







CONCISE STUDY

GENDER-SENSITIVE VALUE CHAINS ANALYSIS FOR AGRIFOOD SECTOR DEVELOPMENT IN LEBANON

Plant Production, Forestry, Fisheries and Aquaculture, Animal Production, and Agro-Processing



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Abbreviations

CAS Central Administration of Statistics

FAO Food and Agriculture Organization of the United Nations

FGD Focus Group Discussion

FTL Fair Trade Lebanon

GBC Gender-Based Constraints

GBV Gender-Based Violence

GSVC Gender-Sensitive Value Chain

IFAD International Fund for Agricultural Development

ILO International Labour Organization

IO International Organization

KII Key Informant Interview

LBP Lebanese Pound

LFHLCS Labor Force and Household Living Conditions Survey

MoA Ministry of Agriculture

MoL Ministry of Labor

NGO Non-Governmental Organization

SME Small and Mid-sized Enterprises

UNDP United Nations Development Programme

UN Women United Nations Entity for Gender Equality and the Empowerment of Women

UoB University of Balamand

USD United States Dollar

VC Value Chain

WEE Women's Economic Empowerment

WEF World Economic Forum

Executive Summary

Under the scope of the Canada-funded project implemented by the Food and Agriculture Organization of the United Nations (FAO) in Lebanon in coordination with the Ministry of Agriculture (MoA), General Directorate of Agriculture and General Directorate of Cooperatives and titled "Support to Women's Cooperatives and Associations in the Agrifood Sector in Lebanon" (رافدات الريفات), Fair Trade Lebanon (FTL) completed a "Gender-Sensitive Value Chain Analysis of the Agrifood Sector in Lebanon" study. In Lebanon, the participation in agro-food cooperatives and associations, particularly for women, remains limited due to a number of impeding factors which include: (1) the limited access to infrastructure and services, (2) the restricted knowledge and skills in agribusiness, (3) the patriarchal system that governs the sector, and ultimately gives women restricted roles and responsibilities without the possibility for upward social mobility and decent employment. FAO and FTL in consortium with Infopro, a market research company in Lebanon that was in charge of the data collection process completed the analysis in July 2021. These challenges are encountered on various levels, where working women in agriculture as individuals, as part of a family business, or as part of a cooperative all suffer from these constraints.

This study identifies Value Chain (VC) opportunities for women cooperatives, associations and individuals by adopting the FAO Gender-Sensitive Value Chain (GSVC) framework of analysis. In addition to the core and extended VC levels, as well as the national and global enabling environment, this framework adds 2 dimensions to be analyzed which are the individual and household levels, the areas in which gender inequalities frequently start from. Therefore, adding these 2 levels of analysis facilitates the systematic integration of gender equality into VC development programmes and projects¹. In addition to experts for each sub-sector, namely Plant Production, Forestry, Fisheries and Aquaculture, Animal Production and Agro-Processing, this study included a gender consultant who played a major role in the different phases of the study. These included preparing and giving workshops to the sub-sector experts prior to the literature review and analysis, and aligning their work within a gender framework; also, participating in the data collection phase, where the consultant revised the data collection tools prepared by the sub-sector experts for the Key Informant Interviews (KIIs), Survey and Focus Group Discussions (FGDs) and attended the majority of the KIIs. The consultant additionally revised the analysis of each sub-sector, included a gender assessment and assisted in the study's reporting.

Due to the delays this study endured, several activities were added to the initial deliverables as mitigation measures to alleviate the impact of such interruptions on the beneficiaries' business plan development, another component of the Canada funded FAO project. As such, the literature review phase was followed by a meeting between sub-sector experts with the Project facilitators to update them on the initial findings. A further unplanned activity occurred after the FTL's submission of progress report 1 (on the literature review phase) and progress report 2 (on the KIIs phase): it involved a second meeting between the sub-sectors experts and the study's beneficiaries, where they were informed about the KIIs findings.

¹ The FAO Gender Gender-Sensitive Value Chain (GSVC) framework of analysis, 2018. https://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1175525/

As the data collection process took much longer time that expected because of the lockdowns, inability to perform in-person survey, and the forced switch into a Computer Assisted Telephone Interviewing survey, an additional activity was put in place: it consisted of a debriefing session, this time addressed from the experts to the Project beneficiaries directly. During the session, the experts discussed the identified opportunities, each in their respective sub-sectors, and gave practical and operational recommendations women can consider, if they wish to adopt a certain opportunity; this activity was concluded by a Questions & Answers session, in which beneficiaries asked experts directly about specific concerns they have, or opportunity they were interested in.

Gender Glossary

Gender: socially constructed roles, behaviors and characteristics that a given society considers appropriate for males and females. These roles and characteristics are acquired through socialization processes: people are born female or male, but learn to be women or men. Unlike sex, which is biological, gender attitudes can change and develop over time.²

Gender vs Women: Women are a category of people; gender is the socially constructed difference between women and men. This results in certain power relations and dynamics, causing inequality in people's capacity to make choices. As women often lag behind in this respect, many development interventions focus on the empowerment of women.³

Gender-aware: Programs that seek to understand the differences between men and women and how gender may affect programming. Gender concerns are integrated into some aspects of the program life cycle such as market research, and participation targets between men and women are established and monitored. Women's Economic Empowerment (WEE) is not a key objective of the program.⁴

Gender Mainstreaming: Programs that explicitly integrate women's economic empowerment into all aspects of the program cycle. Examples include: conducting gender-responsive market research; gender-responsive sector and intervention selection; identifying key entry points for women in targeted VCs; strategies for enhancing women's participation and leadership; and gender-responsive results measurement systems. Interventions aim to facilitate change for female and male beneficiaries. WEE is one of the key objectives of the program.⁵

Gender Roles: are when a person is expected to act in a certain way based on society expectations related to their Gender. Behaviors learned in a specific community, or other particular groups that set the conditions of what constitutes the tasks or responsibilities specific to males or females. Gender roles are affected by age, race, social class, religion, and geographic environment, economic environment, and political environment. Changes often occur in gender roles in response to the changing economic, natural, and political conditions, as well as development efforts.⁶

Gender-Based Violence (GBV): may affect women and men, boys and girls. However, highest percentages remain in terms of men committing crimes, which is why it is important to involve men as part of the solution. GBV is considered to be one of the most serious human rights issues. A countless

² FAO (2014), Developing gender-sensitive value chains: A guiding framework, Retrieved at: https://www.fao.org/3/i6462e/i6462e.pdf

³ FAO (2011), Module 1: Conceptual framework: gender issues and gender analysis approaches, Retrieved at: https://www.fao.org/3/md280e/md280e03.pdf

⁴ UN ESCWA (n.d.), Gender Glossary: Gender Awareness, Retrieved at: https://www.unescwa.org/sd-glossary/gender-awareness

⁵ ILO (2017), Gender Equality Tool: Definition of Gender Mainstreaming, Retrieved at: https://www.ilo.org/public/english/bureau/gender/newsite2002/about/defin.htm

⁶ European Institute for Gender Equality (n.d.), Gender Roles, Retrieved at: https://eige.europa.eu/thesaurus/terms/1209

number of persons in the world are being subjected to physical, sexual and mental abuse, and the highest rates still touch women and children. there are different types of GBV: physical, emotional, sexual and economic violence.⁷

Gender Discrimination: Gender discrimination is unequal treatment of an individual or group of individuals based on gender. Workplace gender discrimination comes in many different forms, but generally it means that an employee or a job applicant is treated differently or less favorably in terms of pay, working hours, etc., because of their sex or gender, or because the person is affiliated with an organization or group that is associated with a particular sex or gender.⁸

Equal Pay for Equal Work: Equal pay for equal work is the concept of labor rights that individuals doing the same work should receive the same remuneration. It is most commonly used in the context of sexual discrimination, in relation to the gender pay gap. Equal pay relates to the full range of payments and benefits, including basic pay, non-salary payments, bonuses and allowances. Some countries have moved faster than others in addressing the problem.⁹

Equality and Equity: Gender equality is linked to sustainable development and is vital to the realization of human rights for all. The overall objective of the gender equality is a society in which women and men enjoy the same opportunities, same rights and same obligations in all spheres of life. Equality between men and women exists when both sexes are able to share equally in the distribution of power and influence, have equal opportunities for financial independence, enjoy equal access to education and the opportunity to develop personal ambitions, interests and talents; share responsibility for the home and children and are completely free from coercion, intimidation and GBV both at work and at home. Gender equity is used to refer to fair treatment of women and men, according to their particular needs. This may include equal treatment, or treatment that is different but considered equivalent in terms of rights, benefits, responsibilities and opportunities. Achieving gender equality implies changes for both men and women. Lives of men are just as strongly influenced by gender as those of women. ¹⁰

Women's Empowerment: Empowerment can be defined as "a process by which those who have been denied the ability to make strategic life choices acquire the ability to do so". In relation to women and VCs, empowerment is about changing gender relations in order to enhance women's ability to shape their lives.¹¹

⁷ Ibid

⁸ Ibid

⁹ Equality and Human Rights Commission (n.d.), What is Equal Pay?, Retrieved at: https://www.equalityhumanrights.com/en/advice-and-guidance/what-equal-pay

¹⁰ Ibid

¹¹ Ibid

Background

After decades of corruption and bad governance, Lebanon is currently facing the greatest financial crisis since the 1850s. In 2021, all industries are on the brink of collapse: exponential devaluation of the Lebanese Pounds (LBP) vs. the United States Dollars (USD), shortage in hospital equipment, harsh fuel scarcity, unavailability of medicine in pharmacies including the chronic disease ones, unofficial capital control imposed by the banks without access to one' funds, etc. It is important to note that this crash has been accelerated by the on-going Syrian crisis that started in 2011: the war in Syria has created a spill over to Lebanon impacting negatively the country on many fronts, namely humanitarian, socioeconomic, and political impact. By the end of 2020, Lebanon was hosting around 1.5 million Syrian refugees out of a population of almost 4.5 million Lebanese, creating the second highest density of refugees per capita (159 per 1 000 habitants, excluding the Palestinian refugees).

Adding to this inevitable economic crisis, the neglect amongst the ruling and executive power in Lebanon have led to one of the largest non-nuclear explosions ever recorded in history: The Beirut Port explosion on 4 August 2020 that has devastated the city, resulting in more than 200 casualties, 6 500 injured and more than 15 billion USD in property damage in the city and its surroundings. Up until the completion of the study in October 2021, and after two years of the 2019 revolution's breakout and the massive popular movements that followed refuting the unprecedented poverty level Lebanon has been going through, deterioration on the Lebanese scenery continues with political disputes hindering the execution of the required reforms for the economy to recover. Such an unstable situation only pushes already susceptible populations into more vulnerability: women in particular, who account to almost half of the Lebanese population, continue to be greatly affected by the job losses in sectors which were heavily female-dominated, such as the health sector, the bank sector, and the education sector.

Additionally, women in Lebanon have been suffering on many levels long before the current economic deterioration in the country: despite Lebanon's ratification of the UN Convention on the Elimination of All Forms of Discrimination Against Women, which outlines the social-economic, and political rights and participation of women, Lebanon's legal framework maintains several discriminatory laws and policies that prevent gender equality and women's socio-economic empowerment, integration and protection. First, Lebanon's constitution does not make explicit reference to gender equality in relation to civil and political rights and fails to specify or protect against gender-based discrimination. Also, a more evident gender-discriminating law is the nationality law that denies Lebanese women the right to pass the nationality to their children. Thus, the absence of laws that ensures gender equality is the main reason behind Lebanon's failure to empower women and give them the opportunity to play their part in achieving sustainable development. This modest progress in passing such laws is not only due to the slow process of legal and constitutional reforms in the country, but also to the objection of some confessional parties to the draft laws presented in the Lebanese parliament that call for gender equality.

Furthermore, gender inequalities are exacerbated in rural areas, where some traditional and religious practices often prevent women from accessing economic resources and assets. These inequalities are also evident in the agrifood sector, notably in food processing, plant production, forestry, animal

production, and fisheries and aquaculture: all these sub-sectors have their own characteristics, history, and obstacles in Lebanon. Adding those difficulties to the systemic gender gap makes it even more challenging to understand and address women's economic, social, cultural, and religious barriers. Lebanon's agriculture is characterized by a very small landholding with an average of 1.4 hectares that are not equally distributed. The agriculture sector is one of the most prevalent sectors in Lebanon and the arable land constitutes 19 percent of the total area of 10 452 km2. Today, this sector faces several technical and social challenges, that include but not restricted to low agricultural productivity, high production cost (due to high costs of imports), poor organization of farmers into cooperatives and associations, vulnerable groups prone to poverty, especially youth and women, and limited opportunities for youth employment.

To respond to all the aforementioned discriminations, FAO Lebanon collaborated with the MoA to implement a project funded by Canada entitled "Support to Women's Cooperatives and Associations in the Agrifood Sector in Lebanon", also known in Arabic as: "واثدات الريف". Within the framework of this project, FAO aims to empower women cooperatives and associations through communal engagement, by promoting a social and cultural environment that enables women's economic empowerment while also increasing the opportunity for these cooperatives and associations to participate in local economies to establish or expand agri-food income-generating enterprises. Being an integral part of this project, the current GSVC Analysis Study aims to understand the opportunities for women cooperatives and associations in the agrifood sector. The study provides accurate and updated information on 5 sub-sectors (plant production, forestry, fisheries and aquaculture, animal production and afro-processing), using a gender perspective, and offers expert analysis and recommendations to identify opportunities for women and women cooperatives/associations to participate in and benefit equally from these VCs. As a result of this study, priorities and action plans to address the identified challenges were put forward.

The study started by a thorough literature review that was undergone by each of the sub-sectors' experts, allowing them to acquire the available data, studies and information regarding the relevant sub-sector in Lebanon. This step was followed by a data collection phase in each sub-sector, that included Key Informant Interviews (KIIs with around 41 stakeholders (22 men and 19 women) from various backgrounds, such as the representatives from government and local authorities (ministries of agriculture, industry and public work & transportation, chamber of commerce, industry and agriculture, Lebanese agriculture and research institute, association of Lebanese industries), from Shouf biosphere reserve, from cooperatives, from input supplier/importers/exporters, from international and local NGOs, from academic institutions and others. The data collection also included a survey on 2 139 main actors in the sector (954 women and 1 185 men), as well as 22 Focus Group Discussions (FGDs that involved mainly 57 women and 64 men producers or cooperative members or heads in the 5 agrifood sub-sectors. After the completion of this phase, each sub-sector expert embarked on the analysis work based on their field of expertise, the collected data and the information they were able to extract from the literature review. Finally, the business opportunities that were identified during the analysis of each sub-sector, underwent a gender revision and assessment to guarantee these opportunities can be seized by the project's main beneficiaries, the 250 women cooperatives. This started first with the sub-sector analysis before conducting the gender analysis to avoid overlooking any business opportunity that might be financially rewarding to cooperatives, associations or individuals: the gender expert then analyzed the

identified business opportunities with a women's empowerment and gender equality perspectives, ensuring each opportunity does not exacerbate risks of marginalization, inequality or Gender-based violence (GBV). Please note that while the study's approach set the sub-sector analysis before the gender one, the sub-sectors' experts attended a series of workshops prepared and given by the gender expert prior to literature review and data collection phases to provide them with gender guidelines they should be aware of during their analysis. In conclusion, the main beneficiaries of the study are expected to learn about identified business opportunities suitable for women, about the expected outcomes, potential barriers / challenges they could face, and recommendations / best practices, that might encourage them to adopt a specific opportunity that falls within their scope of work and field of expertise.

When discussing gender, and particularly when discussing it in respect to "women", there is often a reductionist approach that fails to recognize the many facets of what and who women are. The term "women" is a denotation to a deeply complex multi-layered cross cutting number of issues that affect "Women". Women in Lebanon, for example, are defined by their nationality and residency status (Palestinian, Syrian, host, migrant workers). Yet they are also defined by many other dimensions like education, age, place of residence (rural or urban), work status (employed or unemployed, full-timer or part-timer, self-employed/entrepreneur or worker), type of work, and marital status to name a few among a very long list. As such this research has taken conscious efforts to avoid falling into this classing trap of treating women as a homogenous group of people while disregarding the details that make up the reality of their problems. Consequently, when approaching the topic of women through the study, the approach made sure to take into consideration a number of characteristics to ensure maximum inclusion for all vulnerable individuals. These categories include, taken with respect to nationality, the following:

- Level of Education: Educated/Uneducated
- Employment Status: (Part time/Full time/Casual employment, employment in Family business/Individual enterprise, inherited family business, housewife)
- Family composition (number of children)
- Age (Gen Z, Millennials, Gen X, Boomers II)
- Marital status (single, married, divorced, separated, widow)
- Level of income (low, medium, high)
- Place of residency
- Area/Region of morphology (rural, urban, nomad, etc.)

Approach and Methods

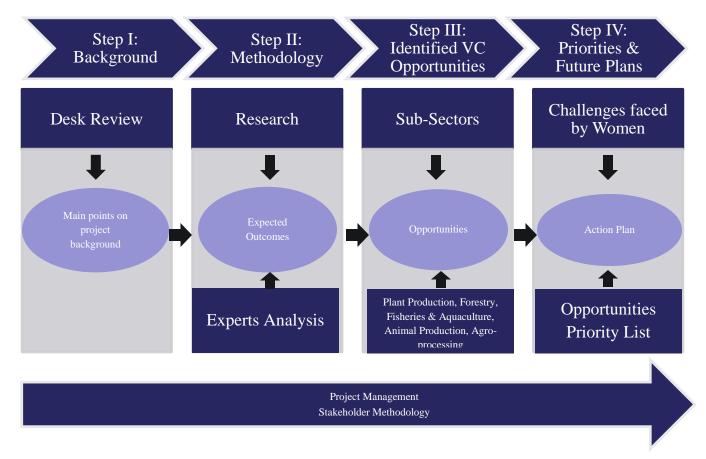
The study was conducted according to the FAO Sustainable Food Value Chain (SFVC) and GSVC Frameworks. The FAO SFVC Framework offers entry points for GSVC development by stating that interventions need to be targeted where the most impact can be attained. Gender gaps in VC development are wide; however, if they are analyzed and addressed properly, structural and systemic change may be achieved. By doing so the sustainability of the VC is greatly enhanced, fulfilling one of the primal aims of the SFVC framework. The SFVC focuses on core and extended VC as well as national and global enabling environments. The GSVC framework features two additional levels: the household and individual level. Most VC development approaches, including SFVC, stop at the household level. Yet, gender inequalities often originate within the household, and individual agency and power might also depend on intra-household dynamics. Hence why, FAO created a GSVC Framework to build on the SFVC Framework and ensure an all-round approach to achieving inclusiveness in its work, and why the two approaches were employed for the following study. Accordingly, the study's approach that was developed for the project will be following 4 steps as discussed and explained below:

KEY CONCEPTS IN THE GSVC FRAMEWORK

Individual level: The individual level represents a person's ability to make use of economic opportunities in a system.

Household level: The household is considered as a system with different stakeholders, resource flows and power structures affecting participation and benefits from agricultural production.

Gender-based constraints (GBC): "can be defined as "restrictions on men's or women's access to resources or opportunities that are based on their gender roles or responsibilities (USAID, 2009)"



Step 1: Background

At this step, the background is outlined to understand the initial context of this report. It explains the objectives of this report:

- Identification of gender-sensitive opportunities in 5 sub-sectors in agrifood
- Measuring the extent of women inclusion in all these opportunities
- Future plans including recommendations and suggestions to the next phase of detailed business planning and how to involve women more in this sector.

Step 2: Methodology

At this step, the approach of the study sets the expectations and potential outcome of each part while confirming the milestones of the project's objectives.

Desk Review and Data Collection

Value Chain Analysis with Gender Focus

Chapters' Merger and Adjustment

Weighing Chart

- Desk Research on each value chain to understand the best practices
- Create the questionnaires and tools to collect the required data important for the analysis
- Collection of data from surveys, workshops, focus groups, phone interviews
- High level analysis and recommendations on opportunities extracted from the surveys

- Identification of several opportunities of each of the selected value chains.
- Focus on the gender aspect and the inclusion in each opportunity
- Merge all the chapters collected from experts
- Create observation points and develop recommendations and enablers for women in the agrifood sector
- Assessment of each opportunity based on 2 sets of criteria (when applicable)
- Create a chart and summary table to identify the most interesting to the least

The study started by a thorough literature review, in which each expert/consultant identified the secondary data available relevant to their respective sub-sector, as well as the gaps that were lacking yet crucial for the GSVC analysis they were seeking. Then, experts/consultants prepared the data collection tools for the KIIs, FGDs and the survey, according to the findings and gaps. After agreeing with the sample for the 5 sub-sectors (around 9 KIIs for each sub-sector, and 2 000 people surveyed for the overall agrifood sector), the data collection process started and was performed by Infopro, a market research company in Lebanon. At the end of the data collection process, a report synthesizing the collected data was presented by Infopro to the experts (referred to as Infopro's report throughout the study) to start the analysis phase and identify the VC opportunities, each in their respective sub-sector. It is important to note that the consultant deployed the 'do-no-harm' approach for the data-collection phase to make sure that the information was collected in a way to ensure the safety and comfort of all interviewed persons.

Step 3: Identified Value Chain Opportunities

This step identified several VC opportunities in the 5 agrifood sub-sectors studied within the scope of this study. In efforts to reach inclusiveness, social justice and gender equality in the agrifood sector in Lebanon, this project studied all levels of the VC, starting at the individual and household levels, moving to the core and extended VC, and reaching the national and global enabling environments.

After identifying opportunities, a weighing chart was added at a later stage to the initial design to help beneficiaries prioritize the identified opportunities. This chart was created to rank all identified opportunities according to gender criteria (vertical axis) and economic criteria (horizontal axis). Below is a list of criteria that was part of the scoring exercise for each opportunity (where applicable).

Economic Axis	Gender Axis
Geographic Location and its Impact	Legal Capability
Market Needs (Consumers' Demands)	Physical Capacity
Potential to Export	Cultural & Tradition Tolerance
Expertise Needed and Availability	Religious Acceptance
Time to Implement / Change / Amend	
Level of Complexity	
Funds Needed	

Business opportunities were identified throughout the different nodes of the VCs in each of the 5 agrifood sub-sectors: the study aimed to provide relevant information about these opportunities, such as background, general description, potential gender-based constraints (GBCs), as well as recommendations.

Background / General Description of Opportunity / Expected Outcomes:

This section attempted to explain the process of the business opportunity: potential problems faced, potential opportunity for enhancement that will boost and increase the cooperative's revenue, types of inputs and raw material, the availability of imported ones vs. the local production, the expected outcomes and impact of the cooperative. Other elements such as the personnel, education level, and their qualifications, implementation time, profitability, infrastructure, access to loans, and other details are mentioned when available: these elements will be further elaborated once a cooperative decides to adopt a certain opportunity and develop a business plan accordingly.

Potential GBCs

Following the description of the opportunity, potential GBCs that might arise during its implementation were discussed. This information is of relevant importance and should be used by women cooperatives, associations and individuals: it will help them in mitigating the risks as well as provide ease in the implementation of the opportunity.

Recommendations and Good Practices

This part is dedicated to provide the beneficiaries with the key recommendations for the opportunity. Those recommendations vary from being a mix of the business environment, gender inclusion, and other elements important to the success of the suggested opportunity.

Step 4: Priorities and Future Plans

Identify main GBCs:

Based on the data collected in the scope of this study, the gender expert summarized the main GBCs faced by women in each of the sub-sectors from the most severe to the least. This section hihglighted these challenges and barriers, which will lay the ground for future interventions that will aim to create favorable working conditions for women in the agrifood sector in Lebanon.

Main enablers and recommendations:

Sub-sector experts jointly with the gender expert provided general recommendations and other remarks for the sub-sector, after proposing specific operational/pragmatic recommendations for each business opportunity in the sections above. Additionally, the gender expert stated the main enablers that would improve women's status in the sector in Lebanon.

Summary of Findings

Despite that the national legislation provides women and men with equal rights in regard to ownership, access to loans and banking facilities, rural women in general and those who work in agriculture lack awareness of their rights and discrimination is still very common, especially in regard to credit. Legal provisions on employment in the agricultural sector are inadequate for both men and women. In addition, the National Social Security Fund that provides health and maternity insurance, end-of-service indemnity, and family and education allowances, covers only permanent agricultural employees. And since most of the women who work in agriculture are part-timers, they are not protected by labour laws governing working hours, maternity leaves, health measures and other aspects of employment. In particular, article 7 of the Lebanese labour law exclude workers in the agriculture sector from having the rights that other workers have, which exposes many rural women who work in agriculture to all kinds of abuse, sexual harassment and discrimination.

Additionally, there are no official precaution strategies or even official mechanism of complaints that protect women who work in agriculture from being exploited, abused, exposed to sexual harassment, arbitrarily dismissed from work, unfair pay, or deprived of health protection. This gap allows employers to deal with women unfairly without any laws to deter them. It is important to note that farmers are not unified under one syndicate, but rather dispersed under many syndicates and federations. Consequently, not being part of a large pressuring group prevents women working in the agricultural sector from speaking up in the event that they are exposed to violence, harassment, or any other harm.

The problem is further deepened due to the scarcity of special organizations or ministries that are in charge of protecting those women; even with the presence of a hotline provided by the Internal Security Forces and helplines provided by local Non-Governmental Organizations (NGOs) dedicated to reporting on Domestic Violence. There is some availability of shelters and social services for Violence Against Women survivors, but are of limited capacities and remain dependent on NGOs or non-state actors for their existence. Access to these services is limited among women for several reasons: many are not aware of the hotline or helplines and presence of such shelters and lack knowledge on their basic rights, humanitarian principles and international treaties that protect them from violence. Others fear the judgement of their community and are under social pressure. The attempt to establish the National Observatory for Women in Agriculture and Rural Areas in 2008, arguably the first of its kind in the Arab World, could have been a step in recognizing and promoting the role of women in agriculture, rural products, and agro-food. The organization aimed to promote territorial development through the valorization of women entrepreneurship and support rural women by spreading knowledge and good practices. Unfortunately, this body didn't capture the interest of policy makers and the many attempts to adopt it as an official public institution is yet to succeed.

Gender inequalities in access to and control over resources persist and undermine sustainable and inclusive development of the sector. Despite taking on a large share of work in agriculture, women are often unpaid and their efforts are unrecognized labour: their work is framed as part of their domestic work or assisting in the family businesses. Furthermore, and even though women farmers play an active

role as traders, processors, labourers, and entrepreneurs, they nonetheless often face large barriers in access to land, labour, financial services, water, rural infrastructure, technology, marketing, extension service, agricultural inputs and membership in cooperatives. It is important to note that women in rural areas who take an active role in agriculture usually carry most of the responsibility of housework and reproductive activities.

Adding to the inequalities and discriminations that women face in the agricultural sector, their sufferings continue in regards to the safety related to the sector itself. The International Labour Organization (ILO) notes that agriculture is one of the three most dangerous sectors in terms of occupational safety and health, irrespective of the age of the worker. In addition to occupational diseases it results in a high rate of work-related fatalities and non-fatal accidents, largely through the use of motorized agricultural machinery. While traditionally men have the highest rate of occupational accidents, the large number of working children and women in agriculture narrow this gender gap. Contact with agro-chemicals puts especially children and women at risk, with potential health repercussions into the next generation.

According to the World Economic Forum (WEF), the participation among Lebanese women in the labour force is very low. Based on the Gender Gap Report of 2015, Lebanon was ranked 138 out of 145 total countries in women's participation in the labour market. The ILO estimates unemployment among Lebanese women to reach twice the average. Women's enrollment and educational attainment have increased significantly during recent years, however, there are not enough women entering the workforce.

Migrant women face compounded challenges. Based on a gender report done for Mercy Corps in 2017, among the Syrian communities, women are the most vulnerable. There is a shift in the gender roles and more Syrian women are at the forefront of their families and the breadwinners, yet decision-making authority is still exclusive to men as it is considered related to religion, and oriental traditions, and costumes. For instance, women from rural areas are paid daily and their income is taken by the husband or the father. Similarly, the latter can decide to force kids to leave schools and involve them in the labour market; he can also accept on behalf of his daughter, and without her consent, to marry her with a man at a very early age: fathers get the money that is supposed to be given to the girl as the marriage gift (moukaddam), which varies between 1 000 and 2 000 USD.

Among the major findings flagged while attending the KIIs and the FGDs was that knowledge among stakeholders in terms of gender issues was relatively low despite the technical knowhow present for those working in the sector. Women issues were not raised in a conscious manner nor discussed openly, which kept the matter unresolved and without any proposed solution to eliminate or at least reduce the gender gap in the sector. Issues faced by women were often overlooked by employers given the context of the daily hassle of work in each sub-sector; vast differences in pay checks between men and women was never discussed and often assumed normal. Consequently, and with the sudden depreciation in value of the LBP to the USD, gender discrimination in the agricultural sector has never been more pressing topic: women working in the sector and who send their income to their families back home such as migrant workers found themselves unable to do so anymore; single headed female household, who had been suffering from unfair wages, found their meagre income stripped in half and even less. The

difference in effects on various women types, of different nationalities, marital status and job sector was once again displayed to confirm the need for a multi-layered and crosscutting approach in dealing with the issues. The economic situation and its repercussions on the local currency devaluation relative to the USD had a negative impact on all the sectors, and especially on agriculture where the rate of wage is already below the minimum wage.

Gender Dynamics in Lebanon's Agrifood Labour Force: An Overview

Although employment regulations in Lebanon do not differentiate between men and women, social welfare remains predominantly focused on men according to the UN Women's Country Gender and Economic Profiles Report of 2016¹² This is partially due to many legislations in Lebanon that still discriminates against women, including the inheritance law. As stated in the FAO GSVC framework, power go hand in hand with agency, the latter being the ability to make autonomous choices and transforming them into desired outcomes, and the former being the control over resources and profits. Inequality in this regard puts women in a vicious cycle where her lack of access to productive resources negatively impacts her capabilities, self-confidence and decision-making power. Consequently, the labour force in the agri-food sector in Lebanon is focused on men, leaving behind the weakest link in it, the women. According to the report, it also remains common for families to support the education and employment of women until marriage or motherhood. 13 The ILO's Labour Force and Household Living Conditions Survey (LFHLCS) of 2018-2019 conducted by the Central Administration of Statistics (CAS), states that the overall labour force participation of women in Lebanon is 29.3 percent. 14 The LFHLCS additionally highlighted a "relatively high degree of gender occupational segregation," despite the fact that the percentage of women in managerial positions is "in proportion to their overall share in total employment". 15

On another level, despite women's right to sign contracts and manage their own properties, the management of women's financial assets and income is strongly influenced by their family members. As highlighted by UN Women, inequality is further aggravated by women's lack of awareness of their legal rights, particularly in rural areas. According to CAS, students registered in higher education in the fields of agriculture, fishery and forestry are almost equally divided among males and females between 2007 and 2008. Despite these numbers, women have so far maintained a very limited role in the agrifood sectors in formal capacities, and are often referred to as "family helpers," with their roles often depending on the specifics of each sub-sector. Estimated rates of women's participation in the agrifood sector's different sub-sectors ranges between 10 percent and 40 percent. As highlighted in an

¹² UN Women (2016), Country Gender and Economic Profiles: Lebanon, Retrieved at: https://arabstates.unwomen.org/en/digital-library/publications/2016/all/country-gender-and-economic-profiles

¹⁴ ILO (2019), Labour Force and Household Living Conditions Survey (LFHLCS) in Lebanon 2018–2019, Retrieved at: https://www.ilo.org/beirut/publications/WCMS 732567/lang--en/index.htm

¹⁵ Ibid

¹⁶ Ibid

¹⁷ Ibid

¹⁸ Central Administration of Statistics (2019), Gender Statistics in Lebanon: Current situation and Future needs, Retrieved at: http://www.cas.gov.lb/index.php/demographic-and-social-en/education-en/96-english/statistics-by-topics/gender-statistics-en

¹⁹ Ibid

²⁰ Ibid

assessment study on governance frameworks for fisheries completed by the International Union for Conservation of Nature in Tyr in South Lebanon for sub-sectors such as fisheries, women's participation remains virtually nonexistent, and only mildly present in repairing nets or assisting in ancillary jobs.²¹ In the plant production sub-sector, their roles are limited to minor tasks away from the field and rather related to the agro-processing sub-sector and the preparation of *mouneh*²² products.²³

According to this study, some of the most recurrent themes associated with the aforementioned realities include perceptions on the physical inability of women to do field or sea work, their main role as caregivers, the limitation of their roles to household chores and tasks, as well as more traditional viewpoints around the presence of women in close contact with men who are not related to them. Additional barriers that prevent women's adequate participation in the agrifood sector include the fact that they are generally paid less than men for the same work, their careers and work is halted periodically depending on their duties as caregivers, as well as the fact that women often lack land and capital, as arable land is typically passed down to the men in the family.²⁴

Perceptions gathered from women as part of this study highlight their unfavorable attitude towards working in the agriculture sector.²⁵ This is mainly due to an overall perception that it requires difficult physical labour.²⁶ Although this remains the sentiment, the status quo seems to be shifting more and more towards the enhancement of women's roles in the sector, a matter that may be attributed to the shifts in social roles (because women need to work) as a result of Lebanon's ongoing economic crisis. As mentioned, women comprise 50 percent of students enrolled in agricultural studies at the university level, and technical academies are also witnessing a spike in female enrollment across many subdisciplines related to the agrifood sector.²⁷ A more recent phenomenon of men encouraging their wives to work (and subsequently get involved in the agrifood sector) has emerged as a result of Lebanon's ongoing economic and financial crisis, although since COVID-19 this trend has also backtracked as the amount of unpaid care and other household work expected of women sharply increased since the pandemic.²⁸ In rural areas, women are undertaking initiatives to create cooperatives for producing mouneh, among other goods. According to this study, women are more likely than men to attend training sessions, and are also more open to receiving training in general.²⁹ According to the fieldwork associated with this study, women are also more eager to invest in developing their line of work, and are also more likely to explore new opportunities.³⁰

²¹ International Union for Conservation of Nature (2019), Assessment study on governance framework for fisheries in the Caza of Tyr - South Lebanon, Retrieved at: https://www.iucn.org/sites/dev/files/content/documents/annex 4.3.1.pdf

²² Mouneh, from the Arabic word mana, meaning 'to store', and storing food in traditional way was essential to all Lebanese throughout history.

²³ Ibid

²⁴ Ibid

²⁵ Ibid

²⁶ Ibid

²⁷ Ibid

²⁸ Lynn Mounzer (2021), Working Women and Post-COVID Lebanon, Wilson Center, Retrieved at: https://www.wilsoncenter.org/blog-post/working-women-and-post-covid-lebanon#:~:text=The%20pandemic%20and%20economic%20crisis,to%2064%20percent%20of%20men

²⁹ Ibid

³⁰ Ibid

Opportunities for women have increased in general across the agrifood sector – as machines have replaced strenuous physical labour in many cases. Each of the sub-sectors within the agrifood sector presents several opportunities for women to explore. Women's role in the sector has been realized in everything from planting crops, to creating recipes, raising cattle, managing greenhouses, generating added-value transformed products, and smoking fish.³¹ Opportunities for women are also present in complementary activities to the sector, such as managing touristic facilities near farms and fishing harbors, or in the areas of marketing for more traditional production entities that lack this expertise.³²

³¹ Ibid

³² Ibid

Gender Realities Across Sectors and Impacting Factors

I. **Access to Assets, Services and Financial Resources:**

Rural women in Lebanon suffer from restricted access to assets and social entitlements, as well from subordinate and unequal gender relations. According to the International Fund for Agricultural Development (IFAD), rural women constitute 40.7 percent of the total paid and unpaid workers in agriculture. 33 Although women provide at least one third of the labour required to sustain agricultural production, most if not all of women's work in agriculture is not accounted for.³⁴ Most women work on a seasonal and part-time basis, and thus their contribution is not counted in the economy.³⁵ Furthermore, as per United Nations Economic and Social Commission for Western Asia, "the fruit of their labour, is channeled directly into their household for the household's consumption, and does not enter into a market cycle". 36 In addition to long hours spent working in agriculture, women have responsibilities in their homes such as cooking, cleaning, caring for their children and fetching water and fuel. On average, rural women end up working between fourteen and sixteen hours per day.³⁷

In the agricultural sector, the community of farmers continue to face restricted access to infrastructure and land ownership inequality. Rural women in particular experience further limited access, and remain widely subjected to exploitation and other forms of unjust labour.³⁸ The agricultural share of economically active women has decreased significantly over time in the country. In fact, it has dropped from 20 percent in 1980 to 7.1 percent in 1995, eventually reaching 2.2 percent in 2010.³⁹ According to FAO, this indicates that women have not been given incentives to engage in the agriculture sector in Lebanon. 40 In 2010, only 32.1 percent of the economically active population in the agricultural sector (1.8 percent of the total population) were females. 41 As for their farming presence, rural women make up 9 percent of the total farm owners and their roles are largely restricted to the production of dairy products, food preserves and subsistence farming.⁴²

³³ Ibid

³⁴ Ibid

³⁵ Ibid

³⁶ UN ESCWA (2009), Women's Economic Empowerment in the ESCWA Region, Retrieved at: https://www.google.com/search?q=rural+women+work+lebanon+un+escwa&rlz=1C1GCEU_enLB972LB972&oq=rural+wo men+work+lebanon+un+escwa&ags=chrome..69i57.5510i0i9&sourceid=chrome&ie=UTF-8

³⁷ Ibid

³⁸ European Commission (2014), Research Papers of Work Package 5: Water and Agriculture, Retrieved at: https://ec.europa.eu/research/participants/documents/downloadPublic?documentIds=080166e5c040acb8&appId=PPGMS 39 Ibid

⁴⁰ Ibid

⁴¹ Ibid

⁴² Hicham Abou Jaoude (2015), Labor Market and Employment Policy in Lebanon, European Training Foundation, Retrieved

In addition to restrictions in the areas of ownership and infrastructure, women in the sector continue to face limited access to markets and technology. Women in different agriculture value chains are highly involved at the production and processing levels, with very marginal roles in marketing through the women cooperatives. 43 They have limited access to technology mainly because they carry out activities as dictated by superiors, such as planting or harvesting manually, in a traditional way, without the use of technology. 44 Any equipment introduced to the farms, such as mechanical harvesters, are managed by male workers, either due to the perception that women do not possess the skills to operate the equipment, or that new uncommon machines are too difficult to operate. 45 In the areas of access to fresh fruits and vegetable markets, women additionally encounter challenges in penetrating wholesale markets – a field that remains highly male-dominated in Lebanon. 46 On the other hand, women involved in processing are perceived to be in a better position in terms of direct access to markets.⁴⁷ However, their inability to compete through the development of marketing strategies, as well as their overall lack of experience in the areas of negotiation, ultimately weakens their abilities to fully access markets.⁴⁸

Barriers to access for women additionally extend to accessing training and information. Women receive much less training than men at the national level, and their lack of interaction with other actors in the sector and experts, significantly limits their access to information and emerging realities.⁴⁹ This study found that only 18 percent of women who took part in the administered survey received training, as opposed to 57 percent of surveyed men.⁵⁰ These constraints negatively impact women's ability to increase productivity, mitigate risks, respond to shocks, or adapt to emerging realities and developments in the agrifood sector. As a result, women tend to resort to second-hand information from their husbands or other male household members. Furthermore, higher illiteracy rates among women also puts them as a disadvantage when it comes to accessing information.

On another level, an overall lack of access to cooperatives and associations places women at a significant disadvantage across the sector. For women, working at the individual level often limits the potential for improving production/processing and accessing different marketing channels.⁵¹ A clear example of this lies in the fact that although women play significant roles in the agricultural sector value chain (from production, processing, to marketing and trade), they lack of ownership and access to productive resources such as land, credit, which in turns limits their ability to gain membership in producer

https://www.etf.europa.eu/sites/default/files/m/33A1850E6A358308C1257DFF005942FE Employment%20policies Leban

on.pdf 43 Ibid

⁴⁴ Ibid

⁴⁵ Ibid

⁴⁶ Ibid

⁴⁷ Ibid

⁴⁸ Ibid

⁴⁹ Ibid

⁵⁰ Ihid

⁵¹ Nisrine Salti and Nadine Mezher (2020), Women on the Verge of Economic Breakdown: Assessing the differential impacts of the economic crisis on women in Lebanon, UN Women, Retrieved at:

https://arabstates.unwomen.org/sites/default/files/Field%200ffice%20Arab%20States/Attachments/Publications/2020/10/ Lebanons%20Economic%20Report%20Updated%201110%20FH.pdf

organizations and marketing cooperatives that can improve their working capital, activities and productivity.⁵²

In their roles as food producers, constraints to women's access to productive resources such as land, credit, inputs and services (particularly extension services) results in lower levels of output, as documented in FAO's report on gender gaps in agriculture.⁵³ For rural women, access to land is the single most important condition for economic empowerment. This is chiefly due to the fact that access to most other productive resources is conditional on land ownership, as well as the fact that land is often a condition for social inclusion. Access to financial services, for instance, is largely dependent on security of land tenure. FAO notes that while all smallholders face constraints in their access to financial resources, in most countries the share of female smallholders who can access credit is 5 to 10 percentage points lower than for male smallholders.⁵⁴ Lack of access to credit diminishes the amount of assets female smallholders can marshal, thereby perpetuating a gender asset gap in most regions. Access to inputs and technology is additionally decisive in explaining differences in yields between male and female smallholders.⁵⁵ The greater capacity of men to command labour, both from (unremunerated) family members and from other members of the community, is evident in the Lebanese case.

In terms of basic infrastructure, Lebanon still falls behind in the fields of acceptable, reliable, and accessible transportation, communication, and clean water provision. In rural areas, barriers regarding distance and transportation to gain services and/or seek work opportunities limit women's mobility and access to resources and markets. Internet and communication availability, quality, and cost are other challenges specific to women, since they have limited access to finances. While this issue affects all sectors, it has a greater impact on creative and knowledge economies, and on access to input and marketing linkages. Access to clear clean water remains a pivotal barrier across all agricultural sectors, particularly since safety and quality norms for export must be applied and respected. Women's lack of access to water brings forth a highly gender-specific reality, as women are typically the ones that transport water from the source for everything from irrigation, to cooking, to drinking and for hygiene purposes. This particularly halts their abilities to integrate into the sector and generate an income.

For its part, the rural cooperative sector in Lebanon is mostly if not entirely male-dominated; however, women mostly provide the invisible but critical labour essential for its survival and sustainability.⁵⁷ Within this gender-discriminatory system, many women have organized in women-only rural cooperatives. Rural women's cooperatives face gender-specific oppression and discrimination. Women cooperatives, in general, face difficulties in marketing their goods, a factor that impedes their long-term sustainability. This is essentially due to gender barriers to mobility, mismatching between their products

⁵² Ibid

⁵³ Ibid

⁵⁴ Ibid

⁵⁵ Ihid

⁵⁶ UNICEF (2021), Water supply systems on the verge of collapse in Lebanon: over 71 per cent of people risk losing access to water, Retrieved at: https://www.unicef.org/press-releases/water-supply-systems-verge-collapse-lebanon-over-71-cent-people-risk-losing-access

⁵⁷ Ibid

and market demands, lack of subsidies or investment in inputs, total liberalization of local markets and flooding with similar, cheaper and more competitive products.⁵⁸

II. Power, Agency and Decision-making:

The Lebanese labour market is characterized by low employment rates, low contributions of women to economic life, a large informal sector, high influx of foreign workers and a large number of skilled Lebanese people seeking and obtaining employment abroad.⁵⁹ The absence of tangible laws and policies that support women in the labour force across all sectors has further resulted in discrimination in the workplace, in the provision of social benefits, taxation, and medical services especially in the non-formal sector.⁶⁰ Gender inequality in Lebanon remains a societal norm. According to the WEF Gender Gap report of 2020, Lebanon has one of the highest overall gender gaps in the world (ranking 145 out of 153 countries), and amongst the lowest global rates of women's labour market participation, hovering at 29 percent for women and 76 percent for men.⁶¹ Since 2010, Lebanon has seen a consistent decline in its global index rank and relative gender gap score primarily as a result of scores consistently close to zero in political empowerment.⁶² These inequalities translate into the country's agrifood sector – as discrepancies in access, agency and leadership across the sector remain widespread across different gender categories.

Structural and legal constraints, sectarian dynamics, socio-cultural values, decision-making structures, public policies, development strategies, ongoing conflicts, and a rise in social conservatism all play key roles in perpetuating women's vulnerability on the national scale – particularly in the agrifood sector. Findings from this study highlight that literacy rates remain low among farm operators in Lebanon. Across the country, farm operators (all of which are male) who control 60 percent of the total useful agricultural surface in Lebanon do not have only completed their primary education. In regions such as the Bekaa and North Lebanon, the agricultural sector relies mainly on temporary workers and women labour in their extended cropping systems – in which women play a very marginal role in the decision-making process, and have little-to-no control over their working hours, conditions or benefits. In many cases, as per the findings of this study, women are paid much less than men for the same work.

⁵⁸ Ibid

⁵⁹ World Bank Group (2017), Jobs for North Lebanon, Retrieved at:

 $[\]underline{https://documents1.worldbank.org/curated/en/800821506102645484/pdf/119940-WP-PUBLIC-sept-27-3am-v2-Leb-Jobsfor-North-Full-report.pdf}$

⁶⁰ K4D (2017), Gender equality and women's empowerment in Lebanon, Helpdesk Report, Retrieved at:

https://reliefweb.int/sites/reliefweb.int/files/resources/175-Gender-Equality-and-Womens-Empowerment-in-Lebanon.pdf 61 UN Women Arab States (2020), Lebanon, Retrieved at:

 $[\]frac{\text{https://arabstates.unwomen.org/en/countries/lebanon\#:}^{\text{:text=Lebanon\%20has\%20one\%20of\%20the,women\%20and\%20}}{76\%25\%20 for\%20 men.}$

⁶² Ibid

⁶³ USAID (2021), Lebanon: Agriculture and Food Security, Retrieved at: https://www.usaid.gov/lebanon/agriculture-and-food-security

⁶⁴ Ibid

⁶⁵ Ibid

⁶⁶ Ibid

⁶⁷ Ibid

Rural women, who constitute 34 percent of the total family workforce in agriculture, are marginalized and overexploited in Lebanon. According to the IFAD, they remain either unpaid (sometimes for more than fourteen hours of work), or hired for seasonal agricultural work during harvest time with low salaries.⁶⁸ According to CAS, the gender pay gap in the agriculture sector is 21 percent.⁶⁹ Women working in agriculture are believed to work more than men as their responsibilities include: planting, weeding, harvesting, food processing, livestock rearing and selling, in addition to: management of the family budget to meet the family needs through a system of goods exchange with other families, hospitality and cooperation.⁷⁰ Women "produce mostly staple crops for household and small scale cash crops", and are involved in agro-food activities (dairy products, canned food, olive oil, honey production, etc.).⁷¹ They work manually and with rudimentary equipment, collect wood for energy and nearly forty remote rural villages in the country require women to fetch water".⁷²

According to the FAO's latest "Women, Agriculture and Rural Development" Fact Sheet of Lebanon, men care for the health of animals and marketing by-products while women carry out all other tasks. The Fact Sheet further insists that "men make almost all decisions related to farming activities except for allocation of water for livestock", described as a "women-dominated activity".

In Lebanon's fishing sector there are evidently different levels of participation and of occupational burden between men and women. As per a FAO 2012 report, men are the ones that do the actual fishing and women are seen as involved with post-harvest and marketing activities. This has led to the overall diminishment of women's roles within the sub-sector — as their role remains "marginal" in comparison to their male counterparts. Women's roles however, remain much more diverse. Within the fishing sub-sector, women are involved in every part of the daily activities of fishing, such a preparing nets, sales and cleaning. According to findings from this study, women's presence in the fishing sub-sector remains very rare, and their agency in the sub-sector remains absent. This is chiefly due to the fact that their presence in the workforce is restricted to unpaid work in family business, and often enough, working in these capacities from home.

Research and data on women's participation in the fisheries sector at the national level in Lebanon remains scarce – with almost no studies directed at the gender dynamics across this sub-sector in the country. One of the only assessments of women participation in the fisheries sector was carried out in

 ⁶⁸ IFAD (2017), Gender dimensions of agricultural and rural employment, Retrieved at:
 https://www.ifad.org/documents/38714170/40187194/GRE WEB.pdf/9fb80e6a-0463-4571-b6df-234635454aab
 ⁶⁹ Ibid
 ⁷⁰ Ibid
 ⁷¹ Ibid
 ⁷² FAO (1995), Fact sheet: Lebanon - Women, agriculture and rural development, Retrieved at:
 https://www.fao.org/publications/card/es/c/a4ec307b-9998-55c6-954a-a31236d8d9ae/

 ⁷⁴ Ibid
 ⁷⁵ Ibid
 ⁷⁶ FAO (2012), Fisheries and Aquaculture in Lebanon, Retrieved at: https://www.fao.org/documents/card/en/c/cb4201en/7

 ⁷⁸ Ibid
 ⁷⁹ Ibid

Anfeh (North Lebanon) by the University of Balamand (UoB)'s Marine and Coastal Resources Program in 2018. 80 The survey conducted for the purpose of this study highlighted that all women working in the fisheries sector are relatives of the fisher: 76 percent were wives, 13 percent daughters, 8 percent mothers, and 3 percent sisters.⁸¹ This is consistent with a European Union study completed in 2013, that highlights that women are mostly working in family enterprises alongside what is perceived as their main responsibilities within the household.⁸² Women are responsible for selling the fish, mending nets, preparing hooks and even managing book-keeping and paying invoices. 83 Women's contributions have been known to allow the household to reduce costs and keep income inside the family. In the areas of perception among women, the UoB study found that the women themselves do not see working in the family business/from home as a job, but rather as a contribution to the overall well-being of the household. 84 As a result, the work carried out by women remains invisible amid more traditional gender dynamics, and they remain unable to access resources or benefit from social security or protection schemes. According to the "Assessment of the Commercial Seafood Chain in Lebanon," women's employment was generally limited in the commercial seafood chain. 85 In the sub-sector, women were found particularly in administrative, marketing and accounting departments although their salaries might be lower than men's by up to 20 percent.86 In the GSVCA study conducted by FTL and subject of this report, it was found that single, divorced, and widowed women are perceived to have a "lower status" in society, and decisions are typically made by other males in the family; in the areas of decision-making, women are said to have a say in the allocation of family expenditures only.

According to the United Nations Development Programme (UNPD) 2020 study titled "Gendered Value Chain Studies: Barriers and Opportunities", in the small ruminant dairy sector, especially in Northern Bekaa, women's involvement is mainly in "milking sheep and goats" while their husbands transfer the milk directly to the milk collectors who, in turn, sell them to processors.⁸⁷ Only some women cooperatives focus on the collection process as well as selling directly to retailers.⁸⁸ The UNDP study found that the involvement of women in dairy processing is considerable through cooperatives within their premises or in-house.⁸⁹ Small farms in Lebanon employ around 80 percent and 90 percent of the casual and permanent agricultural labour force respectively.⁹⁰ Small farms in Lebanon are in the majority family farms; however, there is no data available on the distribution of the working population by age,

⁸⁰ University of Balamand (2018), Socio-economic assessment of the fisheries sector in Anfeh, Retrieved at: http://www.balamand.edu.lb/IOE/OurProjects/Details/Pages/MCR/SocioEconomicAnfeh.aspx

https://www.lb.undp.org/content/lebanon/en/home/library/womens_empowerment/Gendered-Value-Chains.html

⁸¹ Ibid

⁸² Ibid

⁸³ Ibid

⁸⁴ Ibid

⁸⁵ Dario Pinello and Samir Majdalani (2018), Assessment of the Commercial Seafood Chain in Lebanon, Retrieved at: https://www.agriculture.gov.lb/getattachment/3446e66a-1147-457b-a75f-08a5ca6b97a3/Assessment-of-the-Commercial-Seafood-Chain-in-Lebanon

⁸⁶ Ibid

⁸⁷ UNDP (2020), Gendered Value-Chains Study: Barriers and Opportunities, Retrieved at:

⁸⁸ Ibid

⁸⁹ Ibid

 $^{^{90}}$ FAO (2017), The State of Food and Agriculture: Leveraging Food Systems for Inclusive Rural Transformation, Retrieved at: $\frac{\text{https://www.fao.org/3/i7658e/i7658e.pdf}}{\text{https://www.fao.org/3/i7658e/i7658e.pdf}}$

gender and size of farms. ⁹¹ The percentage of female permanent workers in the animal production sector nationwide is 18.2 percent, versus 81.8 percent males. ⁹² The overall pay gap for all nationalities and across all working levels is 19.3 percent. ⁹³

As per findings the fieldwork attached to this study, women still have very limited power to decide over the use of family income, even when they are working themselves. Based on fieldwork, only 48.9 percent of participants believe that women should have decision-making power over the household income, while 26.7 percent insisted that only a portion of her own income should fall under her control, with the rest of the amount contributing to the overall family income that the "man of the house" ultimately has decision-making power over. 95

http://www.cas.gov.lb/images/PDFs/SIF/CAS Labour Market In Lebanon SIF1.pdf

⁹¹ Ibid

⁹² CAS (2011), The Labor Market in Lebanon, Retrieved at:

⁹³ Ibid

⁹⁴ Ibid

⁹⁵ Ibid

Intersectional Challenges for Syrian Refugee Women

Gender-specific challenges faced by Syrian refugee women remain prevalent and dominant across the agrifood sector, as well as across broader lines. Syrian women continue to encounter severe challenges in accessing labour markets in the host countries where they reside, with Lebanon additionally serving as one of the host countries that largely restricts Syrian refugees' employment and integration into the labour force across all sectors. 96 Although 52.5 percent of Syrian refugees in Jordan and Lebanon are females, a gender imbalance is present within this community in different working age groups. 97 In Lebanon, the male-to-female ratio is particularly low in the 20-24, 25-29 and 30-34 age groups, where females consistently outnumber males. 98 Employment and activity rates of Syrian women remain particularly low in Lebanon. Nationwide, unemployment of Syrian women is estimated at 68 percent, with economic activity rates at 19 percent. 99 Furthermore, the gender pay gap is substantial for Syrian women workers in Lebanon. According to the ILO, Syrian women reportedly earn 40 percent less than men. 100 The need for women to engage in childcare additionally requires them to seek out only part-time and home-based forms of income. 101 According to the ILO, of the entire Syrian refugee women population (aged above 15 years old), only 6 percent are currently working in Lebanon. 102 Syrian refugees in Lebanon's informal economy are mainly employed in services, agriculture, commerce, construction, and factories. 103 Most refugees work in Lebanon informally, whereby 92percent have no work contract and over 56 percent work on a seasonal, weekly or daily basis. 104

Only 23 percent of Syrian refugees in Lebanon earn regular monthly wages, with women reportedly earning at least 40 percent less than men per month. Among the Syrian communities, women remain the country's most vulnerable. Syrian women in rural areas are routinely paid on a daily basis, with their income being given to their husbands in order to allocate family expenses. While there has been a shift in traditional gender roles, and more Syrian women are becoming the breadwinners of their families, the possibility for this remains rooted in cultural, religious and social dynamics. Fear of harassment in the workplace is a common concern among Syrian refugee women and their families. As outlined in a UN

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<sup>96</sup> Maysa Baroud and Nour Zeidan (2021), Addressing Challenges Faced by Syrian Refugees Working in the Informal Economy: Case Studies from Lebanon and Jordan, Issam Fares Institute, American University of Beirut, Retrieved at: <a href="https://www.aub.edu.lb/ifi/Documents/publications/policy_briefs/2020-20/20210101">https://www.aub.edu.lb/ifi/Documents/publications/policy_briefs/2020-20/20210101</a> addressing challenges faced by syrian refugees brief.pdf
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⁹⁷ Ibid

⁹⁸ Ibid

⁹⁹ Ibid

¹⁰⁰ ILO (2014), Assessment of the Impact of Syrian Refugees in Lebanon and their Employment Profile, Retrieved at: https://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms 240134.pdf

¹⁰¹ Ibid

¹⁰² Ibid

¹⁰³ Ibid

¹⁰⁴ Ibid

¹⁰⁵ Ibid

¹⁰⁶ Ibid

Women study on women's participation in the agricultural sector, while the phenomenon is frequently and widely cited as a significant concern, the number of women who report having personally experienced harassment physical or verbal tends to be significantly lower, likely due to reporting concerns and barriers. 107

Barriers to Access and Agency

While measuring and understanding the underperformance of the VCs, the FAO GSVC framework adds 2 dimensions that help in finding the origins of gender inequalities in the agri-food sector. Accordingly, this project studied constraints faced by women on the individual and household levels, and was able to depict the root causes of gender discrimination that originate from these 2 levels and have its repercussions on the challenges faced by women on the cooperative and national level in general. Having women-led cooperatives and associations as the main beneficiaries of this project, the 2 added dimensions helped in assessing the constraints faced by members of these cooperatives on the individual and household levels, which in turn limits and negatively impact the organization's work and progress. Being without certain capabilities (knowledge, skills and experience) self-confidence and decision making power, and lacking access to assets, agricultural and/or financial services hinders women's growth on the individual and household level as well as on the cooperative and national level. As such, the GBCs and barriers listed below are categorized under 4 levels: individual, household, cooperative and national environment.

I. GBCs on the Individual Level

Limited access to finance and credit facilities: Women are less likely than men to have access to financial institutions, bank loans, and financial resources as they have fewer assets and less land ownership due to Personal Status laws in Lebanon that are unequal to women, and the overall dominant inheritance culture which favors men over women. Moreover, women seeking to start their own businesses in rural areas cannot access the business management support required, nor any rural incubators that can serve the local communities and encourage women to establish businesses with access to finances based on sound business models. Government funding for agrifood industries are often limited and insufficient to the sector's needs and potentials. Women continue to encounter multiple obstacles in accessing finances and loans from banks and other formal financial institutions to invest in agrifood businesses. Despite the efforts cooperatives put in terms of partnership with the private sector and organizations to access funds, the situation remains very challenging and income is limited to selling products. Women in cooperatives need credits to grow their work, to buy materials or other, but this remains very limited and the conditions are not always in the favor of women. According to this study, this is mainly attributed to the nature of most rural microfinance programs and credit schemes which are designed to target male clients and tend to be biased against women.

High cost of resources, energy and land: Inheritance law is particularly influential in the agrifood sector (particularly in agriculture), where women often do not possess or have access to land. This is particularly challenging for women engaged in processing activities, whether fruit or milk processing, as they need to ensure a consistent supply in order to manufacture the products. This not only incurs

¹⁰⁸ Ibid ¹⁰⁹ Ibid

more costs, but also influences market access, and further limits market opportunities. As a result, women joining cooperatives will have less opportunities in the farming and food processing sector.

Limited knowledge of safety and quality standards: A common feature for the small ruminant and other value chains in the agrifood sector is that women also have limited knowledge of the safety and quality standards regarding the different products; this, in turn, affects market access and linkages with potential buyers who require assurance of quality before purchasing. The processing methods are still traditional, artisanal, and do not always respond to the market demand.

II. GBCs on the Household Level

Socio-cultural barriers: Gender-based barriers in the areas of cultural norms remain the main obstacle that restricts women from participation in the agrifood sector. There are several economic sectors and activities that are still considered as "men's jobs" and deemed not suitable for women. Such gender dynamics remain persistent, and result in women continuing to be at a disadvantage in many sub-sectors and industries. The following stereotypes apply to the individual, professional and cooperative levels. These socio-cultural factors imposed on women by society, coupled with the psychological factors imposed by women on themselves and on their aspirations, inhibit their participation and employment in different activities. In particular, the agrifood sector remains highly dominated by males across Lebanon, making it increasingly difficult for women to breakthrough and gain support in order to further integrate into sub-sectors within this space. Men hand over different senior roles to their male peers rather than to a woman for the same reasons: an overall lack of confidence in her abilities, expertise and an overall narrow understanding of her roles in general. The root causes of women's limited economic participation and leadership is traced back to the social norms that dictate the expected roles of women and men. In Lebanon, women's participation in the labour market is further constrained by deep structural power relations that result in men controlling financial decision-making processes, an uneven distribution of household and home care work, limited awareness of women's rights, social restrictions on women's mobility, low self-confidence amongst women, and specific resulting risks such as GBV. As per the GSVCA requirements, gender gap between women and men in Lebanon remains high, and reaching a higher level of sustainability in the value chair requires its decrease, raising awareness about these challenges limiting the role of women in agriculture.

III. GBCs on the Cooperative Level

Lack of learning and training opportunities: Inadequate technical training (skills and techniques) for women related to several agrifood sub-sectors such as fishing for instance is an impending factor. The majority of training programs offered by the public sector and NGOs are perceived as non-women friendly, with very few of them explicitly targeting women.¹¹⁰ Women are typically involved in more

productive and reproductive tasks within the household, and therefore have little time to attend training and educational programs. Such a lack of education and training opportunities for women results in persistent employment barriers in the agri-food sector at the national level. There is additionally insufficient women integration in Science, Technology, Engineering, and Mathematics Education. This impacts their level of knowledge and access and usage of technology. There is not enough counseling and orientation to motivate more women to pursue such specialties, which could increase their opportunities for integration within different emerging sectors.

Limited access to markets and technology: Women have limited access to technology within the agrifood space. This is mainly due to the fact that they carry out activities dictated to them by their superiors, such as planting or harvesting in a traditional way in agriculture for instance. These tasks are generally carried out manually, without the assistance of technology.

IV. GBCS on the National Level

Lack of information: One of the pivotal issues to address when it comes to women's participation in value chains, as well as their integration into the agrifood sector as a whole, remains the absence of gender disaggregated data across all sub-sectors. Cooperatives are often asked to complete work related to stereotyped tasks; pantry, food processing, and other tasks remain required from men. While the presence of women in the sector is prevalent, this is not captured by labour statistics due to the fact that much of their involvement is informal, unpaid and/or unreported. This in turn contributes to an underestimation of women's role in the sector/value chains, and renders it difficult to address gender-related issues including unequal employment opportunities, access to resources and decision-making. The absence of data additionally translates into little policy attention being given to the gender dimension of this sector, and sectorial support not being channeled adequately to women. A reason for gender information unavailability originates from an evident gap in research on women in the agrifood sector.

Weak institutions: The inefficiency of government departments, women NGOs and cooperatives could be a factor determining the little attention that has so far been given to women's roles and potentials within agrifood sector. Women-targeted income-generating activities implemented by these institutions revolve predominantly around traditional small-scale agribusiness activities, ignoring larger impeding realities, and rarely including programs for addressing gender inequalities in the sector as a whole. This could be a result of limited women's representation and participation within these institutions.

Restrictive legal frameworks: Labour law includes several discriminatory codes that, for example, prohibit women participation in certain professions considered "hard," and lacks clear mechanisms for protecting women's rights in terms of remuneration, promotion, and competence in the private and public sectors. Measures for social security and protection, including parental leave, welfare benefits, and safety from sexual harassment are largely absent. For Syrian refugee women specifically, other challenges in the areas of legislation include the increased costs of attaining the required legal documents they need, as well as the very restrictive conditions they continue to navigate at all levels.

Cross-cutting services and infrastructure: A sense of safety and protection needed to encourage and support women's economic involvement is lacking in most cases, and in the agrifood sector particularly. These needs include social and medical insurance, day-care services, and reliable and safe transportation. Agriculture workers, household caretakers, freelancers, and workers in informal sectors still do not receive any social or medical insurance.

Limited business development services: Business Development Services providers are not sufficiently gender-focused, with little awareness of the constraints that women face. There is not enough attention given to the needs of women enterprises at different levels, or to the geographical distribution of such services.

Exploring Opportunities for Women

Despite the fact that Lebanon's ongoing economic and financial crisis has been worse on women, it has provided for additional opportunities for them to assume roles as income generators within their own households. According to an interview with a Key Informant from the Chouf Biosphere Reserve, [...] households now require an additional source of income, and this has resulted in attempts to integrate women everywhere possible. Additional interviews found an emerging trend among men, of encouraging women to work outside the house as long as they are earning a "good income". Interventions that would increase women's involvement in the agrifood sector include opportunities in marketing, management, packaging, and sales. Potential areas of intervention for women in rural areas also include taking care of existing or future guest houses, within or besides the production units. Findings also referred to women's abilities to serve as rangers, supervisors, or have administrative duties. Prior to the crisis, microcredits were provided as a solution for very small production projects led by women. The sections below explore gender-sensitive opportunities in each of the 5 agrifood subsectors, that were identified following the data collection phase which included KIIs, surveys and FGDs that were completed with experts in the field, practitioners, workers, farmers, and various organizations and cooperatives that work in the sector.

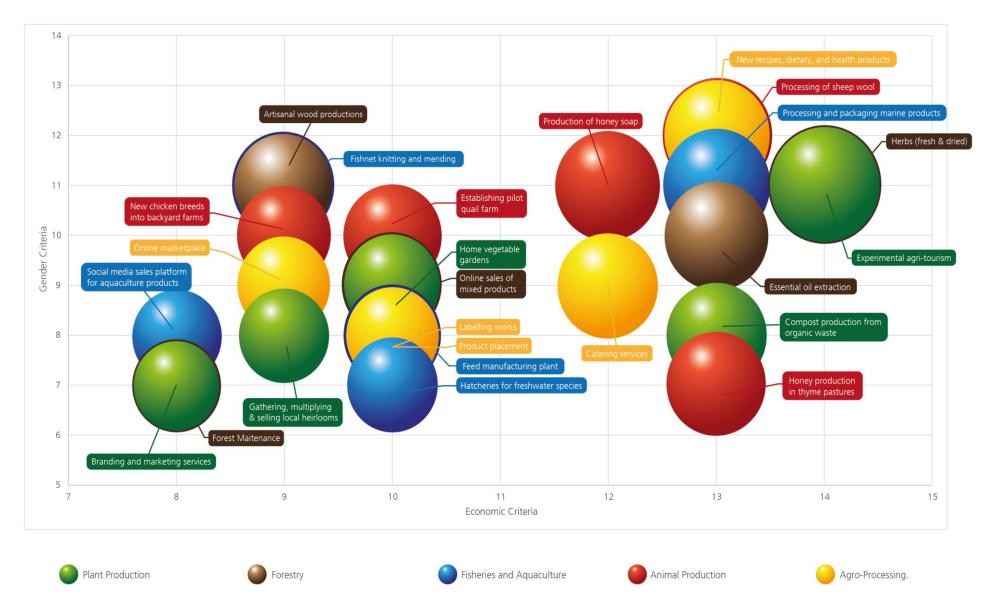
A VC approach was adopted to explore the possibility of women inclusion in all nodes of the selected chains under each sub-sector and ensure gender mainstreaming is encouraged. Therefore, all opportunities were identified based on their economic viability as much as their degree of gendersensitivity. As shown in the weighing matrix below, 5 opportunities for each sub-sector that scored the highest in the economic criteria (X axis) and gender criteria (Y axis) were included in the chart: economic criteria include parameters such as the geographic location and its impact, market needs, potential to export, expertise needed, level of complexity, time to implement, and funds needed. As for the gender criteria, it included parameters like legal capacity, physical capacity, cultural and traditional tolerance, and religious acceptance. Consequently, the farther up opportunities are positioned in the weighing chart below, the more appealing they ought to be for women cooperatives; by the same token, the farther right ones are the most economically appealing as per the aforementioned parameters. Please note that each sub-sector opportunities were allocated a different color, and overlapping opportunities that scored the same in the gender and economic criteria are appearing in the weighing matrix with an encircled bubble whose filling and border colors match the 2 sub-sectors that opportunities belong to. The weighing chart is followed by sections for each sub-sector, in which a description of the prioritized opportunities is given along other relevant data.

¹¹¹ Nicole Hark (2021), Lebanon is in crisis. And it's worse for women, Lutheran World Relief, Retrieved at: https://lwr.org/blog/2021/lebanon-crisis-and-its-worse-women

¹¹² Key Informant Interview, 2022

¹¹³ Ibid

¹¹⁴ Ibid



Matrix 1: Weighing chart for the gender-sensitive opportunities across all sub-sectors

I. Opportunities in Plant Production:

- 1. Compost Production from Organic Waste: a wide variety of fruits and vegetables are by nature perishable and have a very short life cycle and consequently, a compost production opportunity arises from this condition. Not only will it partially solve an existing fragile waste disposal system, this opportunity will provide locally produced compost that will substitute some of the relatively expensive imported agricultural inputs such as fertilizers. The compost production opportunity is based on gathering all organic waste resulting from fruits and vegetables losses on a daily basis from all selling points, wholesale and retail, and composting them to produce non-synthetic organic fertilizers. It is an important component of an agricultural value chain based on circular economy. Collecting and composting organic waste provides an important opportunity for women since they can be involved in every level of production from gathering organic waste from selling points to composting units and compost distribution. Women working in this opportunity do not require a special level of education; however, this work requires some physical labour and geographical mobility. Launching this service requires a fair amount of investment, supervision by specialists to avoid contaminating underground waters and minimize gaseous waste. Compost production is equally suitable for women and men, and thus women cooperatives having the required funds and expertise will benefit from having a leading role in this project that is rather considered underexploited in the country. This will have a positive impact through creating a new dynamic in the gender distribution of roles and responsibilities, and through making women challenge the socially constructed gender roles and themselves. Moreover, women empowerment is also achieved through providing value for what anyone in the project is doing. Trainings should be provided for women, men, and youth about compost in order for workers to learn how to do this job with no harm to the environment. Certificates of accomplishment as per the levels and content provided can be given in order to encourage participation and to formalize the learning. For cooperatives and farms, certified farms doing compost and showing the number of women and other workers who were trained can provide the company, association or cooperative more benefits in terms of access to local and foreign markets. These elements should be visible in the marketing inside and outside Lebanon, at the local, national, diaspora and international levels. The objective would be to attract and motivate the ethical consumer to buy from certified cooperatives, seeking more transparency, more gender equality and more support for women and men farmers. Capitalizing more of these experiences is a must and involving more women in the process will have a double positive impact; raising women opportunities from one side, and supporting the environment chain on the other.
- 2. Branding and Marketing Services: Most fruit producers currently sell their products to traders who have the connections to sell the produce to the farmers' market or to export it. Usually, all the risks of monetary fluctuation or wastage are the responsibility of the producers since they are the weak link in the VC. It is important to create new marketing channels that would link the producers directly to the consumers while providing them with an edge, an added value, be it the origin of the produce or their characteristics. In this framework, branding strategies can be designed and applied for apples, cherries, etc., with attractive and efficient packages to be sold in direct sales points close to the producers' regions. Women can excel in branding, networking and sales as well as the linkages they would create within this opportunity leading to a network of local stakeholders, that would

decentralize part of the VC. This opportunity would require a marketing background to set the branding and the sales points. It would also require proper training to make the network function. Younger generations are more involved in branding and social media. Cooperative deciding to opt for this opportunity should set a network of producers and sales points that would be attractive to clients. They should also diversify the products offered to guarantee their sustainability that is challenged by the seasonality of fruit production.

- 3. Experimental Agri-tourism: The proposed opportunity is based on hosting tourists for experiential touristic activities during emblematic seasons such as harvesting or picking and sharing the lives of the farmers during these times in order to re-establish the link between the consumers and the producers. It is important to provide special training on touristic activities and the different security rules and regulations and quality standards. Women can be involved in this activity on different levels including marketing and organizing of the events as well as their logistical support of the tourists. There is also a priority for household women where they can participate in this initiative in parallel with her usual duties, and using an accumulated know-how in household maintenance, cooking, etc. It will provide a sustainable seasonal income through two ways: the first is the additional labour force assisting in the harvest activity and the second is the income from the bed and breakfast activities. Acknowledging that this opportunity is a rather new concept in Lebanon and might be challenging for some farmers to receive people in their houses, specific training on communication, health and hygiene, hospitality basics, and others would be crucial. Furthermore, this opportunity is applicable by both women and men, even though cultural barriers in communities might present an obstacle for women more than men, where it is not acceptable to receive strangers in the household. Today, more than 151 rural cooperatives run by women are active around Lebanon (crtda.org.lb): they promote healthy, natural and authentic agro-food produce and preserves, along with local crafts; all produced in a traditional way. Internal tourism activities present a recently acquired trend among Lebanese but it is still considered limited and has room for expansion: it is crucial to encourage more activities and provide visibility and networking between the Lebanese guest houses. These activities vary for each season, attracting tourists all year long and securing sustainable income: it includes, among others, hiking in the nearby nature, picking fresh fruits from the surrounding orchards, preparing and/or tasting local dishes that are unique to each village. Establishing a yearly agenda for activities would guarantee a regular and non-seasonal income for women, which would attract women from different generations to carry out such work. It will also raise the level of decentralization and improvement of the rural areas in Lebanon.
- **4. Gathering, Multiplying and Selling Local Heirlooms or Adapted Species:** Most of the seeds produced in plant nurseries are imported F1 Hybrids, that are resistant to diseases and harsh environmental conditions: these seeds need to be imported every year and cannot be reproduced locally because they will lose their genetic advantage. Due to the current financial crisis, farmers are commonly replacing these seeds by lower grade ones that are causing the spread of diseases and the use of more pesticides, resulting in lower production volumes. The proposed initiative is based on collecting heirlooms or seeds of vegetables that have been used by farmers for decades which helped them acquire an adaptation to local environmental conditions. These seeds need to be tested and reproduced to be made available for farmers. This would provide farmers with better seeds with

lower consumption of pesticides and better-quality produce. This is a medium-term initiative that would take between 3 to 5 years and that can start with a budget of 10 000 USD. The needed profile for this initiative is women with agricultural academic backgrounds and geographic mobility. Adapted species may present some weaknesses if they were not present long enough to develop resistance to environmental conditions, so it is important for this opportunity to be supported by a university or a research centre to follow up on the development of the plants' productivity criteria. It is highly recommended that women, men and even youth have training or courses on the usage of pesticides and their effects on the environment and the risk on their health.

5. Home Vegetable Gardens: Households usually purchase fruits and vegetables from sale points without any quality assurance and according to the varying prices. These items represent an important component of households' monthly expenditure. Moreover, the quality of the products may be questionable due to the delay between the harvest, transportation, storage and sale. Home gardening can be a partial or total substitute to the fruits and vegetables bought from sale points and it would provide quality and freshness assurance. This opportunity can be implemented in 6 months between training equipment and disposables and production with an average investment that ranges between 200 USD and 500 USD per case. This opportunity is mainly directed to household women, where they can participate in the income provision in an indirect manner while still being able to fulfill the responsibilities they have to sustain. Moreover, women will encourage their children to be more eco-friendly and get back to nature. Women also should have some courses with certifications about plantation and the usage of pesticides, they can also have sessions on how to use the food waste as natural compost. According to the AFD advisor, women are capable of managing greenhouses, if their knowledge and skills are improved. 'We can use the household approach, which supports women inside their households, by teaching them about financing, budgeting, production, etc.' The sustainability of the project depends on input supplies; therefore, it is important to minimize procurements such as seeds by using heirlooms, fertilisers by implementing composting techniques etc. Available spaces are an important challenge, in addition to weather conditions, so the use of small greenhouses can provide a solution. Home gardens are usually grown in small surfaces and there is a need for product diversification, it will be impossible to use the same agricultural practices calendars for the different crops and will result in the use of smaller quantities of different pesticides and fertilizers, etc. Provide training on home gardening will encourage more women, working and non-working outside the house, to join the battle of boosting the agriculture sector. Home-based jobs for women in this sub-sector include planting fungi at home, home vegetable gardens, producing soap, planting flowers, as well as creating and managing plant nurseries. Through a home business, opportunities such as door-to-door sales might be an opportunity.

II. Opportunities in Forestry:

- 1. Artisanal Wood Production: Artisanal wooden works are currently available in many touristic facilities; they include writings or drawings on woods from falling branches or dead trees and they are usually bought by tourists. The needed skills are mainly artistic ones and they are usually developed by the persons without specific training; also, such production is mainly hand-made and therefore require time. In order to widen the scope of available writings and drawings, it is advisable to provide equipment to make the carving more precise such as automated wood burners and to provide technical training on the use of these machines. At the same time, training can be provided on artistic writing, especially on the Arabic words that would transform them into beautiful drawings. The cost can be below 10 000 USD for the equipment. This opportunity doesn't require physical presence at the points of sales and would support women who opt to work from home to cope with other household responsibilities. This opportunity also concerns the women who lost their jobs because it will provide them with an important skill that could be used in seeking different job opportunities. The maintenance of the equipment might cause a problem with the decreasing availability of foreign currencies; another challenge is the limitations of sale points and the limited number of tourists with the current Covid-19 crisis. A possible solution would be to incorporate these wooden souvenirs in gift boxes and to market them online. Since this opportunity would be directed towards tourists mainly, it is recommended to enlarge the scope of carved objects to cater for the needs of all tourists, adding to them the Lebanese traditional items. Use social media with targeting specific populations, and target foreigners as well as the diaspora. Mentioning the kind of wood that is used and its location in the Lebanese territory is also an added value.
- 2. Forest Maintenance: There is little effort being made to maintain forests in most of the Lebanese territory, which greatly increases the fire risks and due to this low maintenance, many hectares are burnt every year during the period of end September and early October. Maintenance activities include pruning the lower branches, cutting smaller shrubs and making way for passage in case of fire for fire fighters. As mentioned before, all the produced waste can be composted or transformed into pellets or briquettes for different uses. According to Infopro's report, charcoal is produced in considerable volumes but additional quantities are imported to fulfill the local demand, which is mainly for heating, barbecues, and hookah; the report also states that women participate, with men, in planting, plowing, pruning, managing fields, and cleaning the forest. This opportunity requires work away from home and an important physical effort, which would necessitate women with a certain physical ability; also, mechanization may provide an answer to facilitate women inclusion in this opportunity. Additionally, forest maintenance supports mixed teams where women can be team leaders supervising actual physical work and marking the spaces that need to be cleared and the species needing to be cleared: it will place women in leading positions for advocacy for environmental protection and forest management. The advantage is that the number of created jobs is high and the required period of work can cover almost all year. The needed investments are mainly paying workers and basic equipment. Trainings and certifications by the MoA in collaboration with NGOs and qualified institutions are required to get an understanding of the flora and the adequate pruning and clearing. It is also important to collaborate with the directorate of natural resources and rural development in the MoA for open spaces and with the Ministry of Environment for the reserves.

Collaboration should further be followed with the firefighting brigades (Civil Defense) to identify all the hot zones where forest fires usually take place and provide support to their activities. The proposed activity would decrease the forest fires probability and would provide job opportunities year-round for women in rural areas. This will also increase their role in preserving the environment and providing income to their households. Municipalities or reforestation institutions could provide the financial support to preserve the attractiveness of the region for touristic activities. Moreover, it is important to include male family members at the beginning of the inclusion to allow them to share responsibilities with women and as the precursors of women's emancipation and integration as an important and equal partner in the economic and social like. Men should be part of the change and they should support women's actions and work. As they are the decision makers in general in the local society, they can prohibit women from accessing resources and work.

3. Online Sales of Mixed Products: With the Covid-19 pandemic, many businesses have chosen online tools to market their products and delivery services to avoid opening their stores. Now that the pandemic restrictions are decreasing and that face to face sales are reclaiming their natural status where human interaction plays an important role, online services have proven that they are efficient and decrease the cost of the final product, especially that they don't require a physical space for display and that delivery services include different items at the same time, reducing the costs even further. Currently, most wooden carved souvenirs are sold as separate pieces, but enlarging their range and incorporating them with other items can increase their marketability. It remains interesting to sell online artisanal wooden works with door to door delivery; however, to increase their sales, it is interesting to incorporate them into gifts and souvenirs, for example wooden carved boxes containing jewellery or chocolate etc. For this opportunity to be a success, networking is very important and should include e-marketing and sales platforms and producers of jewellery and highend chocolate and sweets. The needed investment is quite low, since it will be mainly based on collaboration and on sales income distribution. This opportunity needs some marketing and networking skills and could be functional in 6 months. This opportunity can be performed by women and men, it is nonetheless particularly interesting for women in households with certain knowledge of the e-marketing activities, where they can integrate the whole production chain: the creative part which would provide mixed products and designs, the production part and the delivery part. This opportunity can be done on a part time basis. One of the major drawbacks of e-sales of wooden souvenirs is the limited supply for some wood such as cedars, where the available quantities of dead branches and dead trees are limited, whereas pine wood and oak wood are more available; other woods can be used such as willow, juniper, etc. where they are more available, therefore, it is important to adapt the size of the items to the availability of their wood. Another challenge is the important human contact and the physical presence for customers to see, feel and smell the wooden items; therefore, it is important to note that online sales should target a specific segment of customers who already know about the products or need to get this service remotely. Guaranteeing wood quality is a must, since there are many ways for adulteration through covering low quality wood with special perfumes that would disappear in time. Women's presence should be very visible as part of the branding to support a fair and inclusive sector that offers women an equal opportunity of integration as men.

- **4.** Essential Oils Extraction: Lebanese forests are typical Mediterranean lands where many herbs grow with diverse tastes and smells. Many herbs such as sage, rosemary, etc. with medicinal and therapeutic effects are gathered every year and sold to extractors to get essential oils, as the national and international markets for such oils are growing. In addition to oils, another product can emerge from this activity which is less concentrated and provided in larger quantities: plant water. Currently, picking is done without any control nor any regards to the plants' sustainability: on one side, such activities are not done by local populations who have the right to benefit from their surrounding lands and on the other, picking is done sometimes too early and often roots are extracted in the process which would delay the plants restoration. Another draw-back is the competition with pickers from other regions, hence the importance of the intervention of local authorities to organize this process and to allow residents of each region to benefit from the whole VC, starting with the picking activity and reaching the extraction of essential oils. Also, connection with pharmaceutical companies or perfume producers is an important step towards the success of this opportunity. It is important to guarantee the quality of the products and their traceability as adulteration methods are diversified. The investments include basic equipment for cutting and gathering and gloves that would protect the hands of the pickers and the roots of the plants. As for the extraction part, extraction and refining apparatus can also be purchased and it would be around 2 000 USD. Trainings about the plants and the extraction process are needed. This opportunity can be adopted by men and women: it requires the participation of local citizens since they know the exact geographical distribution of these plants and the right knowledge about their life cycle. It is a seasonal work for the gathering and extraction part but a part-time job for the products sales. According to LRI, extracting essential oil is another way to give women more income, as there are a lot of aromatic plants in our forests that can produce useful essential oils.
- 5. Herbs (fresh and dried): Herbs such as thyme and oregano are usually gathered from forests and prairies during the summer season, the concept is the same as the plants used in essential oils extraction. Usually parties of workers gather them as they are later dried and chopped. Some of them are used in salads and in cooking and others such as thyme are mixed with other components like sesame and sumac with other different variations. The support that can be provided to the herbs field relies on tackling the organizational component that would allow municipalities to identify their territories and sustain their production and their use by local communities. Training on the plant's life cycle and picking techniques as well as picking, gathering and transportation techniques are required. It is important also to provide existing mills with special drying and chopping machines that would support the post-harvest activities. It is a short-term investment below 2 000 USD for the machines but it can benefit a whole community and decrease the drying and chopping costs users have to pay. This opportunity is very inclusive and cross cutting with other activities, especially for cooperatives, it would allow them to increase the diversity of their products within a traditional framework. Picking needs a minimal know-how of the plant life cycle and picking technology as it also requires some physical labour and geographical mobility. As for the drying, chopping, mixing, filling and sales, they only need minimal physical labour and know-how and if the mills are near the houses, it is possible for women to carry their household responsibilities for the ones who are in the obligation of carrying full time household activities. Drying activities are highly energy consuming; however, there are low cost dryers that can be built and that rely solely on solar energy. Also, these

herbs are only available during a short period of time during the year and therefore it is important to dry them to increase their shelf life. Another challenge lies within the storing conditions whereby it is essential to guarantee adequate storage away from humidity to preserve their quality. It is important to work with sun dryers in order to decrease the energy cost and thus decrease both the environmental and the financial cost. Innovation is also key in providing different sorts of herbs mixes such as Zaatar mix (for example good thymes). Zaatar has a huge potential at the export level. Guarantee the participation of women in the production chain, raise the level of training and innovative technologies, and make the presence of women visible at the marketing level which would require their participation in training to strengthen their marketing skills. Encourage the new flavours and taste, fusion of flavours in the Zaatar to provide a wider list of products to consume. At the export level, it would be great to highlight the story of women working in the sub-sector, the regions, as well as some recipes for the usage.

III. Opportunities in Fisheries and Aquaculture:

- 1. Social Media Sales Platform for Aquaculture Products: There is no direct marketing of aquaculture products as is apparent in the absence of marketing campaigns and commercials. Fish produced from aquaculture are sold fresh or served in restaurants around the fish farms. In the case of rainbow trout, the fish is also fileted and smoked and the product also finds its way to consumers mostly through direct contacts. Social media provides an excellent opportunity for farmers to further enhance their direct marketing to consumers. Social media connectivity provides the best opportunity to link farmers with consumers. Fish farmers are encouraged to rely as much as possible on social media applications to communicate with their customers. An additional approach would be to promote locally farmed rainbow trout on cooking shows aired on local TV stations therefore ensuring that households are aware of the existence of the fish and ways to cook and serve it. Moreover, providing a geographic identity to the product by labelling where it was farmed will most likely affect its price. This is another opportunity that favours the inclusion of women. More specifically, women in the aquaculture VC can handle communication and sales with customers on social media. In addition, women can work in direct sales of fish and/or in the restaurants associated with the farms. Fish farmers may consider that the level of production may not warrant launching marketing campaigns since the market is largely undersaturated and the product is easily sold. In addition, fish farmers may not have the initiative to promote their products nor the resources to launch sustained marketing campaigns. Furthermore, support is lacking by the government as the MoA to date has not launched any marketing campaign promoting aquaculture products. Platforms are to be created by experts with the support of the aquaculture community. It is recommended that platform development be carried-out in an integrative approach where farmers are invited to be part of the whole process. This serves a dual purpose: 1) raising awareness of fish farmers about the benefits of the platforms; and 2) training the fishers management and functionality of the platforms. It is also recommended to involve younger generations at the level of social media. Younger generations are more familiar with social media and they are also in search for jobs within the actual crisis. Involving them will bring new technologies to the aquaculture VC, and it will raise the cohesion between the generations.
- 2. Processing and Packaging Marine Products: Even though processing of seafood into value-added products is well known amongst fisher communities, the industry did not develop due to lack of interest of fishermen as can be clearly seen from the results of the current survey. Only 17 percent were interested in packaging and 16 percent in processing of marine products. In addition, there were no incentives nor guidance by public authorities to establish such trades. Some small-scale opportunities are currently provided by the food and beverage industry through seafood restaurants where they commission fisher families to provide them with some processed products like pickled and/or salted fish, mostly during the summer tourist season. Some small-scale processing is currently provided by the food and beverage industry through seafood restaurants where they commission fisher families to provide them with some processed products like pickled and/or salted fish, mostly during the summer tourist season. Due to the economic crisis, there is a growth opportunity for such products at the national level: for example, certain tuna-like fish species as the Little tunny (Euthynnus alletteratus) are marinated in vinegar and olive oil; other species as the Round sardine

(Sardinella aurita) and the Anchovy (Engraulis encrasicolus) are pickled or dried with sea salt. There are most likely many other family/local recipes to add value to seafood that still need to be identified, evaluated and documented with potential to be produced at industrial scale. Particularly, the perennial wild herb, the Rock samphire (Crithmum maritimum) that grows just above the hightide levels of marine rocky shores is commonly pickled and consumed in certain locations. It is important to recognize though that fishers cannot obtain microcredits to develop their trade as their boats and gears are not recognized as collateral by lending agencies. This hinders their capacity to improve their livelihood and to diversify their economic basket. Given the reasons outlined throughout the study about the limited presence of women in fisheries VC, this opportunity seems by far the most appropriate for their inclusion in it. Further validating the availability of prospects is the willingness of almost half of surveyed women to participate in training courses on drying, pickling, smoking, salting, fish paste, fish sauce, packaging, labelling, marketing, and cooking. This is also clearly considered by the MoA as the best area to integrate women in the sector where it was stated that: "We have to put more added value to the products. Here is where women have a role to play, because men are already busy playing their role. Women could be integrated into the Value Chain through branding, packaging, labelling, and many other fields."

- 3. Feed Manufacturing Planting: Fish feed for the freshwater aquaculture industry is imported and Lebanon lacks a functional feed production plant to supply the farms and reduce costs. A feed manufacturing plant was established in Hermel but remains inoperative due to both political and technical reasons. The main opportunity therefore lies in putting the Hermel fish feed manufacturing plant into operation by providing all the necessary material and financial resources. This will create employment opportunities for both women and men at different levels of expertise (feed manufacturing, equipment maintenance experts, nutrition experts, sales, marketing etc...) and adds another level of security to farmers and markets alike. The main barrier is political as the Hermel feed production plant is inoperative: to ensure that the plant is operational, lobbying with concerned authorities is essential, to secure the necessary material and financial resources until the plant becomes fully independent through product sales. Once put into operation, challenges may be experienced in the quality of the produced food, price, the acceptance of the product by fish farmers in the region and the ability of the plant to produce feed for different species. Stability of provision of fish feed will lead to stability in production and the potential expansion of the VC.
- **4. Fishnet Knitting and Mending:** It is widely accepted that the fisheries VC is essentially male oriented where women are hardly present, or play marginal assisting roles. Even though the presence of women is rare in fishing activities, as is the case globally, 58 percent of male respondents of the survey done within the scope of this study were in favour of their inclusion in the sector. Women are currently only involved in research and development, capacity building, provision of training, some gear manufacturing like net mending, and family-based, small-scale processing of seafood. Net mending and knitting are common activities that women offer their fisher husbands as a way of support, rather than a proper income generating job. This activity can be undertaken by women individuals or cooperatives from which they can earn an income: women could learn the proper specs for the nets in order to contribute to decreasing the exploitation of small fish and over-fishing

practices. There is an important role for women to play here in the areas of preparation and support for mainstream fishing – particularly in the areas of maintenance after fishing as well.

5. Hatcheries for Freshwater Species: the hatchery that is located in Anjar usually provides rainbow trout larvae to farms. Its status fluctuates between operative and inoperative depending on availability of resources provided by the government. This opportunity is equally feasible for women and men and operations in a hatchery could drive women into this sub-sector even more. Given the small size of the freshwater aquaculture VC, there is no need for the construction of a new hatchery. Efforts and investments should concentrate on ensuring its sustainability and on providing its staff with the necessary tools, and material and financial support to test the viability of new species. This will surely lead to expanding the VC and allows current and new farms to diversify their product with positive impacts on the aquatic food industry. If the Anjar hatchery is provided with the needed resources to sustain its activities, women may be employed in broodstock maintenance, rearing of larvae and fry, identifying the feasibility of new species for farming as well as in fish health and marketing. The main barrier is the small number of fish farms to which the hatchery is catered for in addition to the lack of material and financial resources by the government to ensure its sustainability.

IV. Opportunities in Animal Production:

- 1. Processing of Sheep Wool: this opportunity consists of the creation of a facility for the production of yarn from sheep wool. Similar to men, women would equally fit within the work of such a facility they would collect/receive wool from existing or new sheep farms and process them. Several technologies exist for the production of yarn from sheep wool, however, they all include the same steps: cleaning to remove oils and debris; drying, picking (to remove remaining debris), dyeing (optional), carding (combing), and spinning. Based on the quality of the wool, it can be sold for the production of rugs, clothes, etc. The proposed project consists of establishing a facility/workshop for the transformation of sheep wool to yarn. The wool would be collected/bought from sheep farmers and transported to the facility, where it will undergo the process described in the previous paragraph. The produced yarn could be sold as is or weaved and sold as intermediate (fabric) or finished product. Women can be involved in all stages of the process: coordination with farmers, collection and transport of wool, processing, and sale of wool. Initial training is required to acquire the skills (traditional and modern). Two main challenges arise: expensive processing equipment and the assurance of good quality wool. The quality and type of wool depends on the sheep breed. Therefore, it is important for the facility operators to be trained on the various types of wool produced by the local breeds and potential breeds to be introduced and the specific requirements for their processing into finished products. It is recommended that the facility collaborates with an expert to determine the required specific processing steps per wool type (where applicable) and to identify potential types of yarn that can be produced and the associated potential end uses.
- 2. New Chicken Breeds into Backyard Farms: The Lebanese market has a remarkable demand for free-range or backyard eggs due to the farming method used and nutritional value that gives them an advantage over commercial eggs. New productive chicken breeds can be introduced to existing and new farms to improve productivity, and increase the profitability of small-scale farms and allow the production of high quality, free-range eggs at the same nutritional input that is currently being used in farms. Alternatively, a series of backyard chicken farms raising high productive breeds can be established by several farmers in a selected area that would create a cooperative for the production and sale of free-range eggs and meat. The cooperative would put several conditions for farms and farming methods, hygiene, feed types, etc. that need to be followed by members. The cooperative would collect produced eggs, package them and distribute them to consumers or markets. The creation of such a cooperative would allow the following: train members on the topic of farm management, monitoring of animal health, and livestock disease management; benefit from economies of scale through the procurement of needed input for farms; sign agreements with veterinarians for periodic inspection and consultation; assure the unified quality of production through monitoring of farms and provision of support; and last assure markets for products. Women can manage and operate the farms, manage the cooperative, monitor and evaluate production and quality, and market the products. Individual farm management could be a secondary activity practiced in addition to traditional jobs. No special skills are needed, except for professional support in the business setup stage, especially in breed selection and the development of tailored operating procedures. Farm operators need to be educated on good practices, best ways to monitor animal health and manage diseases. Farm management should ensure compliance to production standards

to be set by all farm members and should procure alternatives to commercial feed to reduce the production cost.

- 3. Honey Production in Thyme Pastures: To ensure the production of high-quality honey, bee pastures can be created through the plantation of agricultural lands with thyme. These fields would provide the bees with the needed pollen. The project could also include a workshop where thyme and honey-derived products can be manufactured. This methodology provides a safe pasture for bees and provides a secondary source of income from thyme. Women can plant and take care of the thyme field, and harvest the produce. In addition, they would take care of the bees and beehives as well as produce honey, bee pollen, and propolis. Also, foodstuffs derived from honey and thyme can be produced for sale. Women should be trained on planting and upkeeping thyme fields as well as beekeeping. It is worth noting that women in Lebanon have been traditionally involved in the production of Zaatar, and contribute to 12 percent of the market share, however, their involvement is more significant in wild collection from forested areas (USAID, 2020). Challenges in this opportunity include the availability of agricultural lands and the assurance that no pesticides are used in the vicinity of the pasture. Women-led cooperatives who would like to seize this opportunity should be encouraged to rent lands from religious corps (Wa'ef), Mchaa lands (owned by the government). The cooperative implementing this opportunity could align its efforts with one of the protected areas of Lebanon and would develop a program for the proliferation of thyme planting and the availability of land. The development of a labelling program associated with a certain village and protected area could reap benefits to all stakeholders. The project could be established in collaboration and/or under the guidance of experts or other cooperatives that have successfully implemented similar projects in Lebanon to learn best practices and benefit from their expertise.
- **4.** Production of Honey Soap: Honey soap can be produced through a cold process, using as main inputs oil, caustic soda, and honey. The production of honey soap could be an independent project, procuring honey from beekeepers, or could be associated with newly established apiaries. Women can manage and operate soap production, and market and sell the products. This opportunity would introduce the production of a new type of honey derived product and would assure an additional source of income for honey producers. Technical support by experts is needed at the initial stage of the project, to design the process, procure the needed equipment, advise on the types of materials, recipes and methodology for operation. The operation of the facility requires skills that should be taught to the facility operators; in addition, marketing and sales skills would be a plus. Extensive training for this opportunity might be required, especially in the creation of new soap twists using honey. Also, a marketing strategy will be needed to push this opportunity forward. A market linkage might also be needed for the introduction of such a new product concept. Depending on the desired quality and characteristics of soap, several recipes can be selected, using various components. It is therefore recommended to produce different types of soap depending on the accessibility to needed materials and market them for their benefits. Accordingly, such projects should be implemented in collaboration with experts to develop the recipes, including ingredients and their proportions, and to consult dermatologists on potential adverse reactions to certain ingredients (such as allergic reactions). The packaging of the produced soap should include a list of the main ingredients, and

could include a short story related to the project and its impacts on local communities (beekeepers, women involved in production, etc.).

5. Establishing Pilot Quail Farms: such farms that do not utilize too much space, and also do not require sophisticated resources. Quail are smaller-sized poultry birds that can be raised in cage systems in small places. A cage 120 cm long, 60 cm wide, and 25 cm high can host 50 quilts. Quail farms should be well lit and ventilated These birds grow fast and start laying eggs within 6 to 7 weeks. The expected outcomes of such farm are the production of an alternative source of protein for local consumption as well as the production of a source of meat for potential international export A quail farm can be managed and operated by women and men; but this opportunity presents a gate for women inclusion as they are able to establish such farms in family yards and outdoor spaces, while also resuming her household and caregiving obligations in parallel. The creation of a niche market is essential, possibly through the imaging as an hors d'oeuvre (Meza). The pilot farm can be operated by women and women associations who would need capacity building to ensure proper farm management. Several sources online provide guidelines and tips for starting a quail farm: including a description of the characteristics of quail, their life cycle, selection of breed, farm design, feed, breeding, diseases, hygiene, etc. Any organization/individual should seek the support of an expert and take into consideration the local regulations, climate, availability of inputs, and other circumstances that might affect the project.

V. Opportunities in Agro-processing:

- 1. Labelling Work: Most cooperatives perform manual labeling work, frequently placing the name of the product along with the name of the cooperative that prepared it. Information as ingredients, tracking number (batch number), expiry dates, nice brand design are most of the time missing. Also, manual labeling is considered highly time-consuming and requires long hours of work from the cooperative members. Additionally, such labeling is not clean and accurate, which makes the final product less appealing for the final consumers. The opportunity is to provide labeling machines to the cooperatives and small groups of farmers to help them gain time, nice aesthetic finishing, required minimum information, and decrease cost. Both women and men have equally various opportunities in this project from label designing to writing accurate information. Inclusion in this opportunity can even embrace people with some disabilities. Employment of people with disabilities should go in parallel with capacity-building sessions. The objective is to integrate a marginalized community in all the projects. The expected outcomes from providing a labeling machine to cooperatives are as follows: reduce work hours of the cooperative members which will consequently reduce the cost; obtain accurate and clean final products in regards to the nutritional data that should be present on the product, and an appealing design that will encourage the consumer to buy it; include a tracking number of the production batch to track any deficiencies or issues observed once in the market. It's a simple task in the agro-processing process yet needs precision. Hence, the most eligible to fulfill the manipulation and functioning of a labeling machine are women. For the machine functioning, women with a low level of education could perform the task, whereas for the label content and design requires women that have a high level of education to input the correct data and the aesthetic design. Whatever the lines of product are, all cooperatives are eligible to implement such an opportunity and acquire labeling machines. The very first barrier to this opportunity is the relatively expensive price of the labelling machine, especially during the tough economic times the country is facing. Another challenge to this opportunity is the shortage of electricity that can also affect the functioning of the machine, and waste time, which might push the cooperative to go back to the manual labeling to finish their products and send them to the market. In terms of labelling, it is highly recommended to study the market of destination, check what are the requirements to adapt their labeling content, language, and design. Women would need guidance to initiate such tasks, in order to understand and adapt accordingly. This guidance can be done by a local NGO that has already implemented such work or is already selling its products locally or exporting it to international markets. Concerning the labeling machine, it is recommended to train the team of women responsible for using the machine, to help them understand the functioning of the machine, the maintenance needs, and any mitigation measures that should be taken if a problem occurs.
- 2. Catering Services: Most cooperatives' work is based on the seasonality of their raw material. When their stock reaches zero, their activity considerably slows down which causes a drop in revenue, leading to a decrease in the purchasing power of the cooperative members as well. Therefore, these women can either start a catering service or increase the volume of an already existing one, which would allow them to be productive during the down period of the cooperative. This opportunity would not keep these women from performing household and caregiving tasks. Catering service would particularly be appealing in rural areas where people often celebrate special occasions that are

part of the Lebanese culture such as newborn babies, religious celebrations, traditional occasions, and many others. Not only does this opportunity fall within the scope of most women cooperatives (meaning they have most of the skills and equipment required for it), offering catering services will fill the gap created by the seasonality of the raw material. The catering service can offer traditional cooking dishes as well as innovate by adding twists to existing recipes, exotic tastes, and others. Having the required skills in cooking and the equipment and machinery, women cooperatives can directly start testing these recipes with small group of persons, and then grow with time while gaining more and more experience. They might need extensive training in food safety, hygiene, Good Manufacturing Practices, and others to develop their skills further, which will lead to the shift from being only housewives providing a catering service to a more professional cooker with higher standards: women should have the opportunity to have vocational training that will help them have their own small business like a home-based catering. This opportunity would flatten the curve of revenue by increasing the cooperatives' income in the periods outside the season of the raw material they use to create their products; it would increase the household income which affects directly their quality of life during downturn periods; it will increase women's knowledge on food safety, stock management, and pricing strategy after attending such trainings; and last, it would adjust the gender balance of men and women in the catering team

3. Online Markets: Currently, most of the cooperatives count on selling to consumers of their surroundings. They based their sales on trust and good reputation that were gained by the quality and taste of their products: their reputation is their sales channel which is based on word-of-mouth communication. To sell all their products, increase the volume of their work and eventually generate more revenue, they cannot rely on their surroundings and reputation only. From this perspective arise the following opportunity that entails connecting the farmers and cooperatives directly to the terminal market, bypassing consequently all collectors and distributors who very often control the market. The online marketplace opportunity would succeed in increasing the network of the cooperative which is the main reason behind turning digital. In addition to the bigger reach out, transparency is key to the success of an online marketplace: all products should be listed with their prices, nutrition facts and quality levels. The creation of the online platform or marketplace should be followed by a strong marketing strategy to strengthen the project and make it a confirmed success. A prerequisite step to establish such a platform would be to train involved women to use social media, acquire all other necessary information such as how to be active and promote their products. This will give women the opportunity to have their own business from home, which will allow them to become financially independent. The digitizing process needs patience, precision, and detailed oriented persons, which fits more women than men. An online marketplace would create awareness on the presence of such a cooperative along with the story behind it and open a new sales channel which will increase their potential to sell more products and therefore increase the members' revenue and purchasing power. This opportunity can be done at two levels: at the level of the cooperative: social media pages linking the cooperative directly to final consumers. This would require women at an advanced level of education that is also involved in social media platforms. It can also be done at the level of a region: a digital marketplace that englobes several cooperatives from the same region or even from different regions. This would also need women at an advanced level of education but cannot be done at the cooperative level.

- **4. Product Placement:** Cooperatives are often used to the traditional way of selling their products: either from their location that relies on consumers to knock on their door or to be part of the village summer event: the cooperatives will still be targeting the same category and amount of people with little hope of expansion. As previously explained within the scope of the opportunity above, the conventional and traditional selling channels are not sufficient to generate enough revenue and provide decent incomes to cooperative members. Therefore, in addition to the online marketplace suggested, another medium to promote the cooperatives' products would be to place their products in physical spaces and take part in many events throughout the year. Cooperatives are often used to the traditional way of selling their products: either from their location that relies on consumers to knock on their door or to be part of the village summer event: the cooperatives will still be targeting the same category and amount of people with little hope of expansion. As previously explained within the scope of the opportunity above, the conventional and traditional selling channels are not sufficient to generate enough revenue and provide decent incomes to cooperative members. Therefore, in addition to the online marketplace suggested, another medium to promote the cooperatives' products would be to place their products in physical spaces and take part in many events throughout the year. Women will need to have good communication skills that will allow them to be part of such events and attract more consumers to try their products. Events would include train station and garden show events and FTL yearly food fair. Some cooperatives' work on flyers to introduce and promote their products to the consumers, which should migrate to more innovative ways like QR codes to gather customer data and preferences. The cooperatives would also be able to promote new products such as distillates of Zaatar and not only orange flower blossoms for example. This opportunity would introduce new products to the local consumer; it would give a bigger exposure for cooperatives to a wider type of consumer building a profile for each event, each geographic location, etc. which will potentially increase their revenue. It will also allow cooperatives to perform free food testing to receive feedback from consumers on new recipes. As communication is at the core of the product placement in the events, the required level of education is mid to advanced level: women need to have good communication skills that will allow them to be part of such events and attract more consumers to try their products. This can be done at the level of every cooperative involved in agro-processing.
- 5. New Recipes, Dietary and Healthy Food Products: The health and diet markets continue to constitute a major staple of the sub-sector. There is a significant role for women to play at all stages of this process. Whether this be in the areas of creating recipes, to marketing products, to being involved in production. Such products also have a higher value on export. Based on market study on dairy and meat products in Lebanon performed by RPS group, under a project with AVSI in 2021, interesting findings reflected the change in consumer behavior in light of the financial crisis the country is going through. Concerning the dairy products, cooperatives already produced a wide range of products, mostly concentrated between labneh & labneh twists, in addition to a variety of white cheese (Akkaoui, Halloum, White cheese, etc.). With the devaluation of the local currency and the high costs of imports, all kinds of cheese that were once considered exotic are either no longer available on the supermarket shelves or, if found, they are much more expensive on the majority of Lebanese consumers whose salaries are in local currency. Therefore, catering to the Lebanese market would push cooperatives to produce types of cheeses that are still in high demand among consumers,

like exotic cheese (Boursin, brie, Roquefort, etc.) and yellow cheese (kashkawan, parmesan, etc.). Other dairy products could be expanded in the local market, such as "aricheh", a traditional food made from milk which is usually served for breakfast, yogurt and keshek. For the meat products, the scarcity of expertise in the meat processing products, as well as a weak development of meat processing, has made this sector in Lebanon weak and under-developed; also, some imported products like mortadella and others are starting to disappear from the market. Therefore, this presents an opportunity to develop the processed meat industry and explore the significant number of products that could be developed. While observing the Lebanese market, one can hardly notice a fresh meat brand: most consumers buy their meat from the village's butcher or big supermarket. Hence, starting a brand for all sorts of meat would answer the market's need for such a product: it can include steaks, hamburger patties, sujok, and makanek. With their skills in cooking, women's role is essential in these innovations and they are the key to success for such an opportunity. Similar to previous opportunities, women cooperatives can start their own brand, promote their products on social media pages with the right labelling and packaging, and attract consumers who are longing to buy locally produced dairy and meat products. These customers would also be empowering women when they buy products that are exclusively produced by women and clearly labelled as such. In this opportunity as well, women should be trained on food safety and how to preserve food in the best and healthier way. The level of education should be mid-level as it requires some knowledge in quality and hygiene for the food preparation, especially in testing and creating new recipes. This opportunity can be implemented in all cooperatives without any barriers.

- In dairy processing, some opportunities need to be developed:
- Increase the kinds of twists for the labneh
- Increase products of traditional while cheese as halloum akkaoui, arisheh, and others
- Develop new exotic cheeses that are still requested by the consumers in certain regions as mozzarella, Boursin, brie, white cheese with dried fruits
- Produce yellow cheese as it's the main component of every households' meal as kashkawan
- In meat processing, there are existing as well as new opportunities that need to be developed:
- Increase the production of hamburger, nakanek, and sujok along with proper branding and marketing strategy
- Replace unhealthy imported processed meat such as Mortadella that is largely consumed by Lebanese customers) with processed chicken or fish.

The introduction of new products, new recipes, and traditional products with twists will immediately increase the revenue of the cooperative and will incentivize the production team to increase the production volume. This will positively impact the cooperative's members income which will in turn impact their families.

Concluding Remarks:

I. Persisting Challenges

Lebanon continues to endure economic hardships at all levels. Ultimately, this has shifted social roles, family dynamics, and laid the foundation for an expanded role of the woman outside her household duties and caregiving roles. As households continue to need more income to make ends meet, the current crises indirectly serve as a push forward in the areas of breaking down gendered roles, and in the areas of pushing for women's empowerment in the long-term. Amid the aforementioned ongoing economic hardships Lebanon continues to endure, women-led cooperatives and associations across the agrifood sector remain in dire need of assistance and support. While some forms of assistance that target production units as a whole would indirectly benefit women and assist with their integration into the sector, there remains a need to target women specifically in long-term support and development responses. On a nationwide level, the following gaps and needs have been identified in most women-led cooperatives and the below sections categorizes them by the individual, household, cooperative and national levels:

A. Individual and Household Levels

- 1. Awareness of gender dimensions: this remains limited in the agriculture sector, and this is common to all workers in the sector. Despite this constraint being present on all levels, women are very often the primary enforcers of gender norms and restrictions as mentioned in the FAO framework: gender roles are not only imposed upon women by the society but they are also enacted by women themselves. Furthermore, stakeholders in the KIIs from the 5 sub-sectors view gender as a domestic violence element, not a mainstreaming concept related to all sectors. The lack of understanding of gender leads to a problem when addressing gender at the agriculture sector in general and sub-sectors in particular.
- 2. Lack of capabilities in terms of skills, knowledge and experience: In terms of income generation, it was very challenging to know if women can survive from pantry production, how were the first three years in terms of selling, and other major elements to assess their activity in the agricultural sector on an economic and income generation levels. Ambiguity in that regards is mainly attributed to poor book-keeping, unpaid labour, and resistance to declare such information.
- **3. Sexual harassment:** women are often exposed and endure sexual harassment and abuse in the agrifood sector. Although it is very common, it was very hard to report it in the study because the topic remains a taboo, and no data was collected in this regard.
- **4. Intrahousehold dynamics:** Women tend to accept their place as inferior to men, especially for women in cooperatives, farmers, and other workers. Household dynamics laid the ground for such acceptance, where gender roles and responsibilities are assigned within the household and shape how women perceive themselves, and to what extent they are involved in the VC and control the benefits of this participation.

B. Cooperative Level

- 1. Stereotype: the cooperatives are essential in Lebanon, yet they are very stereotyped. Cooperative work is mainly related to pantry, and two main challenges are encountered at their level. First, and because of weak law enforcement, cooperatives are not a good example for democracy and rotation in terms of leading, elections, clarification of roles and responsibilities is not clear in general. The same president remains for years and controls the decisions and the relations with the eternal world. Second, cooperatives reinforce the stereotyped role of women, and don't question the benefits or the place of women in agriculture. In terms of production, women production moved beyond stereotyped and repetitive practices, which raised the level of competition and decreased the capacity to sell the products.
- 2. Lack of Financial Support: The direct cash or in-kind support that the MoA used to provide has now plummeted in value. Similarly, subsidized material, according to the financial setup funded by the Central Bank is no longer a viable option. At the moment, the sector continues to navigate through a nationwide lack of available resources, distortion of prices, black market rates, smuggling, etc. International Organizations (IOs), development agencies, and NGOs are unable to bridge this gap. The situation does not lend itself to the sustainable development of womenled cooperatives and of the sector as a whole.
- **3. Limited Training:** Training needs to be more structured, tailored and specific. This remains a major lack as per the findings of this study. There is a need to target precise needs of the sector, as well as specific populations such as women cooperatives and refugees. Findings additionally highlight knowledge gaps across all agrifood sub-sectors.
- **4. Lack of Machinery and Tools:** there is a lack in machinery and tools in agrifood women cooperatives. In order to assist in modernizing the production process across a number of subsectors, machines and tools are needed nationwide. Not only would this assist in enhancing productivity, standards, quality, quantity, and variety of products, but will also assist in women filling a number of positions that otherwise required strenuous manual labour.
- 5. Lack of Cooperatives' Clusters: Groupings (whether cooperatives or clusters) are still not encouraged despite the fact that the majority of the existing ones have proven to be useful despite their limited resources. This is particularly helpful for women as they have fewer financial resources than men and would benefit from these types of groupings in order to become more efficient in the marketplace. As per findings from this study, there remains a need for actors to complement each other in the value chain. Suppliers of raw material, producers, suppliers of related services and marketers still do not have an evident and effective coordination scheme.
- **6. Limited Market Access:** Several producers across Lebanon remain isolated in their villages and rural regions, with the trader/middle man serving as their only selling window alongside local consumers and businesses. Few cooperatives participate weekly producers' market, such as the one that has been tested successfully in Beirut and some other regions for instance.

C. National Level

- 1. Lack of gender awareness on the academic level: it is noticed that no social courses, and more specifically gender courses are given neither at the university level, vocational or other training and workshops.
- **2. Limited information on gender in VCs:** there is no data about women working in agriculture as a second job or as a first income to live from. This leads to an under-estimation of women's contribution to agriculture and to their invisibility to practitioners and service providers.
- **3.** Unregulated workers: workers in agrifood sector are informal ones and their job is not regulated by the Ministry of Labour (MoL). Agrifood is among the sectors where women are encountered the most, which leaves experts in a blur and unclear situation as to the status of workers, their rights and obligations.
- **4. Absence of insurance and other types of protection:** Women in the sector don't benefit from insurance, benefits or any other type of protection. In addition to having a lot of child labour and work in critical conditions.

II. Main Enablers and Recommendations

The following enablers and recommendations are applicable to all sub-sectors in the agrifood sector in Lebanon. The main challenges that were highlighted throughout this study require actions and enablers that would improve the gender status in the agrifood sector and protect and/or encourage women's participation in it. These actions and interventions should jointly be addressed by national authorities, as well as local and IOs.

- 1. Becoming more gender-sensitive at the sub-sector level through mandatory gender awareness sessions: Gender awareness sessions should be given at all levels by IOs and NGOs in collaboration with the MoA and directorate of Cooperatives; awareness should equally reach universities, vocational institutes, farmers, private sector and cooperatives. Providing common sessions as a general requirement will raise the knowledge of all workers in the sector about gender, the impact of social norms on women and men, girls and boys. The content of the sessions can be prepared and given as different modules, and the level can be adapted as per the level of education, background and interest. It is crucial to clarify that gender is not a concept related to domestic violence. Gender is mainstreamed in all sectors, including agriculture. Raising the knowledge can be done through campaigns, round-tables, adapted information for different age and background.
- **2. Providing more vocational training:** Concerned parties such as Ministries, Local and IOs involved in Agriculture should provide vocational training for women that encourage women's enrolment into male-dominant work. Women should be provided with know-how that was exclusive to men and should benefit from new job opportunities that were once reserved to men.
- 3. Enhancing the role of cooperatives: Cooperatives are crucial to the sector and essential in Lebanon, yet they are very stereotyped. Through their gender-sensitive programming, international and local organizations should train and support cooperatives members to become more as a union. More crosscutting and clustering work between cooperatives is highly recommended, such as common exhibitions, round tables, exchange of knowledge in a systemized way, etc. Also, restructuring within cooperatives should be encouraged by donors and may lead to more democratic organization, with potential new blood joining, mainly younger ones to it. Cooperatives should be further incentivized by international and local organizations to provide support to women joining; benefits, protection, training, introducing new products, etc.
- **4. Introducing new products onto the market:** In terms of production, it is crucial to introduce new products as per the needs of the market. Concerned authorities, including the MoA and Directorate of Cooperative, in collaboration with International and Local organizations should provide women with training on new products and new technologies. It is essential to keep in the loop the environment level and to be certified on this level. It is also preferred to provide the training for women and men, and youth. Training and all activities should include Lebanese and

Syrian women and men, in order to guarantee inclusivity. Guaranteeing inclusivity reduces the tension between women and men, across the generations, and between nationalities.

- 5. Generating data about women in the sector: It is highly encouraged to start collecting accurate data about women in the sector. A regular census on the workers in the agrifood sector should be done by the MoA, where segregated data on men and women is collected. Although it is challenging on the short-term level, collecting data will highlight the strengths and the weaknesses of the sector, and it will allow the FAO and the partners to program projects aligned with the needs of the communities.
- **6. Including workers in agrifood sector under the labour law:** As mentioned before, the agriculture sector is not regulated by the MoL and workers in agriculture as well as domestic assistance are not covered under the labour law. Accordingly, national (through political activism) and international (through preconditioning criteria) lobbying to integrate workers in these two sectors is crucial in order to value the agriculture and domestic works, and it will attract more women and men into the oldest sector in Lebanon.
- **7. Regarding women entrepreneurs outside the urban landscape:** it is crucial to raise awareness among both women and men entrepreneurs and SMEs about the elements that impact women contribution to the sector; awareness should tackle women's productive potential, as well as the qualitative addition they can make to the VC functioning and to their household's wellbeing.
- 8. Providing women with services and support: Women working in the sector constitute a considerably important number. Yet, their income from the sector remains very limited due to unpaid labor, the devaluation of the local currency, and the constant drop in the prices in comparison with the dollar. Providing women with additional services and support will attract more women, and it will protect them at the medical level. Finding medicines, getting treated or entering to a hospital has become increasingly challenging. Intervening at this level in terms of medical insurance and protection from work accident is a major step towards a sustainable empowerment for women. Women will also become stronger if they pass this protection and insurance to their husbands, children and parents. This protection should cover all workers in the sector; Lebanese, non-Lebanese and stateless. The objective is to leave no one behind. This support is to be provided by international donors and agencies, since the country is facing unprecedented economic and financial crises.
- **9. Alleviating child labour:** It is very important to stop any type of child labour. Although this may be very challenging, FAO and all international donors, as well as local and national NGOs should make sure that all partners stick to the non-employment or abuse of children. Clear prerequisite conditions should also include women protection, fair payment for women farmers, and guarantee of the working number of hours.
- 10. Putting structures, as well as reporting and follow-up mechanisms in place to end all forms of sexual harassment: Sexual harassment should be entirely stopped as well. All organizations

should impose strict rules and contracts should be terminated if cases were reported. This is possible with raising awareness. In addition to that, a unit for complaint should be created among all parties. It is recommended to partner with an existing entity working on this level. Lately, the National Commission for Lebanese Women worked on the mechanism for referral and complaint from sexual harassment and violence with the municipalities, as part of the enforcement of the newly adopted law. It may be interesting to consider this partnership in order to protect women from sexual abuse or harassment.

11. Lobby for Fair and Equal Inheritance and Personal Status Laws: many legislations in Lebanon still discriminate against women, most importantly the inheritance and personal status laws. Due to socio-cultural and religious barriers, gender equality is in particular politically sensitive. Therefore, international lobbying can be of significant importance if such preconditioning is set to the ministries' adherence or eligibility to certain programs.

When tackling the intersectional needs of women specifically, studies must focus on economic opportunities, infrastructure and education needs. Along these lines, coordinated programming between various ministries (namely the MoA and the MoL) in Lebanon and IOs could:

- 1. Improve the quality of education, including technical education. and update programs to respond to today's technological advancements and to new market demands, with higher levels of student retention.
- 2. Revise the Lebanese educational curricula and strategies to secure gender equality and non-discriminatory behavior when encouraging women to select majors, and orienting women towards specific disciplines in-line with broader traditional gender roles.
- **3. Provide gender responsive health and social coverage** to all citizens in all productive sectors, including agriculture, home services, construction, freelance work, etc.
- **4. Develop infrastructure and transport services** in all geographic regions to secure cheap and safe transportation.
- **5. Engage qualified trainers** across all sub-sectors with the right technical know-how in terms of skills to adopt modern training methods through trainers with relevant technical experience, as well as gender responsive knowledge and training skills.
- **6. Link women with the private sector.** IOs should create an ecosystem that supports and nurtures women-led businesses. Such environment would place women as leaders, give them decision making roles, invest in women s entrepreneurial ideas, and provide mentoring and coaching for women on a personal and professional. This will support women's economic integration. CSR activity should focus to empower women

7.	Offer internships for women and job placement opportunities to complement technical or vocational programs.

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