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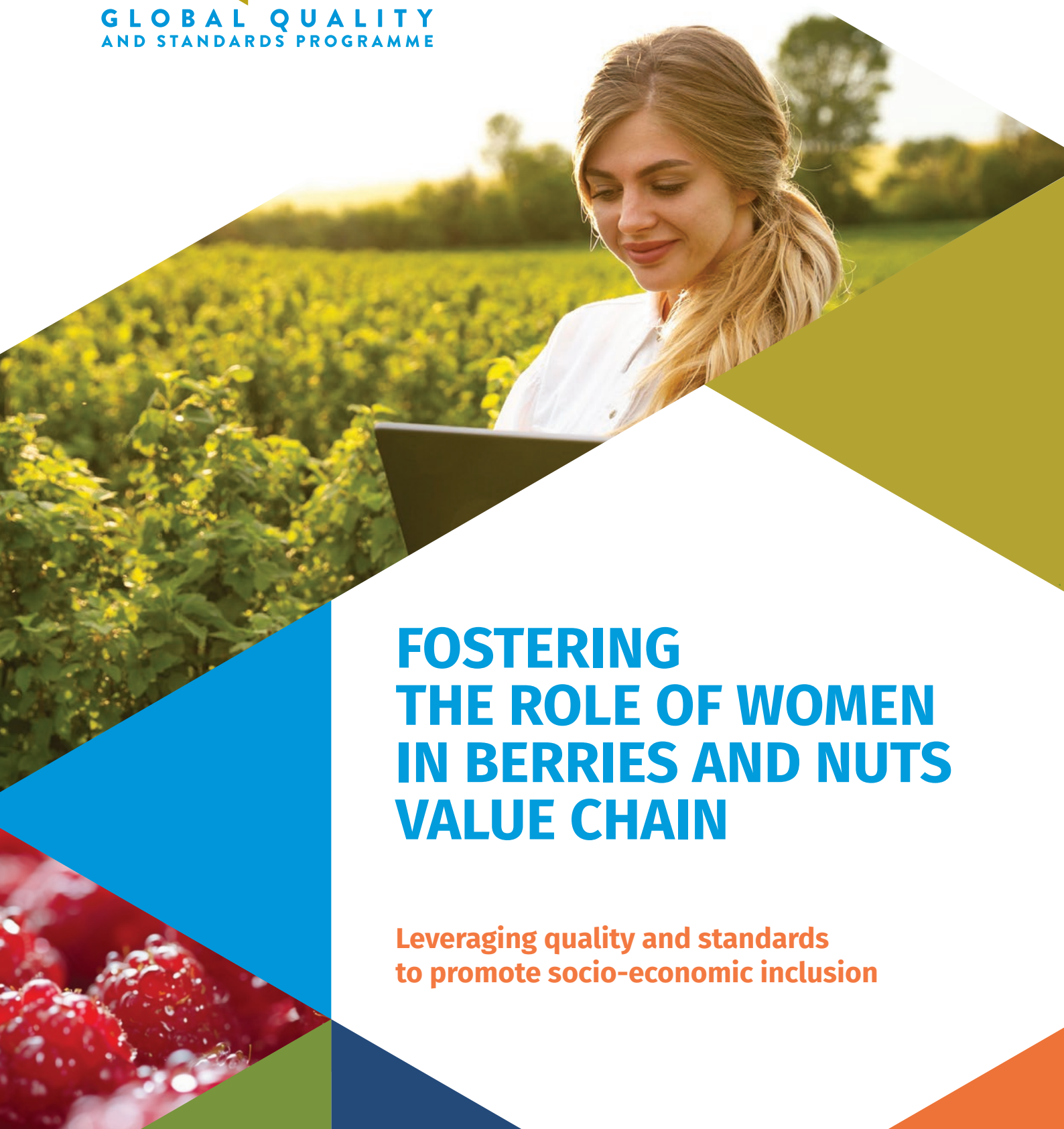
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GLOBAL QUALITY
AND STANDARDS PROGRAMME



FOSTERING THE ROLE OF WOMEN IN BERRIES AND NUTS VALUE CHAIN

**Leveraging quality and standards
to promote socio-economic inclusion**



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LIST OF ACRONYMS

B&N	Berries and Nuts
FTE	Full Time Employees
GBV	Gender Based Violence
GEEW	Gender Equality and Empowerment of Women
IDP	Internally Displaced Person
IOM	International Organization for Migration
ISID	Inclusive and sustainable industrial development
ISO	International Organization for Standardization
MI	Measuring Instrument
NGO	Non-Governmental Organization
NES-2030	National Economic Strategy 2030
OIML	International Organization of Legal Metrology
ISO	International Organization for Standardization
ILAC	International Laboratory Accreditation Cooperation
OSCE	Organization for Security and Co-operation in Europe
RGA	Rapid gender analysis
STEM	Science, Technology, Engineering, and Mathematics
VC	Value Chain

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CONTEXT



This study has been developed within the Global Quality and Standards Programme (GQSP) Ukraine framework. Implemented in partnership with the Ministry of Economy of Ukraine and funded by Switzerland through the State Secretariat for Economic Affairs (SECO), the project's main goal is strengthening Ukraine's national quality infrastructure system to improve the competitiveness of the berries and nuts (B&N) value chains. Focused on enhancing the capacity of SMEs to comply with international standards and market requirements, the GQSP seeks to contribute to Ukraine's integration into regional and global trade.

A cross-cutting goal of the GQSP is to promote women's empowerment throughout its project activities. Women's participation in the Ukrainian agricultural sector – particularly in berries and nuts production – has long been crucial, and with the onset of the war, the role of women has evolved significantly. Many women are now stepping into leadership roles, with this shift presenting both opportunities and challenges. Targeted support is needed to ensure women's active participation in the sector's recovery and development to the fullest of their potential.

This study is a comprehensive assessment of the gender dynamics in Ukraine's berries and nuts sector, with a particular focus on Quality Infrastructure. It aims to ensure, on the one hand, that the project's activities effectively provide women with the necessary skills, competencies, and tools to impact the sector successfully and, on the other hand, to benefit the industry by providing the professionals and support it needs. The findings of this assessment will help tailor strategies to promote gender equality and support women in their new roles, ensuring the resilience and sustainability of Ukraine's economy.

The GQSP is meant to support Ukraine's path towards deeper integration with the European Union and global markets. Women's participation and contribution to the value chain will help Ukraine position itself as a key player in international agricultural markets, thus contributing to the country's economic recovery, while fostering inclusive and sustainable growth.

EXECUTIVE SUMMARY

Quality infrastructure (QI) and adherence to international standards are crucial for enhancing trade and export potential, a principle that holds significant promise for Ukraine's agriculture sector. As Ukraine navigates complex geopolitical landscapes, bolstering the agricultural industry through robust QI systems can open new markets, ensure product quality, and meet global trade requirements. This is especially pertinent for high-potential sub-sectors such as berries and nuts, where adherence to stringent standards can significantly elevate Ukraine's competitive edge on the international stage.

Within this thriving agricultural context, women play an indispensable role. Their involvement is not only vital to the day-to-day operations but also to the strategic advancement of the sector. In the face of the ongoing war and the anticipated post-war recovery period, the contributions of women are set to become even more essential. The war has reshaped the workforce, compelling many women to take on more significant responsibilities and leadership roles within agriculture. Recognizing and supporting this shift is essential for the sector's resilience and growth.

In light of the above, this study delves into the specific ways women can contribute to the berries and nuts sector in Ukraine, examining how their enhanced participation can drive the sector forward. It also explores how the sector, in turn, can serve as a catalyst for women's empowerment, creating a virtuous cycle of growth and development. By leveraging quality infrastructure, the study highlights the dual benefits: improving the sector's standards and practices while simultaneously fostering an environment that empowers women.

The findings and recommendations presented in this publication aim to inform and guide stakeholders within the berries and nuts sector. By aligning their operations with the insights provided, stakeholders can enhance both the sector's efficiency and the empowerment of women. This strategic approach not only promotes gender equality but also ensures that the agricultural sector thrives in a competitive global market.





1. INTRODUCTION

Context and Challenges

According to the Quality Infrastructure for Sustainable Development Index (QI4SD), developed by the United Nations Industrial Development Organization (UNIDO) in collaboration with partner organizations of the International Network on Quality Infrastructure (INetQI), Ukraine's value is 46.3, placing the nation 49th among the assessed countries, but requires improvements to fully capitalize on its economic potential. The NES-2030 strategy emphasizes digitalization, the Green Deal, and entrepreneurship, aligning with EU and WTO commitments. Despite progress, challenges persist in standards dissemination, technical expertise, SME participation, and digitization. Priority areas such as the organic sector and berries and nuts value chain face gaps in quality assurance, certification, and logistics. Enhancing producer capacity, infrastructure, and laboratory capabilities, along with better metrological practices, are essential for Ukraine to meet international standards and boost competitiveness.

In Ukrainian agricultural production, there is a clear division of labour, with specific tasks historically associated with either men or women. Women play a significant role in agricultural activities but are often informally employed, particularly in rural areas and family farms. Administrative and office roles are predominantly occupied by women, while men dominate positions requiring physical strength or technical expertise. Despite women constituting a significant percentage among landowners in the agricultural sector, female-headed households typically own smaller land areas compared to male-headed households. Indeed, the analysis¹ of asset ownership in the B&N sectors underscores a significant gender disparity, with men holding the majority of assets (72.5%) compared to women (27.5%). This reflects broader societal norms and structural barriers that limit women's access to resources and decision-making power within these sectors. Gender disparities in education fields further highlight the need for targeted interventions, as university education related to management shows a higher representation of women² (64%) while agricultural science has a significantly lower percentage (17%). Women face barriers in accessing and controlling resources within the value chains. Despite holding finance and management positions in many B&N sector companies, the overall ownership distribution indicates a disparity in access to assets and control over decision-making processes. The ongoing conflict in Ukraine has exacerbated traditional gender roles and stereotypes, leading to an increase in gender-based violence and reinforcing

biases against women. Internally displaced persons (IDPs), particularly women in rural areas and those from marginalized communities, are significantly affected by the deepened harmful gender stereotypes. As a matter of fact, they have faced increased responsibilities, economic hardships, and health concerns due to the conflict.

The berries and nuts sector in Ukraine faces several significant employment challenges. Companies have encountered a severe labour force shortage, hindering their ability to expand operations. There has been a notable increase in labour costs, underscoring the urgent need for process optimization to alleviate financial strains. Despite technological advancements, manual labour remains essential, particularly in tasks like berries picking, where the workforce is insufficient to meet the demand. The recruitment process has become increasingly difficult, with the absence of women who have left the country in large numbers and men serving in the Armed Forces exacerbating the challenge.

Recommendations

Efforts to address gender disparities by enhancing women's leadership and technical skills are crucial, particularly those aimed to increase women's participation in leadership positions within the sector, the number of qualified female experts and women's ownership of assets. Initiatives should focus on promoting gender equality in education and vocational training programs, strengthening support mechanisms to promote female-led entrepreneurship, and creating job opportunities for women, IDPs and those affected by conflict. Women's empowerment not only allows women to succeed in the B&N sector, but also benefits the entire sector, leveraging the additional contribution of a part of society that often operates in the shadow.

Companies within the B&N sector play a crucial role in promoting gender balance by employing men and women proportionally. Strategies to support women within these value chains should focus on creating a gender-conscious company culture, which considers gender biases in recruitment, for instance, avoiding discrimination during the hiring process, offering part-time jobs, granting women family-friendly shifts, creating measures of support for women with children and single parents, etc. As a result of the analysis, top criteria for hiring resulted in being previous experience and relevant education, with some companies

¹ B&N sectors were analysed using <https://youcontrol.com.ua> open data platform.

² https://www.ukrstat.gov.ua/operativ/operativ2020/m_w/v_osvita.htm

providing temporary accommodation and learning opportunities. Similarly, companies should recognize the added value of including women in decision-making processes and promote their presence in leadership positions. The analysis highlighted that the most largely adopted support measures for women include parental leave, flexible working hours, and, in some cases, on-site amenities.

In summary, the main recommendations for enhancing women's roles in the B&N sector are organized into distinct categories of enhancement.

At the macro level, the government should focus on creating gender-inclusive policies that promote gender equality and encourage women's active participation in quality infrastructure sectors, particularly within the B&N value chain. Regulatory frameworks should mandate gender inclusivity across all related programs and initiatives. Additionally, subsidies and grants should be provided specifically for women-owned enterprises to enhance their access to quality standards and certifications. Enhanced microfinance programs will ensure better access to finance for women starting and expanding their businesses. Nationwide training programs focusing on quality standards, quality management systems, and certification processes should be launched with an emphasis on women's participation. Strengthening and enforcing anti-discrimination laws is crucial to protect women in the workforce and ensure equal opportunities, along with comprehensive support systems for survivors of gender-based violence.

At the meso level, institutions related to quality infrastructure should provide gender sensitivity training for their staff to promote a culture of equality and inclusivity. Leadership skill enhancement programs for women should be developed, encouraging their ad-

vancement to decision-making positions. Facilitating the creation of clusters and networks specifically for women in the B&N value chain will promote collaboration, knowledge sharing, and market access. Institutions should integrate gender equality indicators into their monitoring and evaluation systems to track progress and ensure accountability. A voucher system should be implemented to enable women to access necessary services for sustainable development, such as training on quality standards and certifications.

At the micro level, private sector companies should develop and enforce gender-inclusive hiring policies to ensure equal employment opportunities for women in the quality infrastructure sector. Targeted skill development programs for women employees will enhance their expertise in quality management and standards compliance. Mentorship programs within companies should support the career growth and development of women. Business incubators and accelerators focused on women-owned enterprises in the B&N sector should be created, providing necessary resources, mentorship, and market access. Partnerships with financial institutions should be developed to improve access to credit and investment for women entrepreneurs. Initiatives to promote products produced by women-owned businesses, such as participation in trade fairs, online marketplaces, and export opportunities, should be implemented.

These recommendations aim to empower women in the B&N sector, improving their access to quality infrastructure and enhancing the sector's overall performance. Concrete recommendations for further empowering women in connection with quality infrastructure improvement are detailed in the assessment, addressing issues and gaps related to quality standards for small farmers, value chain operators, and institutional frameworks.





2. SCOPE OF WORK AND OBJECTIVES

The scope of the work and objectives can be divided into the following two categories:

2.1 Assessment aimed to critically assess the situation in the Ukrainian B&N sector from a trade perspective, gender equality and empowerment of women (GEEW) and implications for the sector, with focus on quality and standards:

- Analysis of the economic contribution of women within chosen value chains, examining: (I) Division of labour; (II) Ownership distribution; (III) Access and control levels; (IV) Knowledge dissemination; (V) Beneficiary demographics; (VI) Identifying support recipients and strategies. Evaluate the impact of war on women's roles within the sector.

- Assess the needs and constraints of women in the value chains, including: (I) the extent to which gender-specific roles, differences, disadvantages and/or discrimination affect the value chains; (II) how these differences are represented according to socio-demographic divisions (e.g. age, marital status, income situation); and (III) which groups are particularly disadvantaged or subject to multiple discrimination. Consideration must be given to their needs and constraints in terms of quality and standards.

2.2 Based on the findings, propose a set of concrete, actionable recommendations to improve GEEW in the value chains, clearly suggesting an outline of actions that can contribute to assessing impact using standards, as well as assessing and empowering women from a quality and standards angle.





3. METHODOLOGY

To provide a full-scope assessment with a detailed documental overview, the review process was divided to three steps:

I. Information Review: A review of all relevant environmental, climate and international standards documents and information for the B&N sector, namely:

- The Ukrainian berries association: <https://uaberries.com/biblioteka/katalohy>
- The Ukrainian nut association: <https://www.ukr-nuts.com.ua/en/members>
- Catalogue of Ukrainian organic exporters and web sites of key B&N enterprises
- Legislation requirements overview

- Work platforms overview: Work.ua
- Open data platforms review: <https://youcontrol.com.ua>
- Ukrainian statistics data platform: https://www.ukrstat.gov.ua/operativ/operativ2020/m_w/v_osvita.htm

II. Questionnaire: A questionnaire/interview of selected enterprises and analyses of interviews and answers. The complete list of questions posed are in Annex 1.

III. Report Preparation: The qualitative and quantitative data collected through the questionnaire has been analysed to produce a set of concrete recommendations, which are expected to inform the implementation of technical cooperation activities in a gender-conscious way.





4. GENERAL GENDER OVERVIEW AND UKRAINIAN BERRIES AND NUTS MARKET

As of 1 January 2022, the population of Ukraine amounted to 41.2 million people, with 54% being female and 46% male. With the onset of full-scale war, a significant portion of Ukrainians were forced to leave their homes. According to the United Nations Refugee Agency, as of 31 December 2023, 6,357,1009 people had left Ukraine. Before the full-scale invasion of Ukraine, there were 17.31 million working-age population, of which 15.6 million were formally employed (47% women and 53% men). By the end of 2021, approximately 2.711 million people were employed in agriculture (officially). At the same time, over 45% of those engaged in agricultural production had Informal employment, with agriculture being the primary activity for informally employed individuals.³

In Ukrainian agricultural production, there is a distinctive distribution of types of activities, both in terms of hierarchical positions and specific types of work historically associated with either male or female activities. Despite the significant role of women in agricultural activities, many women are informally employed, especially in rural areas and family farms.

Formally, women constitute a significant percentage of landowners, but the average land area owned by female-headed households is smaller than that of male-headed households. As mentioned earlier, only 20.8% of farms were headed by women at the beginning of 2021. In the European Union, this figure was 32% in 2020.

Since 24 February 2022, the armed conflict in Ukraine has led to a severe humanitarian and socio-economic crisis, primarily impacting vulnerable groups such as youth, women, and displaced individuals. As of 26 September 2022, the International Organization for Migration (IOM) has registered 6,243,000 internally displaced persons (IDPs) within Ukraine. Alongside IDPs, 6,036,000 returnees have resettled in their pre-displacement areas. Notably, about 57% of returnees are

female, with 25% being infants and children under 17. Return conditions vary, with some returning to areas not directly affected by conflict but experiencing significant IDP influxes, and others to recently liberated yet severely damaged regions.

UNIDO’s mission of inclusive and sustainable industrial development (ISID) emphasizes “progress by innovation”. The rapid growth of digital technologies and their adoption by businesses have significantly modified the scope of entrepreneurial activities. New technologies are revolutionizing the way businesses operate. Furthermore, digital technologies may contribute to mitigate environmental and social challenges through entrepreneurial action.

In a broader context, gender-specific value chain manuals/toolboxes offer general recommendations regarding gender mainstreaming:²

- Gender mainstreaming should occur across all stages and levels of the value chain intervention process, spanning from initial analysis to design, implementation, and evaluation.
- Gender mainstreaming entails: a) fostering a gender-inclusive process that ensures women’s participation and voice; and b) implementing interventions based on accurate gender-related information, including gender-disaggregated data to pinpoint areas of gender disparity, and examining gender relations to identify whether differences stem from inequalities of opportunity or free choice.
- Women comprise diverse groups. Therefore, it is insufficient to treat them merely as a single ‘stakeholder group’; instead, women should be integrated across various stakeholder categories.

From interviews with key companies in the B&N sector, it emerged that the full-scale invasion has significantly impacted employment dynamics.

Table 1: Assessment results “How has the situation changed for your company after the full-scale invasion in terms of employment?”

Assessment question	Answers
How has the situation changed for your company after the full-scale invasion in terms of employment?	Difficulties with finding qualified employees
	No qualified staff for technical positions
	High absenteeism rate
	No changes
	Other, please specify

³ <https://organicinitiative.org.ua/wp-content/uploads/2024/03/Gender-study-in-organic-sector-of-Ukraine-EN.pdf>
² Mayoux and Mackie, 2009

Ukraine is assessed based on a WWF (World Wide Fund for Nature) methodology as a medium risk country:

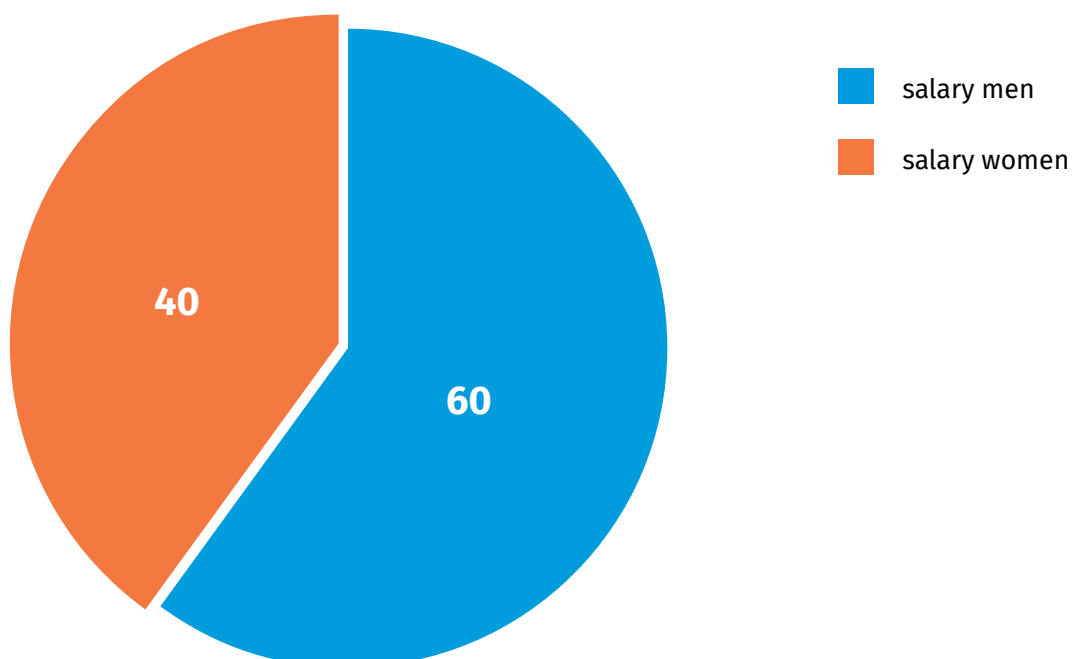
- **Difficulty finding qualified staff:** Companies are experiencing challenges in recruiting skilled workers, indicating a potential talent shortage in the B&N sector. This could hinder business operations and growth prospects. their scarcity could hinder production and quality standards.
- **Increased absenteeism rates:** The invasion has likely disrupted normal work routines, leading to higher absenteeism rates among employees. This can result in decreased productivity and operational inefficiencies for B&N companies. Overall, these responses underscore the urgent need for strategic workforce planning and targeted interventions to address the employment challenges faced by B&N companies in the aftermath of the invasion. Efforts to attract and retain qualified talent, mitigate absenteeism, and address shortages in technical expertise will be crucial for sustaining the sector's growth and resilience amidst ongoing disruptions.
- **Shortage of technical employees, especially mechanics and agronomist:** The shortage of technical personnel, particularly mechanics and agronomist, poses a significant challenge for B&N companies. These roles are crucial for maintaining equipment and ensuring optimal agricultural practices, and Additionally, based on responses from B&N sector companies regarding salaries, while 60% indicated there is no gap for the same positions, 40% of respondents reported that women received lower salaries, indicating a slight gap.:

Table 2: Assessment results “Is there a financial gap between the salaries of men and women?”

Assessment question	Answers
Is there a financial gap between the salaries of men and women?	Women received less salary – 40% of responders

The pie chart below (Figure 1) illustrates the financial gap between the salaries of men and women.

Figure 1: Financial gap between the salaries of men and women? %



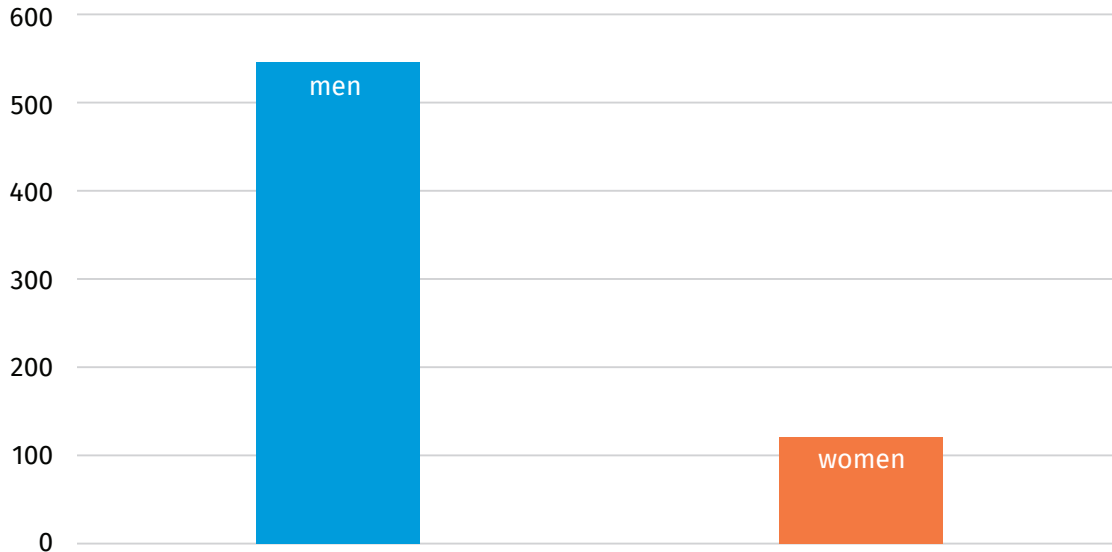
This indicates a positive trend, as the majority reported no gap, although there is still a notable percentage indicating a disparity.

Based on the recent gender study of the organic sector mentioned above, gender disparity is evident, particularly in top management positions where men outnumber women by a ratio of 66% to 34%. Several factors contribute to this situation:

1. Supply and Demand: Female candidates are less frequently considered for top positions due to fewer applications from women or the absence of female resumes. This limits the opportunities for women as decision-makers.

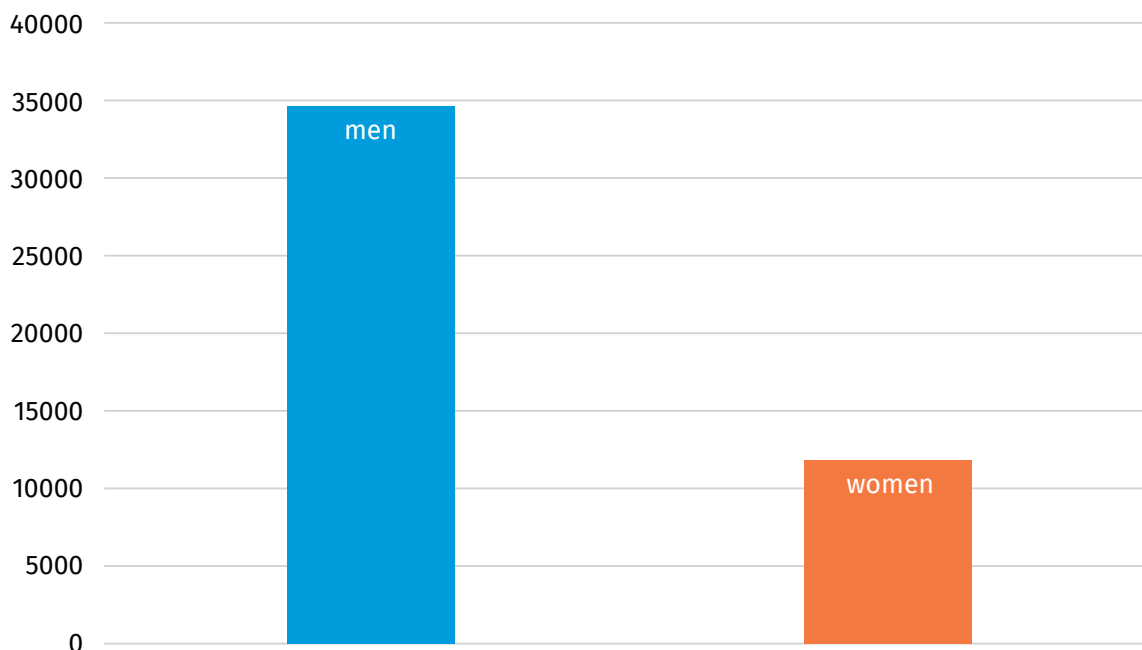
Assessment of candidates for agronomist position have been performed based on Work.ua data, with results of the study presented in Figure 2.

Figure 2: Number of agronomist CVs, Qty



Source: [agronom. Пошук кандидатів. Знайти співробітників в Україні — Work.ua](#)

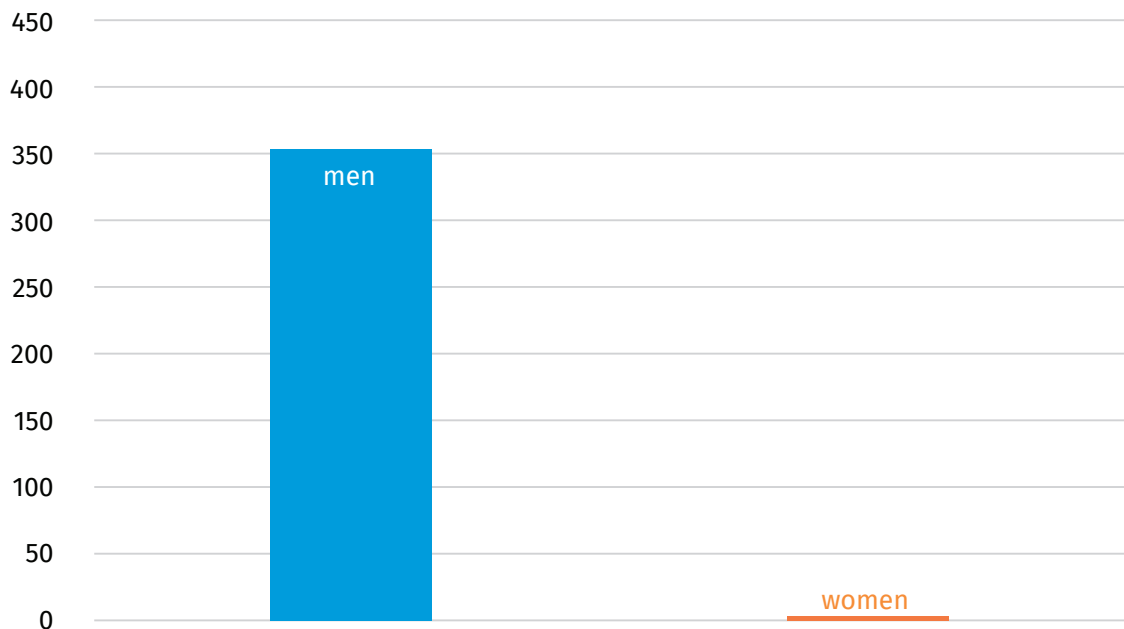
Figure 3: Salary expectations of women and men for the agronomist position, UAH



Source: [agronom. Пошук кандидатів. Знайти співробітників в Україні — Work.ua](#)

The worst situation can be found in agricultural technics and tractor driver positions as illustrated in Figure 4, with number of tractor driver CVs at 442 for men and 1 for women.

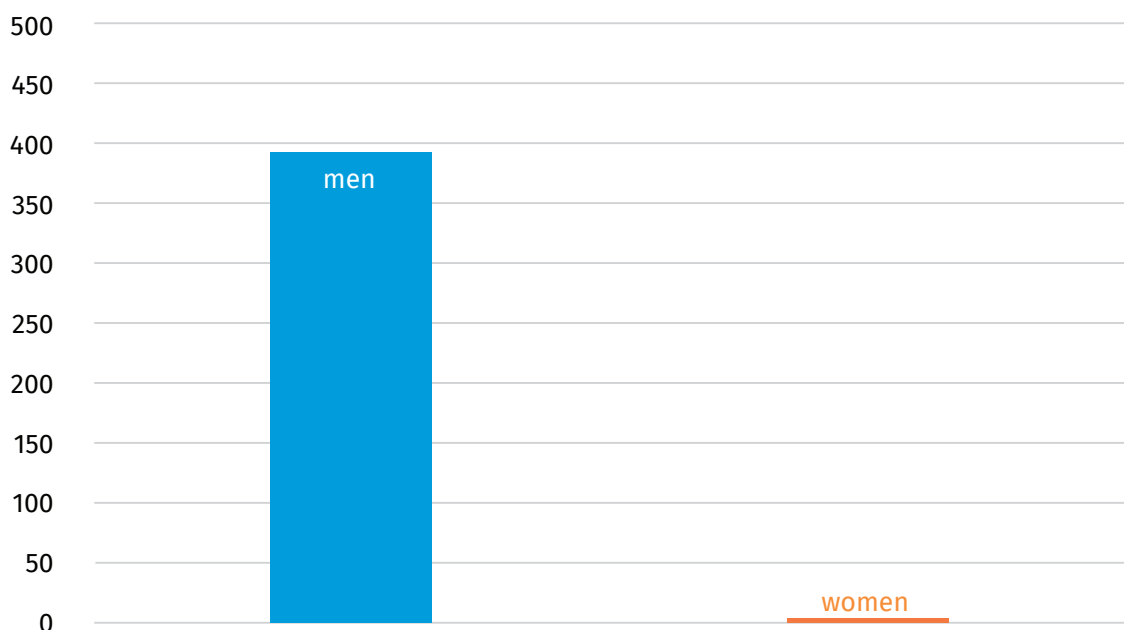
Figure 4: Number of tractor driver CVs, Qty



Source: [водій трактора. Пошук кандидатів. Знайти співробітників в Україні – Work.ua](#)

Almost the same situation can be seen with the position of mechanic as presented in Figure 5.

Figure 5: Number of mechanic CVs, Qty



The analysis of candidate assessments for agronomic positions, particularly in sectors such as agricultural technology and tractor driving, reveals a stark gender disparity. The data from Work.ua showcases a significant gap in the number of male and female applicants, with male candidates dominating the field. Moreover, the disparity extends to salary expectations, indicating potential systemic biases or barriers that discourage women from pursuing these roles. This imbalance not only limits the pool of female decision-makers, but also underscores the need for proactive measures to address gender inequities in recruitment and employment practices within these sectors. Efforts to promote diversity, inclusivity, and equal opportunity are essential to create a more balanced and fairer environment for all candidates, regardless of gender.

2. Socio-cultural Context and Gender Stereotypes:

Female candidates are less frequently considered for top positions due to fewer applications from women or the absence of female resumes. This limits the opportunities for women as decision-makers.

The ongoing conflict in Ukraine, now past its two-year mark since escalation in February 2022, is having profound and concerning impacts on gender equality. Interviews and observations from various sources, including girls, young women, NGO workers, and Ukrainian refugees in neighbouring countries, indicate a reinforcement of traditional gender roles.⁴ This has led to an exacerbation of harmful gender stereotypes and an increase in gender-based violence, particularly affecting girls and young women.

The conflict has also sparked a "masculinization" trend, wherein men and boys are perceived as defenders while caregiving and domestic responsibilities increasingly fall on women and girls. As a result, gender-based violence, including intimate partner violence, sexual violence, and online exploitation, has surged, with millions in need of gender-based violence services.

A 2019 OSCE study found that 75% of Ukrainian women had experienced gender-based violence (GBV), with one in three experiencing physical or sexual violence. According to a UN Women study in 2020, 82% of surveyed women noted that the military conflict in Ukraine worsened the sexual harassment situation and other forms of sexual violence against women and girls in public spaces. The Rapid Gender Analysis study also raises safety concerns related to survival or transactional sex and sex trafficking, citing reports of criminal gangs exploiting displaced Ukrainian women and unaccompanied minors.⁵

Moreover, studies reveal a concerning decline in prioritization of gender equality among young Ukrainians since the onset of the war. This has implications for the long-term fight for gender equality and the rights of girls and women, especially considering the complex mental health challenges and disruptions to education caused by the conflict.

Despite the ongoing crisis, there is a pressing need to ensure sustained attention and action to address the vast and growing humanitarian needs in the region, prioritizing gender-based violence prevention and response, mental health and psychosocial support, and facilitating access to education for affected children.

3. Personal Bias of Employers:

Female candidates are less frequently considered for top positions due to fewer applications from women or the absence of female resumes. This limits the opportunities for women as decision-makers.

Overall, administrative and office roles tend to be occupied by women due to their perceived strengths in task execution, reliability, and meticulousness. Conversely, men dominate roles requiring physical strength or technical expertise, perpetuating the belief that such positions are inherently masculine. Factors contributing to the preference for male agronomists include the low representation of women in agricultural education, the physically demanding nature of the job, and the perception that technical fields require assertive communication styles typically associated with men.

The recent research "[Women in Ukraine: How have gender roles and attitudes changed?](#)" highlights significant shifts in gender roles and attitudes among women in Ukraine since the onset of the war. Women, particularly those in vulnerable groups such as IDPs and those living in occupied areas, have faced challenges ranging from displacement and economic hardships to increased responsibilities and mental health concerns.

One of the prominent changes observed is the increased burden on women to manage households and make decisions in the absence of male family members who are away fighting. This shift in roles has been acknowledged by both men and women as a valuable contribution to the war effort.

Various research methods, including surveys, focus group discussions, interviews, and online analysis,

⁴ <https://plan-international.org/news/2024/02/19/ukraine-war-puts-gender-equality-at-risk/>

⁵ <https://www.unwomen.org/en/news-stories/news/2022/04/rapid-gender-analysis-in-ukraine-reveals-different-impacts-and-needs-of-women-and-men>

were employed to understand these changes comprehensively. Findings indicate that women's perception of their own role is evolving, with a broader definition of the 'ideal' woman emerging, emphasizing qualities like independence, resilience, and patriotism alongside traditional caregiving roles.

Women's role models have also shifted, with admiration extending to local activists and peers in addition to high-profile figures. However, despite increased responsibilities, women express feelings of helplessness

and uncertainty about their ability to influence their lives or the future.

Efforts to ensure women's participation in decision-making processes at the community level remain crucial for the post-conflict recovery of Ukraine. Despite the challenges, the research underscores the resilience and adaptability of women in navigating the complexities of wartime conditions and shaping their evolving roles in society.

4.1 Overview of Berries value chain

Ukraine's total production of berries by official statistics in 2022 was over 154.59 thousand tons, with exports of 88.13 thousand tons of fresh and frozen berries to 97 countries worldwide.

Berry products brought to market by Ukrainian producers include a wide range of wild and cultivated berries.

Ukraine's berry export is booming, demonstrating immense growth since 2014 (a 25-fold expansion in volume over nine years), and it is also one of the most attractive returns on investment in Ukrainian agriculture.

Processed products enter the domestic and export markets, mainly quick-frozen berries and berry mixtures, juice concentrates, single variety purees, mixed-fruit preparations, and a wide range of easy-to-use quick-frozen combinations.

To meet changing market trends, Ukrainian producers are rapidly expanding their preparation of packaged, quick-frozen, wild, and cultivated berries that meet all national quality standards.

Figure 6: Geographical location of key berries companies based on the Ukrainian berry industry catalogue



Source: <https://uaberries.com/novyny/novyny-asotsiatsii/2023>

Using open data platform <https://youcontrol.com.ua>, ownership per key companies in the berrysector has been assessed.

Table 3: Overview of key berry sector companies

	Company name	Foundation	Location	Production volumes, 2023	Certifications	Owner (female/male)
1	Artberry, LLC	2011	Kyiv Region	700 tons	Global G.A.P GRASP, SMETA	M
2	Blue Berry, LLC	2013	Zakarpatian Region	500 tons	GlobalG.A.P., GRASP, SEDEX, UKRSEPRO and standard FSSC 22000 in process.	F
3	Family Garden, LLC	2016	Kyiv Region	750 tons	ORGANIC, GLOBAL, GAP, SME-TA, BRC	M
4	Grass Avenue, FE	2012	Zhytomyr Region	270 tons	Global G.A.P., GRASP	M
5	Nikdaria, LLC	2017	Zhytomyr Region	450 tons	Global GAP, GRASP, SMETA, SEDEX, HACCP	M
6	Yahydky, ASC	2016	Kyiv Region	250 tons	ORGANIC, GAP, GLOBAL GRASP	M
7	Yulia, FE	2002	Cherkasy Region	250 tons	HACCP, ISO 22000, ISO 9000, GLOBAL, GAP	F
8	Agro Organic, LLC	2016	Rivne Region	250 tons	ORGANIC, HACCP, BioSuisse	M
9	BerryMore Actyv, LLC	2017	Dnipropetrovsk Region	120 tons	GLOBAL	F
10	Bionerica, LLC	2013	Ivano- Frankivsk Region	800 tons	ORGANIC, GS1, IFCSMS, IOAS, ISO/IEC	M
11	Oril-Eco, Ltd	2018	Dnipropetrovsk Region	180 tons	ORGANIC, HACCP, FSSC 22000	F, M
12	Alta Kraina	2008	Ivano- Frankivsk Region	4500 tons	Organic FSSC22000, BRC, Sedex	M
13	Alte Foods, LLC	2011	Zhytomyr Region	3000 tons	ORGANIC, BRC, FSSC 22000, Kosher	M
14	Amethyst-Ole, LLC	2011	Zhytomyr Region	2500 tons	ORGANIC, HACCP, ISO 22000, ISO 9000, NATURLAND	F
15	Eco Berry, FE	2017	Ivano- Frankivsk Region	10000 tons	ORGANIC, ISO 22000, Food and Drug Administration (FDA)	M

Obstacles to further market development of frozen berries in Ukraine include non-compliance of product quality standards with the official requirements of the

European Union; absence of large, organized cooperatives for berry cultivation; and insufficient production capacity for freezing fresh berries.

4.2 Overview of Nuts value chain

According to the Food and Agriculture Organization of the United Nations, the nut market is one of the fastest-growing sectors in global horticulture. Each year, global nut trade increases by an average of 7.8%, comparable to the growth rate of the berry market. Cashews, the world's best-selling nut, see remarkable growth of 17.2% annually, or USD 760 million. Trends in vegan and paleo diets, which avoid allergens like gluten and lactose, drive the rapid growth of the global nut market. Nuts play a vital role in these diets due to their high protein content combined with healthy fats and carbohydrates. The increasing number of health-conscious consumers also boosts demand for nuts. Meanwhile, traditional walnuts lag behind cashews and almonds in growth rates due to their less versatile consumption and processing. As a result, the market share of walnuts is gradually declining. Lesser-known niche nuts like hazelnuts, Brazil nuts, and macadamias experience the highest sales growth, increasing global exports by 25–40% annually.

Currently, over 10 main types of nuts are cultivated worldwide. In Ukraine, the assortment of nuts available is quite diverse, including walnuts, Brazil nuts, cashews, pistachios, almonds, hazelnuts, and more, as well as peanuts, which are traditionally considered nuts but are not botanically nuts. The nut business in Ukraine can be divided into enterprises engaged in cultivation and sales, and those involved in importing, packaging, and selling nuts. The first type typically focus on walnut cultivation, which occupies 97.8% of the nut-growing area in fruit-bearing age.

The nut business in Ukraine has several advantages:

- Compared to other fruit and berry crops, it has more sales channels, longer storage duration, and relatively stable high selling prices.

- Yields increase with each fruiting year, and under proper care, plantings can produce for 10-15 years or more, depending on the type and variety-specific agricultural practices, and other factors.
- Nut cultivation requires practically no additional care conditions.
- High profitability of production.

Walnuts in Ukraine are only lightly processed and consumed by the population and exported as in-shell nuts or low-quality kernels. A small portion is used by the confectionery industry. All other types of nuts available in the Ukrainian market are imported.

Imports are typical for the second type of nut business enterprises, which can also be further divided into two types:

- Enterprises that import nuts for their own production needs. These include confectionery factories and bakeries that use nuts for baking, cakes, pastries, and cookies.
- Enterprises engaged in nut packaging and subsequent sales through stores, retail chains, cafes, restaurants, etc.

Using open data platform <https://youcontrol.com.ua>, ownership per biggest companies in the nuts sector has been assessed.

Table 4: Overview of key nut sector companies

	Company name	Foundation	Location	Production volumes, 2023	Certifications	Owner (female/male)
1	Vol Nut	2012	Odesa Region	260 tons	ISO 22000:2005	M
2	Slow Walnuts		Uzhhorod	3000 tons	ORGANIC, ISO 22000	M
3	Primed		Rivne Region	3000 tons	ORGANIC, FSSC, ISO 22000, ISO 9001:2015	F
4	Ukr Walnut		Khmelnytskyi region	1200 tons	ORGANIC, ISP 22000, ISO 9001:2015, ISO 50001, ISO 14001, HACCP	M
5	Svit Fruktu		Zakarpattia Region	28000 tons	ORGANIC	M





5. ANALYSIS OF THE ROLE OF WOMEN IN THE VALUE CHAIN

5.1 Legal framework overview

The legal framework in Ukraine pertaining to gender equality is primarily established by the Constitution of Ukraine, which mandates equal rights and treatment based on sex (Constitution of Ukraine, Part II, Article 24). Supporting this constitutional mandate, three laws emphasize the principles of gender equality and non-discrimination:

- The Law on Ensuring Equal Rights and Opportunities for Women and Men (2005).
- The Law on the Principles of Prevention and Combating Discrimination in Ukraine (2012).
- The Law on Introducing Amendments to Certain Legislative Acts of Ukraine regarding Preventing and Countering Discrimination (2014).

Additionally, the Government of Ukraine has adopted various policy documents to operationalize these legal standards, including:

- Strategy for Preventing and Combating Discrimination in Ukraine 2014–2017 and an Action Plan for its implementation.
- National Strategy on Human Rights and a corresponding Action Plan (2016–2020).
- National Action Plan for the Implementation of Recommendations set forth by the CEDAW Committee by 2021.

- State Social Programme on Ensuring Equal Rights and Opportunities for Women and Men up to 2021.

Efforts to address gender issues extend to rural areas, with specific programs aimed at improving the conditions of women and girls. These initiatives encompass legal awareness, combating stereotypes, enhancing access to education, healthcare, infrastructure, and poverty alleviation.

However, despite these efforts, gender mainstreaming within broader national reforms has been limited. There is a lack of integration of gender equality perspectives into various sectors, particularly those traditionally dominated by men. Women's groups often have minimal involvement in decision-making processes concerning reforms.

To strengthen the national machinery for gender equality, actions include creating subdivisions in central executive bodies for policy oversight, reinstating gender advisors at central and local levels, and appointing gender focal points within ministries.

Localizing gender expertise is becoming increasingly crucial due to decentralization efforts. Both central and local authorities are encouraged to coordinate actions on gender policy, facilitated by training programs for civil servants. Proposed changes in regional policies aim to integrate a gender component into local planning and programming to address the specific needs of women and men effectively.

5.2 Key B&N stakeholders

During current research, key B&N stakeholders were analysed to assess:

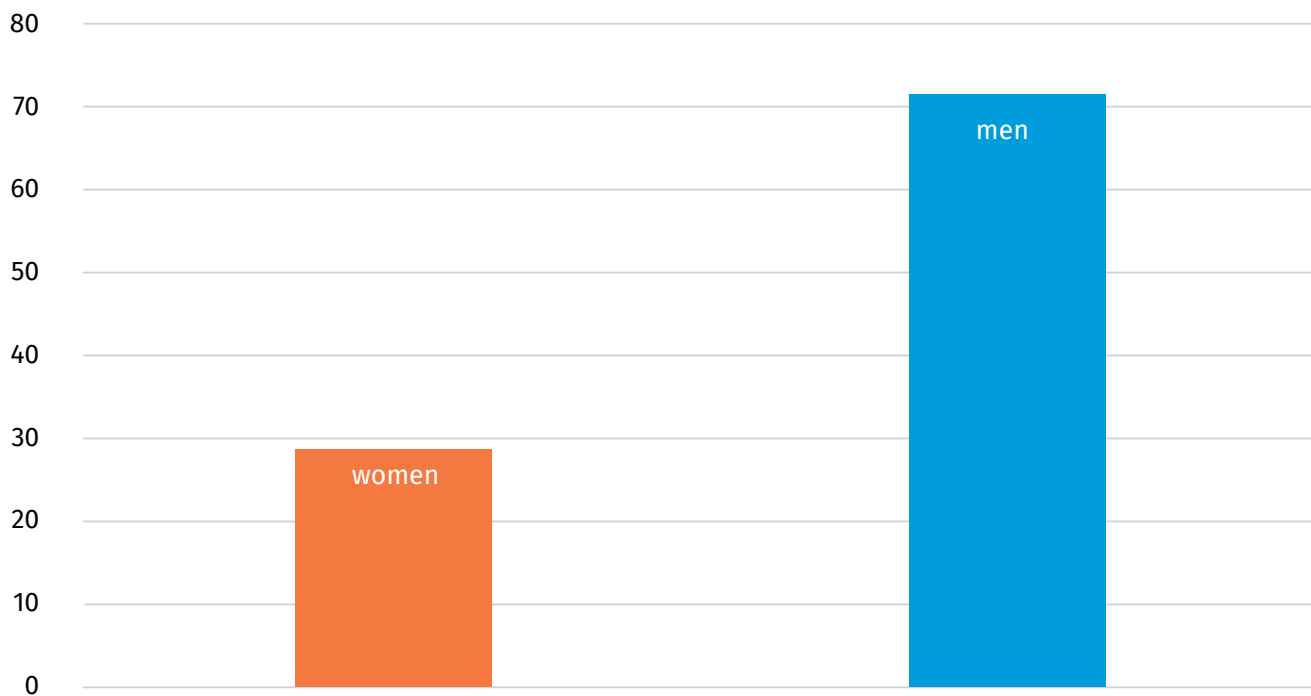
- Women's activities within the B&N value chain
- Asset ownership by women in the B&N sectors
- Access to resources and decision-making power for women
- Women's access to knowledge and training
- Distribution of economic benefits by gender
- Areas where women need support due to gender inequality and the war's impact

Key B&N associations were assessed to identify asset ownership and women's activities:

- Association "Berry Farming of Ukraine"
- ASSOCIATION "UKRSADPROM"
- Public association "Association of orchardists, viticulturists, and winemakers of Ukraine (PA "UKRS-ADVYNPROM")"
- Ukrainian Fruit and Vegetable Association (UFVA)
- Public association "Innovative Farming and Cooperation" (IFC)
- "Ukrainian Business and Trade Association" (UBTA)
- Ukrainian Association of Agricultural Export

The assessment revealed that women are taking lead roles in associations in 2 of 7 associations as illustrated in Figure 7.

Figure 7: Gender balance, association head, %



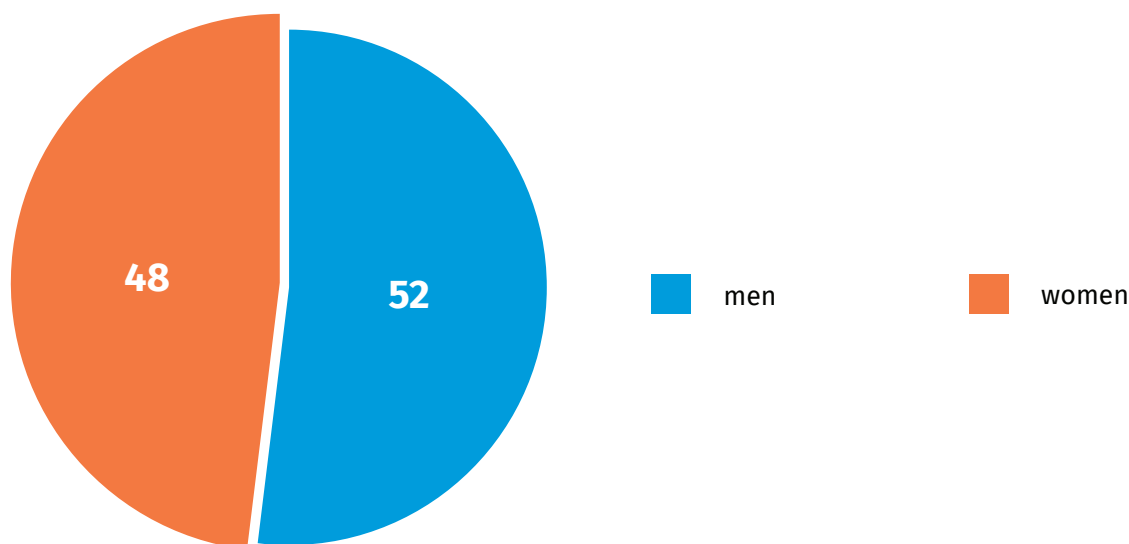
Women are actively engaged in various activities within the berry sector. News sources highlight their participation in key events, such as conferences, workshops, and training sessions organized by associations. Women are also prominently featured in success stories, showcasing their leadership roles in berry farming, entrepreneurship, and innovation. Furthermore, associations recognize and celebrate the achievements of women in the berry sector through awards and accolades, inspiring others to follow suit.

UKRANIAN HOPE PLACE is an example of an initiative provided by a berry association,⁶ which primarily offers job opportunities to seasonal workers. The project

aims to provide employment for women and girls who have been affected by Russian military aggression and have found refuge in one of the targeted regions: Volyn, Chernihiv, Poltava, and Mykolaiv. Women and girls currently seeking employment are invited to register for the project. Additionally, employers are encouraged to join the project by completing an application.

Currently there is a gender balance among companies of B&N sector as illustrated in Figure 8.

Figure 8: Gender balance among companies within the B&N sector, %



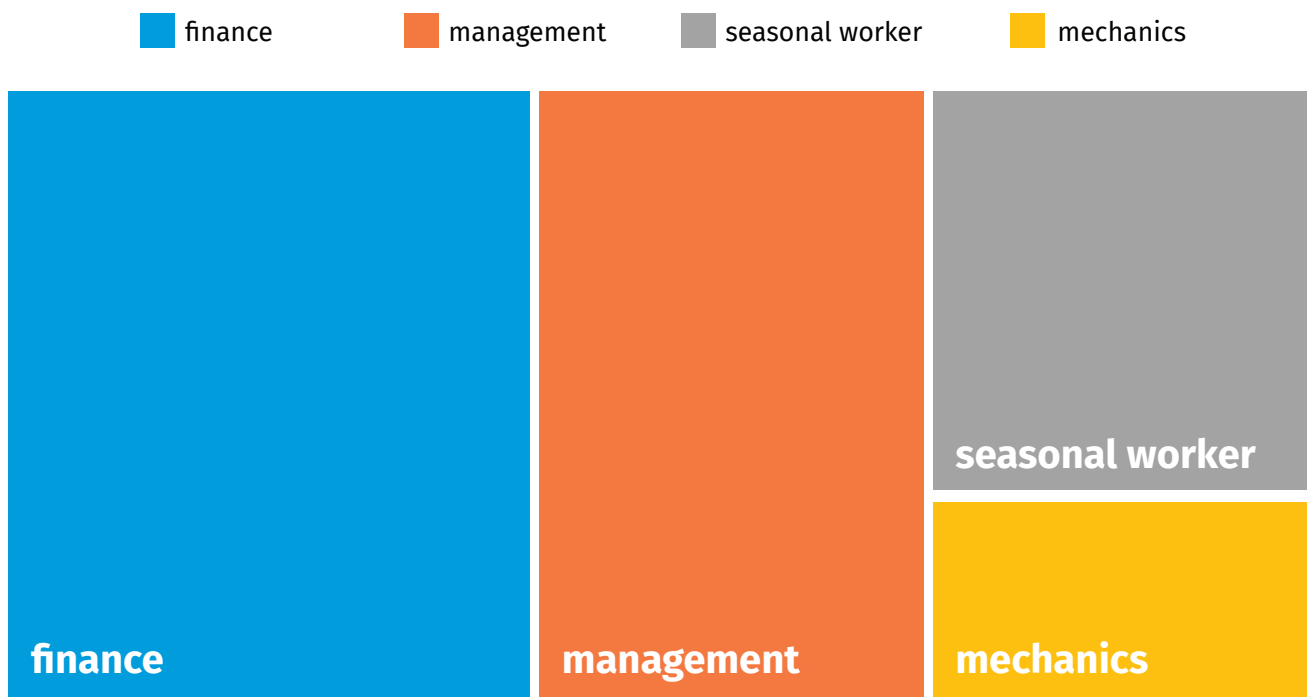
Source: IPG team calculations based on analysis of data from <https://youcontrol.com.ua>

A key contributor to gender balance is big companies from the B&N sector that employ men and women proportionally. Small companies employ more women than men.

In most B&N sector companies, women hold finance and management positions as illustrated in Figure 9.

6 <https://uaberries.com/novyny/novyny-asotsiatsii/proiekt-mistse-nadii>

Figure 9: Distribution of positions held by women, %



Source: IPG team calculations based on analysis of data from <https://youcontrol.com.ua>

Traditional technical positions are mainly occupied by men.

Asset ownership by women in the B&N sector were analysed using <https://youcontrol.com.ua> open data platform.

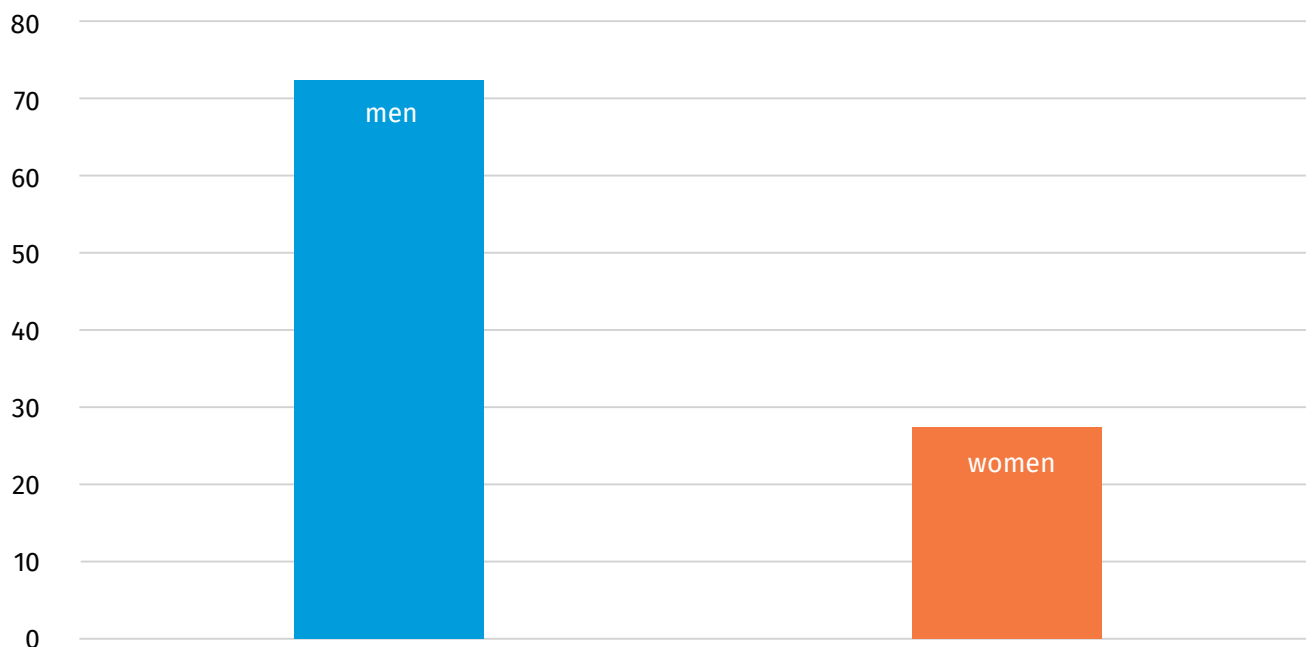
The results of analyses show a disproportion of men to women ownership:

Table 5: Asset ownership assessment, %

Ownership	%
Men	72.5
Women	27.5

The majority of B&N sector companies are men-owned:

Figure 10: Ownership among B&N sector companies, %



The analysis of asset ownership within the B&N sector highlights a significant gender disparity. The findings reveal that the majority of asset ownership in these sectors is held by men, with men owning approximately 72.5% of assets compared to only 27.5% owned by women.

This gender imbalance in asset ownership underscores existing inequalities within the B&N sector, where men predominantly hold control and decision-making power. Such disparities not only limit women's economic opportunities but also hinder gender equality and inclusive growth within these sectors.

The dominance of male ownership in B&N sector companies reflects broader societal norms and structural

barriers that restrict women's access to resources and opportunities for economic participation. Addressing these constraints is essential for promoting gender equity and unlocking the full potential of women in agricultural and rural development.

To overcome these challenges and promote gender-inclusive ownership structures in the B&N sector, concerted efforts are needed to implement policies and initiatives that facilitate women's access to land, finance, education, and leadership opportunities. Empowering women as stakeholders and decision-makers within these sectors is crucial for fostering sustainable and inclusive growth while advancing gender equality in agricultural and rural communities.

5.3 Women's access to knowledge and training

Ukraine's education system spans grades 1 to 12, followed by higher education, with a notable gender balance across levels. However, gender disparities emerge in post-secondary education, particularly in vocational fields, where women are underrepresented. Financial constraints, rural poverty, and societal perceptions contribute to lower female enrolment rates, especially in technical and vocational education. Gender stereotypes drive academic segregation, guiding women towards traditionally "feminine" fields like healthcare and education, while men dominate "masculine" sectors like engineering and transportation. Efforts to challenge stereotypes and promote gender equality in education are evident in national planning initiatives. Roma communities face additional barriers, with fewer girls accessing education due to factors like early marriage and discrimination.

Addressing these disparities is crucial for empowering women and promoting inclusive education and employment opportunities.

Moreover, there are discernible gender patterns in academic fields, with young women predominantly pursuing studies in healthcare and education, while being underrepresented in agricultural, food sciences, and veterinary medicine programs. This underrepresentation of women in academic and research positions related to agriculture, despite their significant contributions to the field, raises concerns about their full participation in scientific study and policy development.⁷

According to national statistics data for 2023:⁸

Table 6: Bachelor education statistics, %

Bachelor education	% of women
Agricultural science	17%
Management	64%

Table 7: Distribution of women across the top 5 regions as a percentage of the total number of students in full-time education, %

Region	% of women in percentage to the total number of students in full-time education
Zakarpatska	49.3%
Kyiv	47.1%
Chernihivska	46.8%
Mykolaivska	45.4%
Ivano-Frankivsk	44.3%

Based on national statistics data for 2023, there are notable gender disparities in bachelor education fields in Ukraine. Agricultural science has a significantly lower percentage of women at 17%, while management shows a higher representation of women at 64%.

Analysing the distribution of women in full-time education across regions, the top five regions with the highest percentage of women students are Za-

karpatska (49.3%), Kyiv (47.1%), Chernihivska (46.8%), Mykolaivska (45.4%), and Ivano-Frankivsk (44.3%).

These statistics highlight varying levels of gender representation across educational fields and regions in Ukraine, suggesting the need for further exploration of factors influencing these disparities and the implementation of targeted interventions to promote gender equality in education.

⁷ <https://openknowledge.fao.org/server/api/core/bitstreams/bcb75dae-370f-491f-be76-1f1d1ff06224/content>

⁸ https://www.ukrstat.gov.ua/operativ/operativ2020/m_w/v_osvita.htm





6. ASSESSMENT OF NEEDS AND CONSTRAINTS OF WOMEN IN THE VALUE CHAIN

During the interview of B&N sector companies the following question of recruitment was analysed: What are your criteria when hiring new employees?

Top criteria mentioned by big companies include previous experience and relevant education for positions of specialists and managers.

For seasonal jobs, the only criteria mentioned is motivation to work.

Several companies also provide temporary accommodation and the possibility to learn on the job.

During the interview with B&N companies, the next question was assessed: What measures of support to women with children/single parents do you have?

The majority of companies provided maternity leave, which is up to 3 years in Ukraine, and flexible working hours for office employees. In one of the big companies there is a dormitory, two meals a day, and a shop at the company premises.

Incorporating examples from the B&N associations helps to contextualize the needs and constraints identified in the assessment, providing specific insights into the challenges faced by women in the B&N industry in Ukraine.

The "Projects" section of uaberries.com mentions initiatives such as "educational programs for berry pro-

ducers" and "workshops and seminars" aimed at improving cultivation techniques and quality standards. These programs could benefit women in the industry by enhancing their knowledge and skills.

Women in the B&N industry may require specialized training and skill development programs to enhance their knowledge and capabilities in areas such as cultivation techniques, harvesting practices, and post-harvest handling as mentioned also, during the interview with Grass Avenue, FE it is already lack of agricultural equipment operators.

The website ukr-nuts.com.ua highlights the importance of modern agricultural practices and equipment for nut production. Initiatives aimed at providing women with access to such resources, perhaps through government subsidies or partnerships with agricultural cooperatives, could help overcome this constraint. There might be a need for increased access to resources such as land, capital, and technology to enable women to engage more effectively in the B&N industry. This could involve initiatives to provide financial assistance, land rights, and access to modern agricultural equipment.

All associations emphasize the export potential of Ukraine's berry and nut products. Women in the industry may benefit from training programs or workshops on international market trends, branding strategies, and export procedures, as mentioned on uaberries.com.

6.1 Constraints in the B&N value chain

While associations provide information about the industry and its potential, they do not specifically address gender disparities or initiatives aimed at promoting gender equality within the sector. This suggests a need for targeted interventions to address gender-based barriers and discrimination.

Gender-based barriers and discrimination may limit women's participation and advancement in the

B&N industry. This could include unequal access to resources, decision-making power, and leadership roles within the industry.

During the interview with companies, the question of inclusion and equality was assessed, results of which can be found in Table 8.

Table 8: Assessment results “What principles of inclusion and equality has your company implemented?”, %

	%
Employment of people with disabilities	50
Accessibility	25
Inclusivity and diversity Policies	25
Trainings for employees on diversity and inclusivity	0
Other, please specify	0

All the mentioned companies are expanding their workforce to include more individuals with disabilities resulting from participation in war, with a specific emphasis on aiding them in securing suitable employment.

Currently there is no focus on training programs dedicated to employee's diversity and inclusion.

The lack of information on financial assistance or credit programs tailored to women in the industry suggests a potential constraint in accessing finance. Highlighting existing opportunities or advocating for gender-sensitive lending practices could help address this constraint. Women entrepreneurs in the industry may face challenges in accessing finance and credit due to factors such as limited collateral, discriminatory lending practices, and lack of financial literacy. This can hinder their ability to invest in their businesses and expand operations.

The website ukr-nuts.com.ua mentions the importance of modern technologies in nut processing and storage. Women may face challenges in accessing these technologies due to factors such as affordability or lack of training. Initiatives to provide training on technology usage or subsidies for equipment could help address this constraint. Inadequate infrastructure, including transportation networks, storage facilities, and processing plants, can pose challenges for women involved in the B&N industry. Similarly, limited access to modern agricultural technologies and practices may hinder productivity and competitiveness.

While the associations promote the potential profitability of B&N production, they do not address the issue of seasonal employment or income instability. Providing alternative income-generating activities during the off-season or promoting value-added products could help mitigate this constraint for women in the industry.

Addressing these needs and constraints will require a multi-faceted approach involving stakeholders such as government agencies, NGOs, industry associations, and development partners. By addressing gender disparities, improving access to resources and markets, and enhancing skills and capacities, women in the B&N industry in Ukraine can unlock their full potential and contribute to the sustainable growth and development of the sector.

Gender-based violence (GBV) remains a pressing issue globally, addressed through legal and policy reforms. Ukraine has proactively undertaken legislative and policy measures to combat GBV and promote gender equality, adopting laws on domestic violence and signing international conventions. Often perpetrated by intimate partners, GBV includes physical, sexual, psychological, emotional and economic violence, infringing upon women's rights and hindering gender parity. Domestic violence stands out as the most prevalent form to affect women in Ukraine, supported by data from national hotlines. Studies indicate that about 22 percent of women aged 15 to 49 have encountered physical or sexual violence.⁹

Despite efforts, GBV remains pervasive, with a significant number of women experiencing violence. Although GBV rates show minor disparities between rural and urban areas, rural areas see slightly higher rates of certain types of violence. However, reporting rates are low due to various factors including shame,

societal tolerance, and lack of support services. Rural survivors face additional challenges accessing help as a result of limited resources and specialized assistance being located primarily in urban centres. Efforts to extend support to remote areas include mobile teams aiding in rural areas, which is institutionalized by the government. Addressing GBV requires comprehensive strategies to protect survivors and promote gender equality.

In conflict-affected regions, such as Eastern Ukraine, the gendered impacts of protracted conflict receive some attention, yet the effect on rural livelihoods remains underexplored. Displacement amplifies vulnerabilities, particularly for women, who require tailored protection, livelihood, and basic needs support. Unemployment and limited job opportunities exacerbate economic hardships, affecting agricultural production and rural incomes. Understanding the nuanced gender dynamics within rural communities affected by conflict is crucial for crafting effective interventions to address poverty, food insecurity, and unemployment.

The interview of B&N sector companies includes the question on the possibility of grievances as highlighted in Table 9.

Table 9: Assessment results “How does your company receive feedback from employees on gender issues?”, %

Question	Answer	%
How does your company receive feedback from employees on gender issues?	Phone	15%
	Meetings with employees	15%
	We do not collect such information	35%
	Other, please specify: logbook, box of proposals and complaints	35%

Based on the answers provided, many companies are using special books and boxes to receive feedback, proposals and grievances. In most cases, small com-

panies do not implement any grievances mechanisms.

⁹ <https://openknowledge.fao.org/server/api/core/bitstreams/bcb75dae-370f-491f-be76-1f1d1ff06224/content>

6.2 War influence on labour and gender questions

The full-scale war has had a profound impact on hundreds of agricultural enterprises, with many experiencing destructions and some even losing their businesses entirely. Ukrainian farmers working in frontline areas or near active combat zones face daily threats from occupiers. However, despite the challenges, agricultural producers persist in uplifting the economy and ensuring Ukraine's food security.

One example is the conversation AgroPortal.ua had with Yuriy Kormyshkin, the owner of the group of companies LLC "South Agro-Export Company".¹⁰ He shared insights into how he and his team manage to preserve production, work towards victory, explore new directions, and develop the business despite the ongoing conflict.

Yuriy revealed that since the onset of the war, the assets were initially under occupation, particularly in the Snihurivskiy district. Despite subsequent liberation efforts, parts of the company's assets continue to suffer from enemy attacks, with some fields mined and property destroyed. Despite these challenges, Yuriy emphasized the resilience of his team and their determination to continue working under such strenuous and hazardous conditions.

Regarding employment, Yuriy noted that while some workers were mobilized to serve in the Armed Forces, others, particularly women with children, relocated to safer areas. As a result, there is now a shortage of workers, especially in professions such as engineering, mechanics, and agronomy. To address this, the company collaborates with the Mykolaiv National Agrarian University, implementing a dual education program and inviting students to work at the company.

In conclusion, the war has created significant challenges for the B&N sector in terms of employment and gender dynamics. The shortage of skilled workers and

the need to adapt to new realities underscore the sector's resilience and the importance of innovative solutions to sustain operations amidst adversity.

The challenges confronting the B&N sector in Ukraine extend beyond labour shortages, encompassing a complex web of socio-economic factors. Hall Hunter, along with other industry players, grapple with a critical shortage of workers, impeding their capacity to scale operations effectively. This scarcity is compounded by the rising costs of labour, which have surged by approximately 10%, necessitating urgent measures to streamline processes and mitigate financial strains.¹¹ Despite the advent of technological solutions, manual labour remains indispensable, particularly in labour-intensive tasks such as berry harvesting.

However, the workforce pool is insufficient to meet the demands of the industry, leading to operational inefficiencies and compromised productivity. Moreover, the recruitment landscape has been further complicated by the exodus of women, who have left the country in significant numbers, and men serving in the Armed Forces. This dual impact has intensified the labour deficit, posing formidable challenges for businesses reliant on seasonal workers. In navigating these complexities, stakeholders must devise innovative strategies to attract and retain talent while fostering a conducive work environment that promotes stability and resilience in the face of adversities. Addressing these multifaceted employment issues is imperative for sustaining growth, ensuring food security, and fortifying the resilience of the B&N sector in Ukraine.

10 <https://agroportal.ua/publishing/intervyu/vidsutnist-obigovih-koshtiv-ta-kadroviy-golod-pro-naybilshi-vikliki-agrobiznesu-v-prifrontovih-oblastyah>
11 http://www.jagodnik.info/wp-content/uploads/2024/03/YAgidnyk_VEB_1_36.pdf



6.3 Quality infrastructure in Ukraine: main challenges

Biodiversity and soil analyses overview¹²

According to the Quality Infrastructure for Sustainable Development Index (QI4SD), developed by the United Nations Industrial Development Organization (UNIDO) in collaboration with partner organizations of the International Network on Quality Infrastructure (INetQI), Ukraine's value is 46.3, placing the nation 49th among the assessed countries, but requires improvements to fully capitalize on its economic potential.

Ukraine is characterized by fertile agricultural plains and significant heavy industry in the east. Classified as a lower-middle-income country, it ranked 131st out of 216 countries with a per capita income of USD 4,830 in 2021, according to the World Bank. Key economic sectors include:

- Manufacturing (22.8% of GDP)
- Mining (12.6%)
- Agriculture (10.6%)
- Trade (6.7%)
- Transportation and Logistics (5.6%)
- Construction (2.7%)

The NES-2030 outlines strategic steps for priority sector development, emphasizing digitalization, the Green Deal, entrepreneurship, and balanced regional development. Ukraine's international commitments, such as the EU Association Agreement and WTO accession, have driven a comprehensive reassessment and transformation of its National Quality Infrastructure (NQI).

Ukraine's NQI ranks 32nd out of 184 countries according to the Global Quality Infrastructure Index 2021. Despite progress, several areas still need improvement including:

- Slow dissemination of new standards and international developments.

- The need for digital tools and advanced analytics to enhance product quality and operational efficiency.
- The potential for Building Information Modelling (BIM) systems to revolutionize the construction sector.

Ukraine's quality infrastructure bodies are aligned with green transformation and digitalization goals but face challenges in fully integrating with European Green Deal priorities, such as decarbonizing transport and phasing out fossil fuels.

- Wooden furniture
- Organic fruit and vegetables
- Sunflower oil
- Raw milk
- Thermoblocks (construction materials)

These value chains are crucial for GDP, employment, trade, and align with national priorities for green transformation and digitalization. There is significant support from development policy programs and interest from key stakeholders.

The development of the organic sector is a priority for Ukraine's economy:

- NES-2030 aims for 3% of land under organic production and USD 1 billion in organic exports by 2030.
- The Law of Ukraine on organic production, updated in 2019, sets the framework for organic farming, though enforcement is pending.
- Nineteen service providers, including Organic Standards LLC, are designated for organic certification.

Major gaps in quality infrastructure for organic value chain include:

- Lack of competent experts in quality assurance for organic agriculture.

¹² Rapid Quality Infrastructure Market Potential Assessment for Ukraine Executive summary of the scoping study on QI services for green and digitalized value chains Project: Quality Standards for Increased Trade in the Eastern Partnership Countries, PN: 2021.2236.4

- Need for national experts in organic certification, food safety, and farming.
- Digitalization of export procedures to meet EU standards.
- Absence of standards for management systems and packaging materials.
- Lack of certified transport and logistics ecosystems for organic products.
- Challenges for small-scale producers in meeting quality criteria and proving EU market eligibility.
- Need for improved product traceability.

Focusing on the organic fruit and vegetables value chain is recommended due to its alignment with economic priorities and potential for growth:

- Ukraine aims to expand organic production and exports significantly.
- Organic farming supports environmental sustainability and digital transformation.
- There is active participation from SMEs and numerous technical assistance projects.

Ukraine's berries and nuts value chain holds significant potential for growth and export, but it faces several challenges within its quality infrastructure system (QIS). Addressing these challenges requires a concerted effort to improve standards, technical expertise, and infrastructure. Recent assessments highlight both the obstacles and opportunities in this sector, offering a roadmap for development.

Current Standards and Technical Committees

As of 2023, Ukraine has enforced 409 national standards for groups of fruits and vegetables, including berries and nuts. Most of these standards have been adopted through the confirmation method, lacking Ukrainian translations, which limits their accessibility and utility for local stakeholders. The QIS includes four national Technical Committees (TCs) in the sector. Notably, TC 24, which focuses on vegetable and fruit products and equipment for their processing, participates in European standardization bodies such as CEN and CENELEC.

Small and medium-sized enterprises (SMEs) constitute about 50% of the participants in these TCs. However, the low qualification levels and awareness

among staff remain significant issues. For SMEs involved in organic products, the participation rate in national TCs is higher (50–80%) yet attracting highly qualified personnel remains a challenge. There are currently eight national TCs for selected organic products, but their activity and participation in European committees are low.

The Ukrainian QIS faces several pressing challenges:

- 1. Standards Adoption and Translation:** There is a need for high-quality translations of harmonized European standards into Ukrainian to ensure broader adoption and compliance.
- 2. Technical Expertise:** The involvement of highly qualified technical specialists in TCs is insufficient, hindering the development and translation of national standards.
- 3. Business Participation:** SMEs show a low level of involvement in European and international TCs, limiting their influence and adoption of best practices.
- 4. Testing Laboratories:** There is a lack of high-tech equipment in testing laboratories, which are predominantly state-owned.
- 5. Logistics and Equipment:** Logistical issues and the availability of appropriate transport and equipment for fresh produce storage are significant concerns.
- 6. Digitization:** Production processes and product quality control programs suffer from a low level of digitization.

Despite these challenges, there are several opportunities to strengthen the QIS:

- 1. Capacity Building:** Enhancing the capacity of producers in safety, hygiene, and assessment and control techniques to comply with international regulations.
- 2. Educational Campaigns:** Implementing educational campaigns that incorporate EU best practices to develop competitive producers and exporters.
- 3. Infrastructure Development:** Developing infrastructure for certified transport and logistics ecosystems for product storage and reloading.
- 4. EU Market Eligibility:** Providing evidence to confirm the eligibility of sector products for the EU marketplace.

5. Product Traceability: Ensuring full traceability of products to meet international standards.

6. Laboratory Enhancement: Strengthening the institutional capacity of laboratories and conformity assessment bodies, including the acquisition of new high-tech equipment.

The National Accreditation Agency of Ukraine (NAAU) has accredited 50 testing laboratories for compliance with DSTU EN ISO/IEC 17025:2019. These laboratories test vegetable growing products, forest nurseries, and forestry products of organic origin. However, most of these laboratories are state-owned and need significant technological upgrades to meet international standards.

A supportive policy environment and a culture of quality are fundamental to business development and knowledge exchange. Ukraine's QIS has undergone substantial changes in recent years, especially with Phase I of reforms. However, the ongoing conflict has impacted various institutions within the QIS and the broader fruit and vegetable sector, necessitating updates to strategic program documents. This includes revising the quality infrastructure development plan, reassessing and finalizing the standardization strategy, and developing a plan to restore the traceability of national standards.

The B&N value chain in Ukraine has substantial growth potential. With the right support, particularly

through Phase II activities, the sector can expand its export capabilities and improve the National Quality Infrastructure (NQI). Addressing challenges such as the translation of standards, enhancing technical expertise, increasing business participation, and upgrading equipment and logistics infrastructure are crucial steps. By focusing on these areas, Ukraine can develop a competitive and resilient sector capable of meeting international standards and increasing its presence in global markets.

Overview of Metrological Regulation in Ukraine¹³

The regulatory framework governing metrology in Ukraine underwent a significant transformation with the enactment of the revised Law on metrology and metrological activity in January 2016. This legislative update marked a departure from the previous Soviet-era system towards a more democratic and adaptable approach to metrological assurance. The new law and its accompanying sub-law acts introduced a set of foundational principles that not only redefine the obligations of metrological services but also empower enterprises with increased responsibility for their measurement practices.

Central to these reforms is the delineation of metrological activities into legal and voluntary spheres. Approximately 80 categories of measuring instruments (MIs) critical to societal functions—such as health, environmental protection, safety, and trade—are sub-

13 [398.pdf \(metrology-bg.org\)](#)

ject to legal regulation. This regulatory scope ensures compliance with international norms prescribed by organizations like OIML (International Organization of Legal Metrology), ISO (International Organization for Standardization), and ILAC (International Laboratory Accreditation Cooperation).

Under the new framework, measurement standards, defined as realizations of specified quantities with documented uncertainties, are excluded from legal regulation. This approach aligns Ukraine's practices with those of the European Union, the United States, Japan, Australia, Canada, and other international entities that adhere to the principles of the International Committee for Weights and Measures (CIPM).

Verification of MIs is a core component of legal metrology, focusing on ensuring the accuracy and reliability of instruments used in regulated sectors. Authorized scientific metrological centres and laboratories perform these verifications, adhering to procedures established by the central executive body responsible for metrology policy. This structured approach provides clarity on the responsibilities of both metrological service providers and MI owners. In contrast, calibration of MIs outside the legally regulated sphere is voluntary but encouraged for maintaining measurement precision and traceability. Accredited laboratories conduct calibrations based on documented traceability to national or international measurement standards, consistent with ILAC Policy on the Traceability of Measurement Results.

Enterprises and organizations play a pivotal role under the new legislation, assuming greater autonomy in decision-making regarding calibration intervals and methods for MIs not mandated for legal verification. This empowerment extends to the use of internally verified MIs as standards for internal metrological activities, provided they comply with the overarching legal framework.

Furthermore, quality assurance in metrology is emphasized through third-party calibration services and internal quality controls adopted by laboratories and enterprises. These practices not only enhance measurement reliability but also contribute to defining appropriate calibration intervals in line with contemporary metrological standards.

In conclusion, Ukraine's modern metrological system embodies organizational principles that prioritize flexibility, responsibility, and alignment with international best practices. By distinguishing between legal and voluntary metrological activities and empowering enterprises with decision-making authority, the regulatory framework promotes a robust metrological infrastructure crucial for ensuring accuracy, reliability, and compliance across diverse sectors of the economy and society.



7. RECOMMENDATIONS

In the context of the ongoing conflict in Ukraine, the war has exacerbated existing challenges and introduced new ones across various sectors, particularly affecting women and the agricultural workforce. Women face heightened responsibilities, economic hardships, and psychological issues as the conflict continues. The B&N sector in Ukraine has been significantly impacted by the military situation, resulting in severe employment issues. Companies in this sector are experiencing an acute shortage of labour, complicating their efforts to expand operations.

To address the gaps left by the reduced male workforce, there is an increasing need to involve more women in roles traditionally held by men. This transition must ensure that process speed and product quality are maintained. The conflict has led to a shortage of skilled professionals in the B&N sector, especially in technical fields such as engineering, mechanics, and agronomy.

It is crucial to enhance women's access to education and professional training in the berry and nut sector. This approach should ensure high quality standards and promote sustainable development, enabling women to contribute effectively to the industry and expand its export potential.

In summary, the main recommendations are organized into distinct categories of enhancement, as outlined in the assessment.

Macro Level (Government Level)

- **Policy Development and Implementation:** The government should focus on creating gender-inclusive policies that promote gender equality and encourage the active participation of women in quality infrastructure sectors, particularly within the berries and nuts (B&N) value chain. Regulatory frameworks need to be established to mandate gender inclusivity across all quality infrastructure-related programs and initiatives.
- **Funding and Financial Support:** Subsidies and grants should be provided specifically for women-owned enterprises in the B&N sector to enhance their access to quality standards and certifications. Additionally, microfinance programs must be enhanced to ensure women have better access to finance for starting and expanding their businesses.

- **Education and Training Initiatives:** Launching nationwide training programs that focus on quality standards, quality management systems, and certification processes is essential, with a special emphasis on women's participation. Scholarships and incentives should be offered to women pursuing education and training in fields related to quality infrastructure.
- **Legal Protection and Enforcement:** Strengthening and enforcing anti-discrimination laws is crucial to protect women in the workforce and ensure equal opportunities. Comprehensive support systems for survivors of gender-based violence, including legal aid, counselling, and rehabilitation services, should be implemented.

Meso Level (Institutional Level)

- **Institutional Capacity Building:** Institutions related to quality infrastructure should provide gender sensitivity training for their staff to promote a culture of equality and inclusivity. Programs to enhance the leadership skills of women within these institutions should be developed, encouraging their advancement to decision-making positions.
- **Cluster and Network Formation:** Facilitating the creation of clusters and networks specifically for women in the B&N value chain will promote collaboration, knowledge sharing, and market access. Establishing partnerships with international organizations can support women's participation in global quality infrastructure initiatives.
- **Monitoring and Accountability:** Institutions should integrate gender equality indicators into their monitoring and evaluation systems to track progress and ensure accountability. Regular reporting on gender equality outcomes and women's participation in quality infrastructure programs should be required.
- **Access to Resources and Services:** A voucher system should be implemented to enable women to access necessary services for sustainable development, such as training on quality standards and certifications. Technical assistance should be provided to women's organizations and cooperatives in the B&N sector to improve their operational efficiency and product quality.

Micro Level (Private Sector Level)

- Corporate Policies and Practices:**
 Private sector companies should develop and enforce gender-inclusive hiring policies to ensure equal employment opportunities for women in the quality infrastructure sector. Implementing strict workplace safety policies is essential to protect women from harassment and discrimination.
- Professional Development and Training:**
 Offering targeted skill development programs for women employees will enhance their expertise in quality management and standards compliance. Mentorship programs should be established within companies to support the career growth and development of women.
- Support for Women Entrepreneurs:**
 Business incubators and accelerators focused on women-owned enterprises in the B&N sector should be created, providing necessary resources, mentorship, and market access. Partnerships with financial institutions should be developed to improve access to credit and investment for women entrepreneurs.
- Promotion of Women’s Products:**
 Initiatives to promote products produced by women-owned businesses, such as participation in trade fairs, online marketplaces, and export opportunities, should be implemented. Support should be provided to women entrepreneurs to obtain necessary quality certifications, enhancing their competitiveness in both domestic and international markets.

A concrete set of recommendations for further women empowerment in connection to quality infrastructure improvement are described in Table 10.

Table 10: Assessment results on difficulties with implementing climate resilience programmes among the B&N sector companies

#	Recommendation	Description	Opportunities
1	Involvement of women in the creation of a modern inter-regional cluster of berries and nuts	Initiation of a cluster that will become the basis for the development of the added value of berries and nuts at the regional and inter-regional levels, with the active participation of women and the implementation of quality standards.	<p>Development of a cluster model with an emphasis on the role of women: Creation of structures that promote the leadership of women in the cluster and the involvement of women farmers and entrepreneurs.</p> <p>Implementation of quality standards: Development and implementation of internationally recognized standards for berry and nut products, which will facilitate better access to markets.</p> <p>Training and development of personnel: Organization of trainings and seminars for professional development, especially for women, in aspects of quality management and cluster coordination.</p> <p>Registration on the European platform of cluster cooperation: Ensuring recognition and cooperation at the international level through cluster registration and cooperation with clusters of EU countries.</p> <p>Monitoring and evaluation of the impact of the cluster: Measuring the impact of the cluster on the economic development of the region and the role of women in this process.</p>

#	Recommendation	Description	Opportunities
2	Provision of technical and business development services	Appropriate technical and business development services are provided at the local and enterprise level, with a particular emphasis on the involvement of women and the implementation of standards that enhance their opportunities and rights.	<p>Voucher system for services: Introduction of a voucher system that will allow business entities to choose the necessary services for the development of their businesses, thus contributing to their sustainable development.</p> <p>Voucher system for services: Introduction of a voucher system that will allow business entities to choose the necessary services for the development of their businesses, thus contributing to their sustainable development.</p> <p>Organization of training and staff development with an emphasis on women: Provision of specialized trainings and development of skills for improving the qualifications of women, including trainings on the understanding and implementation of quality standards (e.g. Global Gap, Organic, HACCAP, ISO, organic, fair trade and others).</p>
3	Sustainable inclusion of women farmers	Inclusion of female farmers in the successful B&N value chain with an emphasis on sustainable development.	<p>Supporting women producers: Providing assistance to women producers in improving their well-being through sustainable and profitable farming.</p> <p>Organizational Consolidation and Capacity Building: Strengthening the capacity of women farmers' organizations to identify business opportunities, expand their business and use new marketing channels.</p>

#	Recommendation	Description	Opportunities
4	Addressing Gender Disparities in Asset Ownership	Given the significant gender disparity in asset ownership within the B&N sectors, initiatives should be implemented to facilitate women's access to land and other productive resources. This could involve targeted policies, financial support mechanisms, and capacity-building programs aimed at enhancing women's ownership and control over assets.	<p>Conduct research on existing programs in Ukraine aimed at increasing the share of women in assets and finance and develop recommendations for new programs that will help increase women's awareness of asset and finance management.</p> <p>Implement programs aimed at increasing women's share of assets and finance; build institutions that promote public investment in social goods and sustainable development.</p> <p>Develop and conduct a series of workshops to explain existing state and grant programs, the principles of working with these programs and training in the basic principles of preparing documentation and reporting on these programs.</p> <p>Provide targeted support and resources to women-owned enterprises and family farms to enhance their productivity and sustainability. Ensure fair wages and working conditions for both men and women.</p> <p>Conduct awareness campaigns to challenge societal norms and stereotypes regarding women's role in asset ownership and management. Provide targeted investments and support mechanisms contributing to gender equality and women's economic empowerment. Projects focusing on incorporating gender-responsive design principles.</p> <p>Facilitate access to finance and credit for women entrepreneurs in the B&N sector through microfinance investments, direct loans to women-owned SMEs with reduced interest rates. Highlight existing opportunities for financial assistance and credit programs tailored to women, and advocate for the removal of barriers that hinder women's access to finance. Enhance access to commercial spaces for women entrepreneurs.</p>

#	Recommendation	Description	Opportunities
5	Enhancing Women's Participation in Leadership Positions (for example of programs, see Annex 1)	Efforts should be made to increase women's representation in leadership positions within B&N sector companies and associations. This could be achieved through measures such as mentorship programs, leadership training, and the establishment of gender-sensitive policies that promote inclusivity and diversity in decision-making processes.	<p>Design and deliver a series of mentoring and leadership development workshops to empower women to take on leadership roles in the B&N sectors.</p> <p>Establish mentorship and leadership development programs to empower women to pursue leadership roles in the B&N sectors. Create inclusive environments that support gender equality.</p> <p>Encourage gender-balanced recruitment practices and eliminate biases in hiring decisions through training and awareness initiatives.</p> <p>Provide financial and technical support to women entrepreneurs and business owners via dedicated grant programs.</p>
6	Addressing Gender-Based Violence and Stereotypes (for more information, please see Annex 2)	Strategies to challenge gender stereotypes and biases, particularly in technical and managerial positions, are essential for creating a more inclusive and equitable work environment. This could involve awareness-raising campaigns, diversity training, and the promotion of positive role models to inspire women to pursue careers in traditionally male-dominated fields.	<p>Strengthen legal frameworks and support services to combat gender-based violence and ensure the safety and security of women and girls in conflict-affected areas.</p> <p>Conduct awareness campaigns to challenge gender stereotypes and promote gender equality, particularly in traditionally male-dominated fields like agriculture.</p> <p>Provide psychosocial support and counselling services to survivors of gender-based violence, addressing their immediate needs and facilitating their recovery and rehabilitation.</p> <p>Promoting gender equality, diversity, and inclusion in the workplace. Provide training and awareness-raising programs to challenge stereotypes and biases and foster a culture of inclusivity and equality. Ensure women's land rights in projects.</p> <p>Develop and implement training and education programs to challenge stereotypes and prejudices and promote a culture of inclusion and equality. Ensure women's rights to land in projects.</p> <p>Establish effective grievance mechanisms and feedback channels within B&N sector companies to address gender-related issues and concerns. Encourage open communication and dialogue between employers and employees and ensure that feedback mechanisms are accessible and responsive to the needs of women in the workforce.</p>

#	Recommendation	Description	Opportunities
7	Promoting Gender Equality in Education and Training (Annex 3 provides a list of programs)	Enhancing women's access to education, vocational training, and skills development programs is crucial for building their capacity and empowering them to succeed in the B&N sectors. Initiatives aimed at promoting education for girls and providing targeted training in agricultural techniques and entrepreneurship can help bridge the gender gap in knowledge and skills.	Increase access to education and vocational training programs for women and girls, particularly in technical fields related to agriculture and rural development.
			Offer scholarships and financial incentives to encourage women's participation in STEM (Science, Technology, Engineering, and Mathematics) disciplines and other traditionally male-dominated sectors.
			Develop gender-sensitive curriculum and teaching materials to challenge stereotypes and promote inclusive learning environments that empower women and girls to pursue their educational and career aspirations.
			Develop targeted educational and training programs aimed at enhancing women's skills and capabilities in agricultural techniques, entrepreneurship, and technology adoption. Provide specialized training that meets the needs of women in the B&N sector, particularly in areas such as cultivation practices, post-harvest handling, and modern agricultural technologies.
			Cooperate with universities and institutes for arranging working students programs for students in 3rd and 4th grades.
		Promote tractor driver positions, agronomists and mechanic positions among pupils. Develop qualification.	
8	Strengthening Support Mechanisms for Women Entrepreneurs (for more details refer to Annex 4)	Facilitate business networks and access to capacity building programs.	Establish women's business networks and support groups to facilitate knowledge sharing, collaboration, and access to resources for women entrepreneurs in the B&N sectors.
			Provide financial incentives and preferential access to credit and investment opportunities for women-owned businesses and startups.
			Offer training and capacity-building programs tailored to the needs of women entrepreneurs, covering areas such as business management, financial literacy, and market access.
9	Support Women Affected by Conflict (for more details refer to Annex 5)	Given the impact of the ongoing conflict on women's economic opportunities and livelihoods, targeted support programs should be implemented to assist women affected by displacement and insecurity. This could include job placement initiatives, vocational training programs, and entrepreneurship support to enable women to rebuild their lives and contribute to the recovery of their communities.	Offer training and development opportunities that empower women to advance in their careers and take on leadership roles within the organization via specialized grant programs. Provide free access to workshops, seminars, and mentorship programs that support professional growth and skill development via associations.
			Offer psychosocial support services to help women cope with the emotional and mental health challenges resulting from conflict-related trauma. This could involve counselling, support groups, and mental health awareness programs.

#	Recommendation	Description	Opportunities
10	Provide Support for Women with Children and Single Parents	<p>Implement supportive measures such as flexible working hours, maternity leave policies, and access to childcare facilities to enable women with children or single parents to participate fully in the workforce. Consider establishing temporary accommodation options and providing opportunities for on-the-job learning to support women's employment and career advancement.</p> <p>Flexible Working Arrangements: Implement flexible working hours and remote work options to accommodate the needs of women with children or single parents. This flexibility allows them to balance their work responsibilities with childcare duties and other personal obligations.</p>	<p>Establish women's business networks and support groups to facilitate knowledge sharing, collaboration, and access to resources for women entrepreneurs in the B&N sectors.</p> <p>Provide financial incentives and preferential access to credit and investment opportunities for women-owned businesses and startups.</p> <p>Offer training and capacity-building programs tailored to the needs of women entrepreneurs, covering areas such as business management, financial literacy, and market access.</p> <p>Employee Assistance Programs: Offer employee assistance programs that provide counselling, mental health support, and resources for managing work-life balance. These programs can help women navigate the challenges of parenthood while maintaining their professional responsibilities.</p> <p>Access to Healthcare Services: Ensure access to healthcare services, including prenatal care, paediatric care, and reproductive health services, for women and their families. Collaborate with healthcare providers and insurance companies to provide affordable and comprehensive healthcare coverage.</p> <p>Workplace Accommodations: Make workplace accommodations for pregnant women and nursing mothers, such as designated nursing rooms, ergonomic furniture, and flexible break times. Ensure that workplaces are safe and conducive to the needs of pregnant women and parents with young children.</p> <p>Community Support Networks: Establish support networks or affinity groups for women with children and single parents within the workplace. These networks can provide peer support, networking opportunities, and resources for addressing common challenges faced by working mothers and single parents.</p> <p>Financial Assistance: Provide financial assistance or subsidies for childcare expenses, school fees, and other educational costs for employees with children. Consider offering scholarships or grants for employees' children to support their education and development.</p>



By implementing these recommendations, Ukraine can work towards achieving greater gender equality and women's empowerment in the B&N sectors, thereby unlocking the full potential of women as drivers of sustainable development and inclusive growth in rural communities.

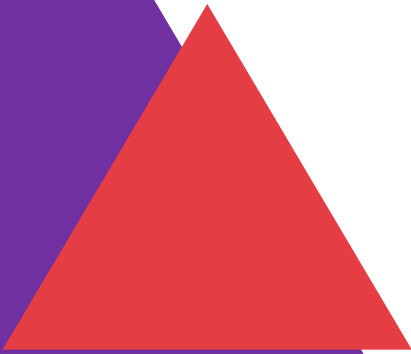
Empowering women to participate fully in decision-making, accessing resources, and acquiring knowledge and skills will not only advance gender equality but also drive sustainable and inclusive growth in the sector.

An overview of programs aimed at increasing women's share of assets and finance and building institutions that promote public investment in social goods and sustainable development can be found in Annex 6.





8. CONCLUSIONS



The comprehensive assessment of the Ukrainian berries and nuts (B&N) value chain, with a particular focus on gender equality and the empowerment of women, has revealed critical insights into the sector's dynamics and the significant role women play within it. **This report underscores the importance of leveraging quality and standards to enhance gender equality and the empowerment of women and promote sustainable development in the B&N sectors of Ukraine.**

Key findings indicate that women in the Ukrainian B&N sectors are significantly underrepresented in terms of asset ownership, with men holding 72.5% of assets compared to 27.5% of women. This disparity is indicative of broader societal norms and structural barriers that limit women's access to resources and decision-making power. The division of labour remains gendered, with women predominantly occupying administrative and office roles, while men are more involved in physically demanding and technical positions. The ongoing conflict in Ukraine has exacerbated traditional gender roles, increased gender-based violence, and reinforced biases against women. Women have faced heightened responsibilities, economic hardships, and mental health challenges due to the war. The conflict has also led to a shortage of skilled workers in the B&N sectors, particularly affecting professions such as engineering, mechanics, and agronomy. Companies are adapting by implementing dual education programs and seeking innovative solutions to sustain operations amidst these challenges.

There is a notable gender disparity in education fields related to the B&N sectors. While women are well-represented in management, their presence in agricultural sciences is significantly lower. Enhancing access to education and vocational training for women is crucial for building their capacity and empowering them within these sectors. Women contribute substantially to the B&N sectors, particularly in family farms and smaller enterprises where they often play key roles. However, they face barriers in accessing and controlling resources within these value chains, limiting their overall impact and decision-making power. In summary, the main recommendations for enhancing women's roles in the B&N sector are organized into distinct categories of enhancement.

At the macro level, the government should focus on creating gender-inclusive policies that promote gender equality and encourage women's active participation in quality infrastructure sectors, particularly within the B&N value chain. This includes establishing regulatory frameworks to mandate gender inclusivity across all related programs and initiatives. Additionally, subsidies and grants should be provided specifically for women-owned enterprises to enhance their access to

quality standards and certifications. Microfinance programs must be enhanced to ensure women have better access to finance for starting and expanding their businesses. Nationwide training programs focusing on quality standards, quality management systems, and certification processes should be launched, with special emphasis on women's participation. Strengthening and enforcing anti-discrimination laws is crucial to protect women in the workforce and ensure equal opportunities, along with comprehensive support systems for survivors of gender-based violence.

At the meso level, institutions related to quality infrastructure should provide gender sensitivity training for their staff to promote a culture of equality and inclusivity. Programs to enhance the leadership skills of women within these institutions should be developed, encouraging their advancement to decision-making positions. Facilitating the creation of clusters and networks specifically for women in the B&N value chain will promote collaboration, knowledge sharing, and market access. Monitoring and accountability should be integrated into gender equality indicators to track progress and ensure accountability. A voucher system should be implemented to enable women to access necessary services for sustainable development, such as training on quality standards and certifications.

At the micro level, private sector companies should develop and enforce gender-inclusive hiring policies to ensure equal employment opportunities for women in the quality infrastructure sector. Offering targeted skill development programs for women employees will enhance their expertise in quality management and standards compliance. Mentorship programs should be established within companies to support the career growth and development of women. Business incubators and accelerators focused on women-owned enterprises in the B&N sector should be created, providing necessary resources, mentorship, and market access. Partnerships with financial institutions should be developed to improve access to credit and investment for women entrepreneurs. Initiatives to promote products produced by women-owned businesses, such as participation in trade fairs, online marketplaces, and export opportunities, should be implemented.

These recommendations aim to further empower women in the B&N sector, improving their access to quality infrastructure and enhancing the sector's overall performance. Concrete sets of recommendations for further women empowerment in connection to quality infrastructure improvement are detailed in the assessment, addressing issues and gaps related to quality standards for small farmers, value chain operators, and institutional frameworks.



Annex 1: List of programs enhancing Women's Participation in Leadership Positions

Increasing women's participation in leadership positions within the berries and nuts (B&N) sector is crucial for promoting inclusivity, diversity, and sustainable growth. Various programs and initiatives aimed at achieving this goal were analysed, focusing on mentorship programs, leadership training, gender-sensitive policies, and efforts to enhance inclusivity in decision-making processes. The examination of global best practices highlights several areas where the Ukrainian market can benefit from targeted interventions and initiatives.

Mentorship programs specifically designed for women in the B&N sector are notably absent in Ukraine. Mentorship programs play a vital role in empowering women within the B&N sector. One effective approach is to pair women working in this industry with experienced female mentors who can provide guidance, advice, and support. For example, Women in Food and Agriculture connects women with mentors to help them navigate the challenges of the agricultural industry ([Mentorship Program - Women in Food and Agriculture \(wfa-initiative.com\)](#)). Similarly, initiatives like FarmHER offer mentorship and networking opportunities by linking young women in the B&N sector with successful female farmers and agribusiness leaders ([FarmHER](#)). These programs not only provide essential professional development but also foster a supportive community for women in agriculture.

Leadership training programs are another critical component in enhancing women's roles in the B&N sector and are another area where the Ukrainian market could see substantial improvements. These programs are designed to develop leadership skills such as strategic planning, financial management, and sustainable farming practices. The Women in Agribusiness Summit is a prime example, offering specialized training to women in the industry ([Women in Agribusiness](#)). Through these initiatives, women are better equipped to take on leadership roles and drive innovation within the sector.

Establishing gender-sensitive policies within agribusiness companies is essential for creating an inclusive

workplace. Inclusive hiring and promotion policies ensure fair and unbiased practices, with specific targets for gender diversity. Companies like Syngenta have implemented gender diversity initiatives to promote equal opportunities ([Syngenta](#)). Additionally, workplace flexibility policies are crucial for supporting work-life balance, accommodating the unique needs of women in the agriculture sector. Bayer's workplace flexibility initiatives serve as a model, offering flexible working hours and remote work options to support women in balancing their professional and personal lives ([Bayer](#)).

Promoting inclusivity and diversity in decision-making processes requires dedicated efforts to create a supportive environment. Establishing diversity and inclusion councils within agribusiness companies can significantly contribute to this goal. Corteva Agriscience's Inclusion and Diversity Council, for instance, is dedicated to promoting diversity and inclusion within the company ([Corteva](#)). Moreover, initiatives aimed at increasing the number of women on corporate boards and in other decision-making bodies are essential. The Boardroom Africa's focus on agribusiness highlights the importance of such initiatives, advocating for greater representation of women at the highest levels of decision-making ([The Boardroom Africa](#)). Ukrainian agribusiness companies and associations could benefit from implementing similar initiatives, ensuring that women are well-represented at the highest levels of decision-making.

In summary, the Ukrainian berries and nuts market would benefit greatly from the introduction and implementation of mentorship programs, leadership training, gender-sensitive policies, and initiatives promoting diversity and inclusion. Addressing these gaps would enhance women's participation in leadership positions and drive sustainable growth and innovation within the sector. By learning from global best practices, Ukraine can create a more inclusive and prosperous future for B&N industry.



Annex 2: List of programs addressing Gender-Based Violence and Stereotypes

To create a more inclusive and equitable work environment within the Ukrainian berries and nuts (B&N) sector, addressing gender-based violence and challenging gender stereotypes and biases are essential. Strategies to challenge gender stereotypes and biases, particularly in technical and managerial positions, are crucial for fostering an inclusive workplace. Awareness campaigns and diversity training can help achieve this goal. For instance, media initiatives can play a significant role in promoting gender equality. Campaigns like UN Women's "HeForShe" have been successful in raising awareness and encouraging men to advocate for gender equality. Implementing similar campaigns in Ukraine can challenge traditional gender roles and inspire women to pursue careers in agriculture and agribusiness.

In addition to media campaigns, diversity training programs are vital. Organizations such as the UN Women have developed comprehensive training programs aimed at promoting gender equality in traditionally male-dominated fields.

UN Women began its work in Ukraine in October 2015 and went from implementing individual projects to opening an office in 2018.

Its activities in Ukraine are focused on three key thematic areas: Women, peace and security, gender-based violence, as well as gender-responsive governance, including gender-sensitive recovery, European integration and humanitarian assistance.

UN Women in Ukraine provides technical support for developing and implementing sectoral policies, advocacy, social mobilization, and capacity-building activities to government authorities at all levels, human rights institutions, women's initiative groups, civil society organizations, and the private sector.

Ukrainian agricultural associations can adopt these training modules to educate employees and management about the importance of diversity and inclusivity. To combat gender-based violence and ensure the safety and security of women and girls, particularly in conflict-affected areas, it is imperative to strengthen legal frameworks and support services. Governmental programs and NGO initiatives can provide the necessary legal and psychosocial support to survivors. For example, the "Safe Cities and Safe Public Spaces" initiative by UN Women focuses on creating safer environments for women through improved policies and community engagement. Adopting similar programs in Ukraine can help address the immediate needs of survivors and facilitate their recovery and rehabilitation. Moreover, providing psychosocial support and counselling services is crucial. NGOs and government pro-

grams can offer these services to help survivors of gender-based violence. Programs like those run by the International Rescue Committee (IRC) provide comprehensive support, including counselling, legal aid, and safe spaces for women. Ukrainian NGOs and governmental bodies can collaborate to establish such support networks, ensuring survivors receive the care they need.

Promoting gender equality, diversity, and inclusion within the workplace requires a concerted effort from all stakeholders. Training and awareness-raising programs can challenge stereotypes and biases, fostering a culture of inclusivity and equality. For example, the EDGE Certification (Economic Dividends for Gender Equality) provides a global business certification standard for gender equality. Ukrainian B&N sector companies can pursue such certifications to demonstrate their commitment to gender equality.

Ensuring women's land rights is another critical aspect. Projects like the "Landesa" initiative, which works to secure land rights for women in rural areas, can serve as a model. Implementing similar projects in Ukraine would empower women in the agricultural sector by providing them with secure land tenure and the associated economic benefits.

Creating effective grievance mechanisms and feedback channels within B&N sector companies is essential for addressing gender-related issues and concerns. Guidelines and training provided by agricultural associations can help companies implement these mechanisms. Encouraging open communication and dialogue between employers and employees ensures that feedback mechanisms are accessible and responsive to the needs of women in the workforce.

For instance, the Fair Wear Foundation's complaint mechanism in the garment industry offers a transparent process for addressing workers' concerns. Adopting similar models in the Ukrainian B&N sector can provide women with a safe and effective way to voice their grievances and seek redress.

Addressing gender-based violence and stereotypes in the Ukrainian berries and nuts sector involves a multifaceted approach. Awareness-raising campaigns, diversity training, strengthened legal frameworks, and support services for survivors are essential components. By implementing these strategies and drawing on successful global examples, Ukraine can create a more inclusive and equitable agricultural industry, ensuring the safety, security, and empowerment of women and girls.



Annex 3: Gender Equality in Education and Training

Enhancing women's access to education, vocational training, and skills development programs is essential for building their capacity and empowering them to succeed in the berries and nuts (B&N) sector.

One of the primary steps towards promoting gender equality in the B&N sector is to increase access to education and vocational training programs for women and girls, particularly in technical fields related to agriculture and rural development. Scholarships and financial incentives play a significant role in encouraging women's participation in STEM (Science, Technology, Engineering, and Mathematics) disciplines and other traditionally male-dominated sectors. For instance, the "Women in STEM" scholarship programs offered by various universities globally provide financial support to women pursuing careers in science and technology ([British Council Women in STEM Scholarships](#)).

In Ukraine, similar scholarship programs can be established to support women and girls in pursuing education in agricultural sciences and technology. Additionally, vocational training programs focusing on agricultural techniques and rural development should be made more accessible to women. For example, the "Feed the Future" initiative by USAID provides agricultural training and resources to women farmers in developing countries, aiming to improve their productivity and economic opportunities ([Feed the Future](#)).

Creating a gender-sensitive curriculum and teaching materials is crucial for challenging stereotypes and promoting inclusive learning environments. Programs that integrate gender perspectives into the curriculum help empower women and girls to pursue their educational and career aspirations. For instance, UNESCO's Gender-Sensitive Education Program works to elimi-

nate gender bias in educational content and teaching practices, fostering an inclusive environment for all students ([UNESCO Gender-Sensitive Education](#)).

Implementing similar initiatives in Ukraine's educational institutions can help create a more inclusive learning environment in the B&N sector. This involves revising textbooks, training teachers on gender sensitivity, and promoting positive role models who inspire women to pursue careers in agriculture and agribusiness.

Developing targeted educational and training programs aimed at enhancing women's skills and capabilities in agricultural techniques, entrepreneurship, and technology adoption is vital. Specialized training programs should meet the specific needs of women in the B&N sector, particularly in areas such as cultivation practices, post-harvest handling, and modern agricultural technologies.

An example of a successful targeted training program is the "Women's Empowerment in Agriculture Index" (WEAI) developed by IFPRI and USAID, which measures the empowerment and inclusion of women in the agricultural sector ([WEAI](#)). This initiative has led to the development of various training programs tailored to women's needs in agriculture.

In Ukraine, similar programs can be introduced to provide women with the skills and knowledge required to excel in the B&N sector. Training centres can be established in rural areas, offering courses on modern agricultural practices, business management, and technology use in farming. Additionally, partnerships with local and international organizations can help provide resources and expertise for these training programs.



**Annex 4:
List of mechanisms
to strengthening Support
for Women Entrepreneurs**

Strengthening support mechanisms, such as (I) business networks, (II) capacity-building programs, and (III) access to financial resources, can significantly enhance the success and sustainability of women-owned businesses.

Creating women's business networks and support groups is an effective way to facilitate knowledge sharing, collaboration, and access to resources for women entrepreneurs. These networks provide a platform for women to connect, share experiences, and support each other's business endeavours.

The Ukrainian Women's Fund ([UWF](#)) is a non-governmental organization dedicated to supporting women's rights and gender equality in Ukraine. Established in 2000, the UWF aims to empower women and foster a robust feminist movement. Key initiatives include:

- **Grant Programs:** Funding women's organizations and initiatives.
- **Capacity Building:** Training workshops for leadership and advocacy skills.
- **Advocacy:** Influencing policies for gender equality.
- **Research and Publications:** Providing insights into gender issues.
- **Providing Financial Incentives and Access to Credit.**
- **Key projects** of the organization in which synergies could be found between B&N sector companies and associations:
 - “Women, Peace, and Security: Response to the Challenges of War”: Addressing the impact of conflict on women and promoting peacebuilding.
 - “SHE RISES: Empowering Ukrainian Women in Wartime and Beyond”: Supporting women’s empowerment during and after conflict.
 - “RESILIENT TOGETHER”: Improving responses to war-related sexual violence.
 - “Network of Gender Think Tanks”: Enhancing policy design, impact assessment, and advocacy.
 - “Women, Peace, and Security Agenda Brings Results Locally in Ukraine”: Implementing local solutions for peace and security.
 - “Women’s Voice and Leadership — Ukraine”: Strengthening women’s leadership and organizational capacities.

Access to finance is often a significant barrier for women entrepreneurs. Providing financial incentives and preferential access to credit and investment opportunities for women-owned businesses can help overcome this challenge.

For instance, the Women’s Entrepreneurship Fund by the European Investment Bank offers financial prod-

ucts designed to support female entrepreneurs by providing easier access to credit. In Ukraine, similar financial products can be developed to support women in the B&N sector, offering low-interest loans, grants, and investment opportunities tailored to their needs. Another example is the Goldman Sachs 10,000 Women initiative, which provides women entrepreneurs around the world with business and management education, mentoring, and access to capital (Goldman Sachs 10,000 Women). Adopting such a program in Ukraine would provide women entrepreneurs in the B&N sector with the financial support and business education necessary for success.

Training and capacity-building programs tailored to the needs of women entrepreneurs are essential for enhancing their business management skills, financial literacy, and market access.

The Cherie Blair Foundation for Women offers a mentoring program that matches women entrepreneurs with mentors to provide tailored support and advice, helping them to grow their businesses (Cherie Blair Foundation for Women). Implementing a similar mentorship program in Ukraine can provide women in the B&N sector with the guidance and expertise needed to scale their businesses.

Moreover, the Global Alliance for Clean Cookstoves runs capacity-building programs that include training on business management, financial planning, and market strategies for women entrepreneurs ([Global Alliance for Clean Cookstoves](#)). Such programs can be adapted for the Ukrainian B&N sector to provide comprehensive training that addresses the unique challenges faced by women entrepreneurs.

The training programs should be specifically designed to meet the unique needs of female entrepreneurs, distinguishing between craftswomen and visionaries. Craftswomen require foundational yet thorough training programs to support their businesses. Visionaries need to develop strategic thinking and innovative business approaches. Additionally, there should be targeted training for experienced female craft entrepreneurs who have the potential to become visionaries. These programs should include motivational training, experience-sharing platforms, and mentoring support, possibly combined with grant assistance, to ensure comprehensive support for all participants.

Promoting gender equality in education and training within the Ukrainian berries and nuts sector requires a comprehensive approach. Increasing access to education and vocational training, developing gender-sensitive curriculum and teaching materials, and creating targeted educational and training programs are essential strategies. By implementing these initiatives, Ukraine can empower women and girls, enabling them to contribute effectively to the B&N sector and drive sustainable growth and development. Through global best practices and localized efforts, Ukraine can bridge the gender gap in knowledge and skills, fostering a more inclusive and equitable agricultural industry.



Annex 5: List of potential initiatives to support women affected by conflict

According to recent study [“Needs of and Challenges Faced by Ukrainian Female Entrepreneurs in the Conditions of Full-Scale War”](#), the occupation of parts of Ukraine in early 2022 and subsequent hostilities increased the number of internally displaced persons (IDPs) to 4.9 million, according to the Ministry of Social Policy of Ukraine. This displacement also led to the relocation of many businesses. Among IDP entrepreneurs, 15% have started a new business, 20% have relocated, and 20% plan to relocate. Government support can help female entrepreneurs overcome relocation challenges.

Businesses can aid in integrating IDP women into communities, with 56% of respondents feeling supported and 49% noting community interest in their business. Female entrepreneurs reported that running a business helped them emotionally and socially integrate into new communities. Business start-up training programs, including psychological support, could benefit this group. However, some IDP female entrepreneurs face prejudice, with 21% experiencing discrimination and insults related to their IDP status.

Support for IDPs can sometimes lead to increased social tensions within communities. Approximately 24% of respondents according to the same [study](#) reported experiencing bias or dismissive attitudes from fellow entrepreneurs who perceived the distribution of government and donor support to IDPs as unfair. This suggests a lack of understanding of the vulnerabilities faced by IDP women, which necessitates improved communication between the state, communities, and the local business sector.

Additionally, marginalized groups, including IDP women, often face exclusion from decision-making processes. Projects that strengthen their interaction with local authorities can enhance their community integration. Financial challenges also hinder IDP women, as they often lack access to traditional capital sources, like borrowing from relatives, and face distrust in banking systems and unawareness of grant programs. Employment centres, key information hubs, have been inadequate in disseminating information about business support programs. Participants in in-depth interviews noted a lack of communication from these centres regarding both specific IDP and general business support programs. Addressing these communication gaps can improve access to necessary resources for IDP women entrepreneurs.

Businesses led by women veterans face significant vulnerability, particularly when managers are deployed to the frontline. Entrepreneurs constitute at least 13% of the Armed Forces of Ukraine, translating¹⁴ to 150,000 individuals whose businesses are either paused or transferred to other managers.

The creation of the Ukrainian Veterans Fund, which implements grant programs for veterans' businesses, marks a significant step. However, respondents highlight the Fund's lengthy decision-making process. Additionally, while there are other support programs by the Ministry of Social Policy, a systematic state policy for veterans' entrepreneurship is lacking.

Veterans need specialized measures for reintegration into civilian life, which includes business support. Addressing post-traumatic stress disorder (PTSD) through accessible psychological assistance is crucial. Western studies show that veterans can leverage their military experience for business management, displaying risk-taking, perseverance, and effective communication skills.

Training programs focusing on skills transfer from military service to business could aid in veterans' integration. Women veterans often overlap with women with disabilities, presenting dual challenges exacerbated by the ongoing conflict, increasing the number of women in both groups.

Integrating female entrepreneurs with disabilities and women veterans into decision-making processes requires coherent health and social security policies. Identifying a key policy actor with expertise and resources is crucial for developing veteran-owned businesses. Support from international and civil society organizations should converge around this actor.

Specialized support programs are necessary for women in rural areas, focusing on training, resources, and overall household well-being. Programs to boost local employment can reduce human resource outflow from villages.

For IDP women, programs should include psychological support and resources, addressing social tension risks in host communities. Comprehensive information campaigns targeting both IDP women and local businesses, along with local initiatives promoting interaction, can enhance social inclusion.

14 https://kse.ua/wp-content/uploads/2024/03/Needs_of_and_Challenges_Faced_by_Ukrainian_Female_Entrepreneurs.pdf



Annex 6: Financial Inclusion and Asset Ownership Programs examples

Program	Description	Examples from other countries
Microfinance and Microcredit Programs	Women-focused Microloans: Provide small loans to women entrepreneurs to start or expand their businesses.	Grameen Bank (Bangladesh): Grameen Bank Kiva (Global): Kiva
Financial Literacy and Education	Financial Education Workshops: Conduct workshops that teach women about budgeting, saving, investing, and managing credit. Digital Financial Literacy: Offer training on using digital financial services such as mobile banking and online investment platforms.	Smart Campaign (Global): Smart Campaign FINCA's Financial Literacy Training (Tanzania): FINCA
Access to Capital	Women's Venture Funds: Create venture capital funds that specifically invest in women-led startups.	Global Fund for Women (Global): Global Fund for Women SheEO (Canada): SheEO
Property Rights and Legal Support	Legal Clinics: Establish clinics that provide legal assistance to women in securing property rights and inheritance claims. Land Titling Programs: Implement programs that facilitate the titling of land in women's names.	Landesa (India, Africa, China): Landesa Namati (Global): Namati
Green Jobs and Training Programs	Green Skills Training: Offer training programs for women in renewable energy, sustainable agriculture, and other green sectors. Women in STEM: Encourage and support women's participation in science, technology, engineering, and mathematics (STEM) fields.	Barefoot College (India): Barefoot College Green Skills Program (Australia): Green Skills
Sustainable Business Support	Sustainable Business Incubators: Establish incubators that support women entrepreneurs in developing sustainable and socially responsible businesses. Impact Investment Funds: Create funds that invest in businesses with positive social and environmental impacts, with a focus on women-led enterprises.	Impact Hub (Global): Impact Hub
Capacity Building for Institutions	Strengthening Women's Organizations: Support organizations that advocate for women's rights and provide resources for their capacity building.	Gender at Work (Global): Gender at Work International Center for Research on Women (ICRW): ICRW







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