity and high costs, as well as dependence on external sources. This situation diminishes farmers' ability to achieve production autonomy and renders food security contingent upon the continued inflow of these inputs from abroad.

**Climate change:** The issue of climate change is of critical importance and must be addressed proactively before its impact deepens, notably as it is destroying decades of traditional agricultural patterns. Moreover, the lack of investment in rural infrastructure and the absence of effective water management policies have made rainfed agriculture increasingly vulnerable to droughts and climate variability. Although this type of farming represents a pillar of food sovereignty and a foundation for wheat self-sufficiency, its marginalization in favor of irrigated or export-oriented crops has made Jordan increasingly dependent on imported wheat, thereby threatening food security and undermining the country's ability to control its most strategic crops.

*Based on these findings, the shift from a focus on food security, with its limited economic rationale, toward the adoption of food sovereignty emerges as an urgent necessity. This approach facilitates the formulation of agricultural and economic policies that strengthen local production from the grassroots, protect the rights of farmers and agricultural laborers, and advance social justice and sustainable food sovereignty in the Hashemite Kingdom of Jordan, the Republic of Lebanon, and Occupied Palestine.*

## **VII- Recommendations**

### **1. Taking on Policies and Planning**





**Address institutional fragmentation:** Handle the clear institutional fragmentation in agricultural governance, as competencies are overlapping among multiple ministries—including Agriculture, Economy, Industry, and Environment—which hinder effective policy implementation. It is therefore recommended to establish a *High National Authority for Food Sovereignty and Security*, directly linked to the Prime Minister’s office, tasked with coordinating among relevant ministries and public institutions. This authority should include representatives from universities, the private sector, civil society, and international organizations. It must operate under a transparent mechanism and be granted executive powers to ensure the continuity of agricultural policies, preventing their alteration due to ministerial changes or political divisions.

## **2. Improving Agricultural Knowledge and Education**

**Strengthen the Connection Between Individuals and Land:** Focus on sustainable agricultural investment rather than purely commercial interests. This can be achieved through field-based and experimental activities that simulate local realities, engaging policymakers, civil society organizations, and grassroots actors.

**Provide Agricultural training:** Shift from a quantitative, commercial model toward an approach that responds to climate and economic transformations. It is crucial that universities and research centers orient their programs toward sustainable, high-value crops, and integrate agricultural curricula with environmental management and food value chain concepts. Additionally, it is recommended to develop a national continuous training network for farmers that combines academic knowledge with field-based expertise.

**Integrate Agricultural knowledge into Curricula:** Incorporate systematic and non-systematic agricultural activities into educational curricula, emphasizing natural agriculture that relies on local resources, including rainwater harvesting and local seeds, to empower future generations to view food as a tool for national sovereignty.

**Enhance Tools and Guidance for Smallholders:** Develop tools and guidelines to facilitate access for smallholder farmers and their products, promoting inclusiveness in local markets and strengthening links between consumers and local producers.





**Fund further Agricultural Research:** Allocate budgets to support productive agricultural research that serves smallholder farmers and healthy production – both plant and animal, – with a focus on improving quality and reducing dependency on external inputs.

**Develop Agricultural Schools:** Encourage the establishment of specialized agricultural schools in all key agricultural regions, based on traditional and natural farming curricula, emphasizing sustainable use of local resources to transfer agricultural knowledge to future generations.

**Foster National Agricultural Libraries:** Establish national agricultural libraries providing sufficient resources and knowledge for researchers and practitioners, supporting the principles of national food sovereignty and access to accurate information on sustainable farming techniques.

### ***3. Enhancing Sustainable and Natural Agriculture in Policies and Development Plans***

**Align Policy with Local Resources:** Implement agricultural policies that rely on local resources and avoid excessive chemical use, aiming to strengthen a resilient agricultural economy, reduce dependence on external or occupying powers, and ensure healthy and sustainable production.

**Transfer Knowledge:** Encourage smallholder farmers and food sovereignty activists to share expertise in sustainable agriculture—including water harvesting and local seeds—with other farmers to promote the spread of healthy and sustainable production practices.

### ***4. Raising Healthy Food Awareness***

**Cultivate Health-Focused Consumption:** Emphasize the health dimension of food consumption, raising awareness of chronic disease risks associated with current dietary patterns through school curricula and consumer protection guidelines issued by relevant ministries.

**Integrate Food and Health in Education:** Incorporate food and health education programs at all educational and community levels to enhance citizens' capacity to make healthy and





sustainable dietary choices, reflecting the principle of food sovereignty and strengthening national food security.

### ***5. Fostering Agricultural Resources and Support***

**Review Financial Support:** Reassess allocations for the agricultural sector to ensure smallholder farmers benefit, focusing on financial and advisory support, activating agricultural insurance and risk mitigation funds, and enhancing economic and social empowerment.

**Innovate in Financial Tools:** Explore the creation of innovative financial instruments, such as agricultural or social banks, to support poor and small-scale farmers.

**Integrate further Agriculture into National Plans:** Include smallholdings in national budget plans and agricultural strategies, increasing exemptions and legal facilitation for registering and developing agricultural cooperatives.

### ***6. Supporting Local Consumption and Sustainable Production***

**Advance Policies to Promote Local Products:** Establish official policies encouraging consumption of products from local smallholder farmers, including both plant and animal products, to reduce dependence on imports and strengthen the local agricultural economy.

**Regulate Input Prices:** Support dialogue between official authorities and active organizations to regulate agricultural input prices, promote social justice among farmers and encourage natural, resource-based farming techniques to reduce costs and increase sustainability.

### ***7. Addressing Natural Resource and Water Management***

**Review Water Allocation:** Allocate available water sources, including wells and springs, to support small-scale agricultural production, protecting and geographically managing these resources for all smallholder areas.

**Encourage Water Harvesting and Land Rehabilitation:** Promote rainwater harvesting, construct water reservoirs, encourage land reclamation to prevent soil erosion, and enact legislation to optimize agricultural water use for smallholder benefit.





**Reuse Wastewater:** Treat and utilize wastewater for sustainable natural agriculture.

### ***8. Reviewing Land Use and Distribution***

**Promote Equitable Land Use:** Ensure fair utilization of endowment lands to support youth, women, and smallholder farmers in producing healthy and diverse food, promoting sustainable natural agriculture in lands susceptible to confiscation.

**Sustain Strategic Local Production:** Support production of strategic local crops such as wheat, olives, and dates through financial and technical support and protection of local products via appropriate taxation policies and promotion of internal consumption.

### ***9. Supporting Farmer Protection and Market Justice***

**Protect Smallholders:** Implement mechanisms to protect small farmers from exploitation by intermediaries in product marketing and shield consumers from monopolistic practices and import dumping.

**Support Environmental and Traditional Agriculture:** Foster prioritization by Ministries and civil society organizations of smallholder farmers as the backbone of national agricultural resilience.

### ***10. Improving Food Safety and Monitoring***

**Enhance Chemical-Free Local Production:** Promote local resource-based production free of chemicals, supporting food and health awareness programs through ministries and field organizations, including establishing joint laboratories to monitor food quality.

**Raise Health Awareness Campaigns:** Conduct campaigns highlighting the importance of healthy food for public health, linking primary healthcare programs to healthy dietary practices.





## ***11. Enhancing Agricultural Land and Legal Policies***

**Regulate Land Use:** Implement laws and policies to regulate the sale and ownership of agricultural lands, prevent conversion to non-agricultural uses, and reconsider classification of agricultural and industrial areas to serve sustainable agriculture.

**Monitoring and Advocacy:** Support monitoring of occupation-related violations on land and farmers and develop international awareness campaigns aligned with relevant global conventions, including the UN Declaration on the Rights of Peasants and Other People Working in Rural Areas.

## ***12. Increasing Integrated Network of Actors***

**Create Comprehensive Network:** Establish a strong network of all actors in food sovereignty to exchange knowledge and strengthen relationships between production and consumption. Producers should find a supporting local consumer base.

**Activate Networks:** Implement this network through national and community institutions, individual initiatives, and smallholder farmers, unifying efforts toward advancing food sovereignty.

### **Implementation Steps:**

1. Form a joint committee of all relevant actors to develop strategic plans and a clear vision for food sovereignty.
2. Promote volunteer activities and shared local markets, encouraging participation from consumers and producers in both rural and urban areas.
3. Utilize modern tools and technologies for communication and networking to achieve strategic objectives.
4. Coordinate and diversify crop production among initiatives and cooperatives to avoid oversupply, while aligning livestock farming across different regions.

## ***13. Developing Agricultural Cooperatives***

**Raise Awareness and Functionality:** Raise awareness among Cooperatives to be fully aware of their importance and combine financial, manual, and knowledge-based efforts.





### **Operational Criteria:**

1. Led by practicing farmers to reflect the principle of landownership by those who cultivate it.
2. Maximize self-reliance, minimizing external funding that may limit food sovereignty, establishing cooperatives based on actual needs rather than funding opportunities.
3. Ensure reciprocal relations between cooperatives under the framework of national food sovereignty, adopting a unified reference system.

### ***14. Activating All Available Agricultural Land***

**Advance Community Engagement:** Cultivate Communities' arable holdings—including initiators, farmers, and supporting consumers—without awaiting official directives.

### **Mechanisms:**

1. Utilize public lands, including endowment and government lands, empowering youth and women to increase employment opportunities and local production.
2. Improve water sources and farm roads to ensure access for all participants and reduce resource gaps.

### ***15. Increasing Collaboration with Local Councils and Institutions***

**Foster Partnerships:** Enhance work between Coalitions, initiatives, civil society organizations and local councils to maximize land use in rural areas:

1. Cultivate unused lands for local communities.
2. Plant fruit-bearing trees along roads and streets for economic value.
3. Plan with municipal councils to facilitate community farms.
4. Establish agricultural committees in each village to replicate experiences.
5. Provide necessary agricultural infrastructure (water networks, farm roads, farmers' markets) to support environmentally sound, resource-based farming.
6. Promote collective action to protect farmers' lands and sovereign production tools.

### ***16. Adopting Natural and Environmental Agriculture***





**Embrace Natural Resource-Based Farming:** Implement natural, resource-based agriculture without chemicals, covering all plant and animal production components.

**Practical Measures:**

1. Produce and use of local seeds, aiming for seed self-sufficiency through community seed houses.
2. Utilize rainwater harvesting and smart irrigation, including natural spring water.
3. Maintain soil fertility physically and biologically using local natural resources.
4. Recycle plant and animal residues for animal feed or organic fertilizer.
5. Invest in solar energy in food processing and agricultural production.

***17. Fostering Access to Local Seeds***

**Widen Seed Banks:** Expand national/community seed bank branches and establish a national seed library in all governorates for all farmers to access local seeds.

***18. Improving Soil Moisture Conservation and Fertility***

**Natural Practices:**

1. Mulch soil with plant residues.
2. Increase organic matter using natural compost and dry herbs.
3. Build stone terraces to prevent erosion.
4. Add straw around the roots to retain moisture.

***19. Avoiding Chemicals and Genetically Modified Crops***

**Cease the use of Synthetic Inputs:** Stop using chemical fertilizers and processed feed to reduce pest spread and maintain livestock nutritional value.

**Foster Organic Fertilization:** Enhance organic fertilization to balance soil and plant nutrients, supporting pest resistance.

**Sustain Soil Microbial Life:** Preserve soil microorganisms and beneficial worms, apply balanced irrigation and reduced tillage to maintain fertility.





## ***20. Establishing Facilities for Organic Production***

**Build Organic Fertilizer Plants:** Establish cooperative-level facilities to ensure the availability of natural and low-cost production inputs.

## ***21. Adopting Intercropping and Crop Rotation***

**Diverse Farming Systems:** Implement intercropping and diversified farming to avoid monoculture, geographically and temporally distributing crops to protect land and water and achieve a sustainable agricultural cycle.

**Replicate Successful Practices:** Promote successful models to reduce plowing, lowering costs and preserving soil.

## ***22. Organizing Production Groups and Reciprocal Practices***

**Foster Food Sovereignty Clusters:** Promote natural agriculture and proper livestock rearing within production clusters at household, village, and national levels.

**Guarantee Reciprocal Relationships:** Ensure horizontal and vertical transfer of knowledge and practices among farmers, consumers, and institutions to support a sustainable local food system.

## ***23. Recommendations Specific to the Palestinian Context***

**Expose and Pressure:** Launch campaigns to expose Israeli occupation practices and pressure it to end its control over resources and crossings, which have been clearly used as tools of starvation and food manipulation against Palestinians, particularly evident during the recent extermination campaigns.

**Document Violations:** Initiate campaigns highlighting **agricultural and environmental violations** committed by the occupation in Palestine, as well as during near-daily attacks on southern Lebanon and the Bekaa Valley in October 2023, which heavily target agricultural lands and deliberately pollute water resources in both Lebanon and occupied Palestine.





**Protect and Restore Land:** Address settlement expansion and land confiscation by protecting open agricultural areas and encouraging the reclamation of threatened lands. Implement policies to limit the commodification of agriculture and prevent its conversion into a dependent cash economy. Activate agricultural cooperatives and promote resilient rainfed (dryland) agriculture as a sustainable socio-environmental model ensuring farmers' continued presence on their land.

**Build Resilient Agricultural Systems:** Develop an emergency and as-independent-as-possible agricultural system free from Israeli constraints. Launch programs to rehabilitate damaged lands, establish local seed banks to preserve threatened agricultural biodiversity, and support women and young farmers as key drivers in revitalizing community-based food production.

**Develop a Palestinian Food Sovereignty Strategy:** Formulate a comprehensive Palestinian food sovereignty strategy integrating governmental, civil society, and research efforts. This strategy should promote local production, support popular markets, and rebuild Palestinian food culture based on indigenous grains and traditional foods, restoring the food identity as a core component of national identity.

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## Individual Interviews

1. **Interview with Hind Al-Batta** – Researcher at the Social and Economic Policy Observatory (SEPO) | Conducted on June 30, 2025.
2. **Interview with Dr. Ibrahim Rubaiea** – PhD in Political, International, and Development Studies | Conducted on July 2, 2025.
3. **Interview with Imran Sawalha** – Engineer at the Jordanian Ministry of Agriculture (Technical Follow-up Department) | Conducted on August 24, 2025.
4. **Interview with Nabil Nemer** – Lecturer in Plant Protection and Climate Change Impact Studies at Holy Spirit University | Conducted on August 25, 2025.
5. **Interview with Lara Wakim** – Director of the Continuing Learning Center at Holy Spirit University (Kaslik); formerly Deputy Director of the Higher Research Center (2019–2021) and Dean of the Faculty of Agricultural and Food Sciences (2013–2019) | Conducted on August 29, 2025.
6. **Interview with Dr. Ziad Yaghi** – Lecturer at the American University of Beirut | Conducted on September 8, 2025.
7. **Interview conducted with Rabi' Azriqat** – Farmer and Agricultural Activist | Conducted on September 21, 2025.
8. **Interview with Abdullah Al-Khawaldeh** – Agricultural Engineer and activist in local and international projects | Conducted on September 22, 2025.

