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THE AGRICULTURAL INNOVATION PROJECT (AIP)

GENDER VALUE CHAIN ASSESSMENT

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List of Abbreviations

ABE	Agricultural Bank of Egypt
AEC	Agriculture Export Council
AIP	Agriculture Innovation Project
CAPMAS	Central Agency for Public Mobilization and Statistics
CBE	Central Bank of Egypt
CEO	Chief Executive Officer
CSR	Corporate Social Responsibility
EBRD	European Bank for Reconstruction and Development
EU	European Union
FA	Farmers Associations
FAO	Food and Agriculture Organization
FEI	Federation Egyptian Industries
FFS	Farmer Field School
FGD	Focus Group Discussion
GII	Global Inequality Index
GoE	Government of Egypt
GVCA	Gender Value Chain Assessment
HDI	UNDP Human Development Index
IDI	In-depth Interview
IFAD	International Fund for Agriculture Development
ILO	International Labor Organization
MALR	Ministry of Agriculture and Land Reclamation

MAP	Medicinal and Aromatic Plants
MENA	Middle East and North Africa
MoIC	Ministry of International Cooperation
MOSS	Ministry of Social Solidarity
MSE	Medium and Small Enterprises
MSMEDA	The Micro, Small & Medium Enterprise Development Agency
NCW	National Council for Women
OVOP	One Village One Product
PHC	Post-Harvest Centres
PRIME	Promotion of Rural Income through Market Enhancement
ROSCA	Rotating Saving and Credit Associations
SFD	The Social Fund for Development
SDG	Sustainable Development Goals
SME	Small and Medium Enterprises
STEM	Science and Technology interpreted through Engineering, all based in Mathematical elements
UN	United Nations
UNDP	United Nations Development Programme
UNIDO	United Nation Industrial Development Organization
VC	Value Chain
VSLA	Village Savings and Loan Associations
WEF	World Economic Forum
WIB	Women in Business

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Executive Summary

This Gender Value Chain Assessment (GVCA) is part of GIZ Egypt's Agricultural Innovation Project (AIP),[1] which aims to increase the income of small-scale farmers in Upper Egypt through agricultural innovation. AIP targets three value chains: the chili pepper, onion and garlic, and the medical and aromatic plants (MAP) in Minya and Beni Suef. They have been selected based on a methodology tailored to identify the value chains in which smallholder farmers, including women farmers, can most benefit from introducing innovative practices, value addition, enhancement of market access, and strengthening of farmer organizations and other knowledge agents.

Women's representation was an essential component in selecting the three value chains of the project. The higher the women's labour participation, the higher the evaluated value chain was regarded. The primary objective of the GVCA is, thus, to gain a better understanding of women's roles, opportunities, and challenges in the three selected horticulture value chains in Beni Suef and Minya and to make recommendations for gender mainstreaming and women's empowerment.

Accordingly, a comprehensive gender-sensitive value chain assessment was conducted for the chili pepper, onion and garlic, and the medical and aromatic plants (MAP) value chains. The study:

- Identified the different roles of men and women in the three horticultural value chains.
- Identified and analysed the main gender-specific constraints and opportunities.
- Mapped the successful interventions and best practices in Upper Egypt's horticulture sector, particularly in Minya and Beni Suef.

The methodological framework integrated quantitative and qualitative methods of research. In addition to the desk review, two surveys were conducted, targeting farmers and post-harvest workers. A total of 200 survey interviews with male and female respondents were carried out.

Focus Group Discussions (FGD) were held with groups of male and female farmers cultivating small plots of garlic, onion, chili pepper, and MAP, as well as groups of

[1] The Agricultural Innovation Project (AIP) boosts Egypt's agricultural sector (giz.de)

male and female workers in onion, garlic, and MAP Post-Harvest Centres (PHC). An additional two FGDs were held with young female and male graduates of Beni Suef University's agriculture faculties to gain a deeper understanding of the specific constraints and opportunities faced by new graduates seeking employment. Another FGD was held with female entrepreneurs who own agribusiness start-ups to identify their challenges and needs.

Individual interviews were held with stakeholders at the Ministry of Agriculture and Land Reclamation (MALR), the Agricultural Bank of Egypt (ABE), the National Council for Women (NCW), the Agriculture Export Council (AEC), and the private sector represented by Royal Herbs.

The study showed that women in the targeted value chains in Minya and Beni Suef mostly work in post-harvest activities, including hand sorting, sieving, grading, packing, and packaging. They rarely have access to training and rely primarily on gaining professional experience from their work supervisors. They are generally more concentrated in seasonal, informal, and low-paid jobs as unskilled workers, mostly in processing units where labour is generally unskilled including that of men's, who work in handling and transportation.

In Beni Suef, women also work in export factories where they must overcome many obstacles to get and secure their jobs. They suffer from long working hours, distant work locations and lack of regular transportation, which, in turn, prevents them from reconciling work with family life.

Meanwhile, women working in production are primarily involved in manual and highly intensive labour activities, including weeding, harvesting, removal of plants, drying, sorting and home transformation. When such farming activities are carried out with the family, the work is unpaid.

The surveys showed that most women working in these value chains are illiterate and rarely have farmer associations or cooperatives memberships. Consequently, they have limited access to information, credit, proper distribution channels, or capacity-building training. Most women work only during harvesting peaks and rarely have a role in the stages that involve decision-making, such as farm management or marketing operations. The selling and income management of the farming process is mostly controlled by men.

The women in the study generally had lower access to education, credit and cash loans, technical training opportunities, and to markets (due to their limited mobility). In addition, women's business networks were often limited to their families and relatives. Meanwhile, the FGDs with women majoring in agriculture, and their high representation in the field, show that there is an opportunity to change the role of women from manual laborers to professionals that contribute to the decision-making process of the value chains.

Compared to official laws, the norms and traditions followed in rural communities remain more traditional in gender roles. For example, while the law guarantees

women free mobility, traditions often do not give women this privilege, limiting their access to markets. Community traditions also often stand in the way of women owning land, which explains the very low female landowners in Beni Suef, who only represent 2% of landowners according to the Agriculture Bank's database in Beni Suef.

Women's participation in the value chains may be enhanced in several ways, including improving their access to information and markets, improve skills and technical capacities, reinforcing their memberships in farmer associations, and linking them with access to credit.

Providing a basic level of literacy and numeracy may increase women's access to information and instill confidence in their ability to interact with other players/actors in the value chains, gather necessary market information, and enter negotiations with buyers and sellers.

Along with enhancing women's technical abilities in their traditional activities, the targeted women may benefit from improving their technical skills in additional parts of the value chain. Moreover, strengthening women's business abilities will also increase their capacities to launch economically successful start-ups, improve the quality of their output, and enable them to compete in the market, increasing their income.

Financial services tailored for women will enhance their capacities and access to markets. They may be accomplished through simplified loan-application procedures, waiving collateral requirements for small loans, giving women who qualify for start-ups preferential access to loans, and establishing Village Savings and Loan Associations (VSLA).

Women farmers will benefit from greater access to the market, better knowledge of marketable crops, and the facilitation of contractual agreements with processors, purchasers, and aggregators. Assistance may also be beneficial in establishing Women's Marketing Associations and developing market connections between such associations and potential wholesalers and processors of horticultural products.

Encouraging female membership in farmer associations will also provide women with greater market access. It may be accomplished by increasing awareness of gender inequality among FAs, mobilising women's committees within the FA, and ensuring higher female representation on boards of directors.

1. Introduction

The Agricultural Innovation Project (AIP),[2] aims to increase the income of small-scale farmers in Upper Egypt through agricultural innovation. It explicitly targets three value chains: chili pepper, onion and garlic, and medical and aromatic plants (MAP) in Minya and Beni Suef.

AIP's objective is to increase the income of small-scale farmers in Upper Egypt's horticulture value chains by adopting agricultural innovations, providing special attention to the specific needs of female farmers. The value chain facilitation approach is used and applied from a market perspective. The horticulture sector's high-value market value chains, including medicinal and aromatic plants (MAP), chili peppers, and onion and garlic, experience increasing opportunities to expand into domestic and export markets. The three value chains also exhibit high female labour representation, another criterion for their selection.

The Gender Value Chain Assessment (GVCA) report examines the obstacles and opportunities for women's economic empowerment in Upper Egypt's onion and garlic, chili peppers, and MAP value chains in Minya and Beni Suef.

1.1 Context and objectives of the study

The assessment's primary objective is to understand the factors influencing women working in the three horticulture value chains targeted by the project to make recommendations on narrowing gender gaps. The assessment serves as a guide for the Agricultural Innovation Project (AIP), and other related projects concerning women empowerment in smallholder communities in Upper Egypt, to develop interventions that increase economic opportunities for female farmers and post-harvest workers.

Multiple factors contribute to the necessity of such interventions. Women face a higher unemployment rate in the governorates where the project applies, with 16.4% of women unemployed in Beni Suef compared to only 1.6 percent of men and 19.2%

[2] The Agricultural Innovation Project (AIP) boosts Egypt's agricultural sector (giz.de)

of women unemployed in Minya compared to only 2% of men. Women have a relatively high representation in Egypt's agricultural sector, the country's second-largest employer after construction, employing 21.1% of the labour force and providing a livelihood for 55% of the general population (CAPMAS, 2019). However, they still face significant gender disparities in access to inputs, credit, and asset ownership, according to the World Development Report 2012 on Gender Equality and Development (World Bank, 2012).

As a result of these constraints, women farmers, processors, post-harvest workers, and entrepreneurs are restricted to less profitable businesses and activities that also have a lower potential for expansion. Meanwhile, work on family-owned land, where women play a major part, is unpaid.

In Upper Egypt, women working in horticulture value chains are less likely than their male counterparts to acquire the knowledge and skills necessary to increase their economic benefit. They face many disadvantages that limit their level of knowledge and skills, including limited access to education and training and a lack of market information. Women also face barriers to accessing high-quality inputs, financing, and financial and extension services (FAO, 2011).

On the other hand, women employed as post-harvest workers earn low wages and are hired on a seasonal and informal basis. While male farmers and post-harvest workers face similar constraints, women face a greater disadvantage due to socio-cultural norms. For instance, due to social traditions, women generally own less land and thus have less access to finance, reducing their ability to purchase agricultural inputs, thereby reducing their productivity and income.

In this context, AIP will focus on promoting women's effective participation in these targeted value chains, including farmers, processors, traders, service providers, and entrepreneurs. For this purpose, the GVCA analyses the selected value chains for gender disparities to inform the design of appropriate interventions. The assessment identifies women's roles in these value chains and the gender-specific needs, constraints, and opportunities. Accordingly, it makes recommendations for interventions that would contribute to the empowerment of the targeted women and help increase their income.

1.2 Report structure

The introductory chapter of this report begins by defining the primary objective of the GVCA and briefly describing the context in which it was conducted**.** Then, the report structure is presented as well as the study's scope and methodology. The second chapter details the study's main findings. The third chapter presents the current efforts made nationally and in Upper Egypt to minimize the gender gap, including existing programmes and interventions for the empowerment of women farmers and

post-harvest workers in Upper Egypt's agriculture sector. The final chapter includes recommendations and suggested interventions that AIP may implement to contribute to the empowerment of women farmers and post-harvest workers in the horticulture value chains in Beni Suef and Minya.

1.3 Scope and methodology

The GVCA uses a combination of quantitative and qualitative tools developed for the various categories of actors involved in the value chains under consideration. The fieldwork aims to collect primary data from farmers, post-harvest workers, and key informants to gain a comprehensive understanding of the gender-based constraints faced by female farmers and post-harvest workers and opportunities in the value chains selected by AIP within the coverage area of Minya and Beni Suef.

To accomplish this goal, tools were tailored to aid in the collection of quantitative and qualitative data on the following topics:

- Roles, practices, and participation of women and men.
- Access to resources and control over benefits.
- Management of farms and income.
- Marketing and information access.

QUANTITATIVE DATA COLLECTION

Two surveys were conducted. One survey solicited responses from farmers, while another solicited responses from processors and workers at post-harvest facilities. The topics covered included cultivation practices, input supply, decision-making, age- and gender-based role divisions in the production process, farm management and marketing, access and control over resources, and control over revenue.

A total of 200 survey interviews with male and female respondents were conducted as follows:

- 100 survey interviews with farmers: 50 women and 50 men.
- 100 survey interviews with post-harvest workers: 70 women and 30 men.

A two-day training session was held for data collectors; 20 individuals were chosen to conduct the surveys. Participants were recruited primarily through community-based NGOs in the targeted areas.

QUALITATIVE DATA COLLECTION

Qualitative data were gathered to supplement the quantitative analysis results and findings and to provide a more detailed picture of the barriers confronting women and the opportunities available in farming and post-harvest activities.

To better understand how to improve women's performance in the targeted value chains, focus group discussions (FGDs) were held with farmers and processors. The FDGs focused on labour recruitment, women's roles, positions and decision-making in the value chains and the challenges facing women's access to information, finance, and the market and income and revenue control.

Qualitative data-collection activities

- 8 FGDs with male and female farmers
- 8 FGDs with male and female processors
- 2 FGDs with unemployed male and female graduates
- 1 FDG with female entrepreneurs
- 6 IDIs with key informants

Additionally, semi-structured interviews with key informants were conducted to elicit information about the environment that governs the value chains, women's roles, and how the intervention programmes applied address women's needs to improve their capacities and increase demand for them in the labour market.

Semi-structured interviews with key informants aided in identifying critical gender issues pertaining to the cultural context and the institutional and regulatory framework.

In-depth interviews (IDIs) were conducted with key informants from the Ministry of Agriculture and Land Reclamation (MALR), the Agricultural Bank of Egypt (ABE), the National Council for Women (NCW), the Agriculture Export Council (AEC), the private sector, and international organisations working on increasing women's employability and capacity in agriculture.

2. The GVCA Research Findings

This chapter presents the main findings of the Gender Value Chain Assessment conducted for the Agriculture Innovation Project. This includes an overview of key indicators that highlight the gender gap in Egypt in terms of access to economic resources (access to education, employment, ownership, financial inclusion), especially in agriculture. It also includes the results of the surveys conducted for the three selected value chains in Minya and Beni Suef, covering information on income, access to land, input supply, finance, and training, and an overview of the gender division of labour in the selected value chains. Finally, it provides an overview of the existing national and institutional initiatives to minimise the economic gender gap.

The presented results are the findings of the desktop research, the surveys, the focus group discussions with male and female farmers and processors, and the in-depth interviews conducted with key stakeholders.

2.1 Key Indicators of Economic Gender Inequality in Egypt

Gender refers to the socially constructed characteristics, norms, ideologies, and qualities that a given society ascribes to behaviour and the actions of women and men (FAO, 2016). Gender attributions situate women in a lower social status than men, which has direct negative implications for women regarding access to resources, decision-making, and opportunities.

Women represent 49.8% of the total population in Egypt. The Human Development Index (HDI) for men is higher than for women by 0.1 index points (0.730 for men compared to 0.652 for women). Egypt ranks 108th out of 162 countries in terms of gender equality, with a GII score of 0.449. The GII measures reproductive health, empowerment, and economic activity. According to the 2017 census, 30.8% of Egyptian women over the age of ten are illiterate, compared to 18.5% of men. Illiteracy among women is higher in rural areas (38.8%) and even higher in Upper Egypt. In Upper Egypt's Minya and Beni Suef, where the project is being implemented, unemployment among women is 45% and 44%, respectively. The female unemployment rate in Egypt is 21.7%, compared to only 4.8% for males (CAPMAS, 2021). The annual gross national income per capita for women is 4,081 USD, while men earn 16,489 USD (CAPMAS, 2020).

The majority of Egypt's female workforce (46%) is employed in the agricultural sector, which is the focus of this project and a significant component of the Egyptian economy, accounting for 11.3% of the country's GDP, 28% of total employment and 55% of employment in Upper Egypt. Nonetheless, a clear gender divide exists in terms of access to productive agricultural assets.

Despite their high participation in agricultural activities, women have limited control over land. According to the FAO, women own only 5.2% of Egypt's land.[3] In Lower Egypt, women own a greater share of the cultivated land, 6%, than in Upper Egypt, where women own only 4% of the cultivated land.[4] Additionally, rural women have fewer accounts in financial institutions; only 7% of female farmers have one, compared to 12% of men (World Bank, 2014).

Full access to resources in their entirety is a powerful indicator of women's empowerment. Among the SDG reforms' primary objectives is to ensure that women have equal access to economic resources, including land and other forms of property, financial services, inheritance, and natural resources. While Egypt's civil

[3] FAO, Gender and Land Rights Database, online at: http://www.fao.org/gender-landrights-database/data-map/statistics/en/

[4] Abdel Aal, Mohammed, *Women in agriculture*, 2002, AUC, online at: http://www1.aucegypt.edu/src/wsite1/research/research_Agriculture.htm

and commercial codes grant women equal rights to own and access land, there is still a significant gender gap in land ownership. As will be demonstrated below by this study's findings, women in rural areas frequently face pressure from their families to sell their land to male relatives.

2.2 Economic Disparities Between Men and Women in the Selected Value Chains

EDUCATION

Literacy and education levels among the farmers interviewed were generally low and lower for women. The survey showed that 62% of the women farmers interviewed were illiterate compared to 46% of the men. While both male and female farmers had a low primary and preparatory school enrollment, females were still lower than their male counterparts. Only 8% of women obtained a primary education, and as low as 2% received a preparatory education. Their male counterparts were not much higher, with only 10% of men finishing primary education and 6% finishing preparatory. Male farmers more often received a technical education, 38% of men compared to 28% of women. None of the female farmers interviewed went to university compared to only two men.

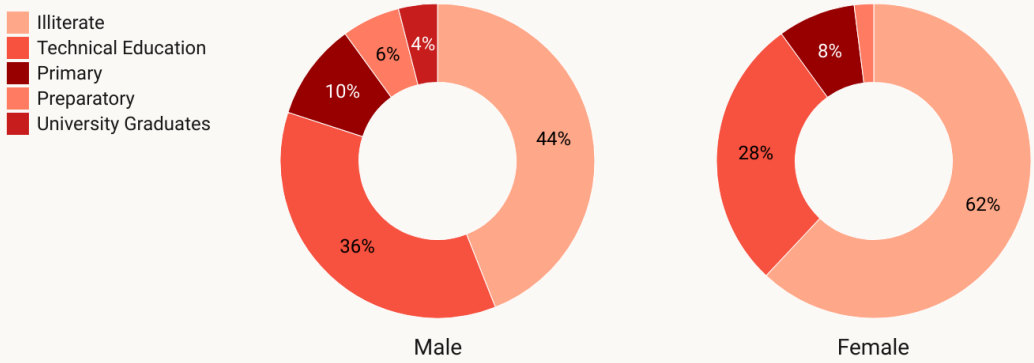

Figure 1: Education levels of 100 farmers selected from the value chains targeted by the AIP in Minya and Beni Suef

ACCESS TO LAND

According to the study's survey sample, men own more land than women, while women more often rent land instead. From the selected sample, 46% of men compared to 34% of women. On the other hand, 62% of the women rented land compared to 50% of the men.

Land ownership is a vital prerequisite for access to credit. According to the vice president of the Principal Bank for Development and Agricultural Credit, since the bank only lends landowners, women are often refused loans.

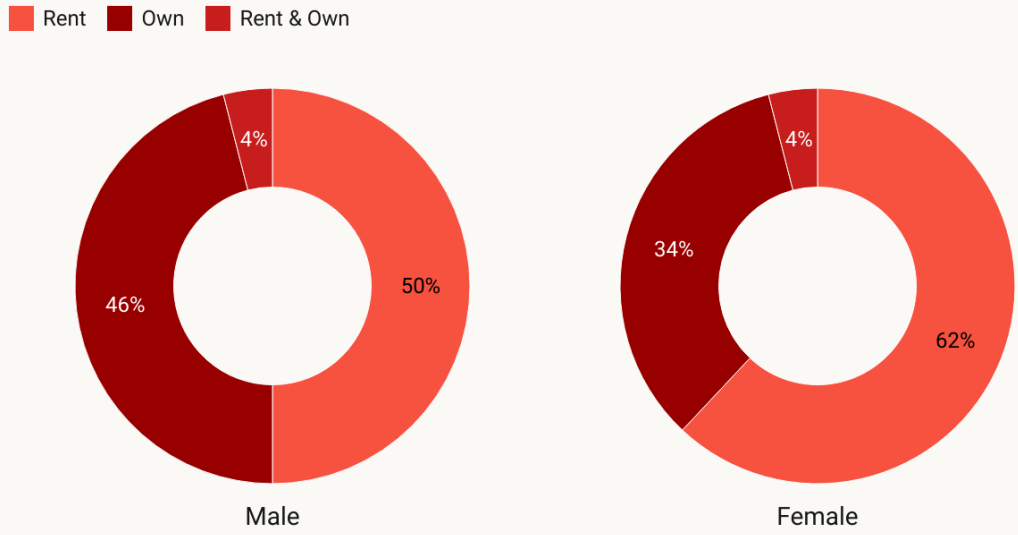

Figure 2: Land ownership by gender

ACCESS TO INPUT SUPPLIES

According to the focus group discussions with the farmers, women do not face specific constraints in accessing inputs, with both men and women facing the same financial challenges.

> “Buying from traders is easier in payment as they are flexible in payment & installments. Since we don’t have to pay in cash.”
>
> Female farmer, MAP, Beni Suef governorate

Since farmers cannot afford buying agricultural inputs (e.g., seeds, fertilizers, and pesticides) in cash, they are less likely to purchase high-quality inputs. Instead, most of the farmers buy their inputs from traders in the local market. These markets are informal and, thus, have no traceability or quality control and offer lower quality products.

The farmers also lack technical information on appropriate usage (e.g., quantity and timing of application and knowledge of farming practices). Consequently, their limited knowledge of the right practices is translated into poor returns and lower agriculture productivity and outputs.

Many of the women interviewed in the focus groups asserted that they lacked the financial means to purchase higher quality inputs and do not have access to the extension services that could deliver information on input best practices and usage. As a result, they can only afford to buy agricultural supplies by resorting to traders

who can offer them advance payments to cover the cost of the input supplies before purchasing the harvest. The women farmers interviewed further explained that they always bought supplies from traders at their local markets because they lacked access to suppliers outside their communities. Moreover, both the surveys and the focus group discussions demonstrated a low female membership in farmer associations (FAs), with few female respondents mentioning buying their input supplies from FAs.

THE GENDER DIVISION OF LABOUR

When asked during the focus group discussions about their source of labour, all farmers stated that they relied on their family members. On average, 5 to 15 family members are directly involved in the farming, production, and marketing operations of a space of 0.5 to 3 feddans. During the land preparation phase, male family members are mainly those involved, using manual tools, mechanical agriculture practices, irrigation tools, and fertilizers.

According to male and female respondents, family members may be paid or unpaid. In situations where workers are paid, chili pepper farmers mentioned a fee of 100 EGP/day for women and 150 EGP/day for men, while MAP workers mentioned an average daily wage of 60 EGP/day for both men and women.

> “I only get EGP 100 per day when I work on chili pepper, but men can get up to EGP 150 doing the same work.”
>
> Female Farmer, Chili Pepper, Beni Suef governorate worker

Female respondents said that they are unpaid when they assist their families in farming and land preparation and only get paid when they work outside their families. Women are generally more involved in unpaid labour, being entirely responsible for managing the household and childcare in addition to the cultivation of subsistence crops and food reserves.

Most respondents stated that external workers were hired during periods of seasonal peaks. The number of seasonal workers varies a lot from one farm to another. In MAP, for example, it ranges from 20 workers/feddan to 50 workers/feddan, with an equal representation of male and female workers. Men and women have different roles, men are hired during land preparation, using mechanical and agriculture tools, while women are more involved in weeding, collecting, and filtering of plants.

In the onion and garlic value chains, only females are hired as processors in collecting and packing with aggregators, which is done on a seasonal basis. They earn 80 EGP/day, are provided a meal during lunch, and work in an open area with no toilets.

Many of the women interviewed confirmed that they do not prefer to work for factories as transportation and meals are not covered and are located far from their villages. In sorting and drying at the onion and garlic and MAP post-harvest centres, only women are hired and work on a seasonal basis, earning 350 EGP per week with transportation provided. They work informally without contracts or benefits.

Crops	Wage	Male	Female
Onions and Garlic Farmers	Per day	150 EGP	100 EGP
MAP Farmers	Per day	60 EGP	60 EGP
Garlic and onions/packaging (Female only)	Per day	NA	80 EGP
MAP Processors (Female Only)	Week	NA	350 EGP

Table 1: Wages of laborers

The below graph summarises the survey findings on the gender division of labour. As the graph shows, women are strongly involved in the agricultural process. Most replies described women's work in cultivation as an "assistance" to the men. The replies show that women play a significant role in harvesting and post-harvesting activities, including drying, hand-sorting, grading, and packing. All require manual handling and are similar in the type of work to food preparation at home. Women have less of a role in storage, marketing, selling, and product transfer.

According to the focus groups, women are usually assigned tasks similar to domestic work. On the other hand, men take jobs requiring greater physical strength (e.g., canal digging, land preparation, irrigation, application of fertilizers). Mostly, the men are responsible for farming management and supervision, hiring labour, sales, financial management, and all transport and logistics issues.

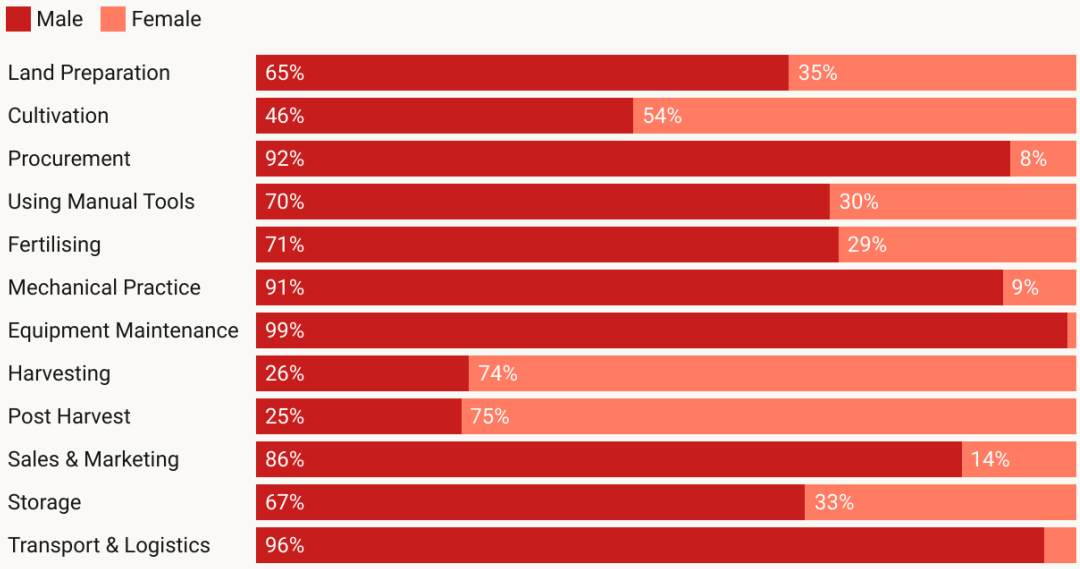

Figure 3: Gender roles in farming and post-harvest activities

ACCESS TO SERVICES

Most farmers are not members of any associations, neither FAs nor cooperatives. However, male membership is still higher mainly because men are the ones who take up the role of purchasing input supplies and overseeing marketing functions. From all 100 respondents, only 20 men said they were members of an association, and only 11 women.

The focus group discussions revealed that women's participation in FAs is limited and showed that this is highly related to the fact that women often lack registered property and have a lower level of education. Cultural norms also play a role in their limited participation in such associations.

ACCESS TO FINANCIAL CREDIT

Having a bank account is a necessary first step towards financial inclusion and the ability to access a diverse range of financial services. According to the survey, few farmers and processors, male or female, have bank accounts. Of the 100 farmers interviewed, only 4 men said they had bank accounts and 2 women. The focus groups also revealed that women are more likely than men to avoid dealing with any other type of financial institution. Women interviewed confirmed that most women did not have bank accounts and were thus unable to obtain loans, relying instead on family and friends to lend them money. According to the vice president of the Principal Bank for Development and Agricultural Credit, only 2% of the bank's customers are women.

MARKET ACCESS

According to the survey interviews, the majority of smallholder farmers, particularly female farmers, sell their products directly to consumers or through local traders because they lack access to wholesalers. Men and women smallholder farmers are frequently compelled to commit to selling all or a portion of their crops to traders who can finance their input supplies.

As explained in the preceding sections, smallholders frequently lack the financial means to finance input purchases and thus rely on traders who can offer a down payment in advance.

The majority of female farmers interviewed stated that they tied their crop to credit and contracted with local traders who could offer a down payment, giving traders an advantage in determining crop prices. Additionally, these traders frequently take over the harvesting process and employ their labourers.

Moreover, female farmers frequently lack the necessary financing for harvesting and transportation and the skills required to negotiate directly with wholesalers. Women with small landholdings also lack sufficient crop volume to secure favourable prices.

As illustrated in the graph below, women are more likely to sell directly to consumers within their villages, whereas men sell to traders and occasionally at collection centres located outside their villages, benefiting from greater access to distant markets.

DECISION MAKING

According to the survey interviews, decisions regarding selling prices are based upon discussions with other farmers and negotiations with traders. Female farmers are more likely to engage their families in decisions over prices than male farmers. Women in the focus groups confirmed that while they do get information about

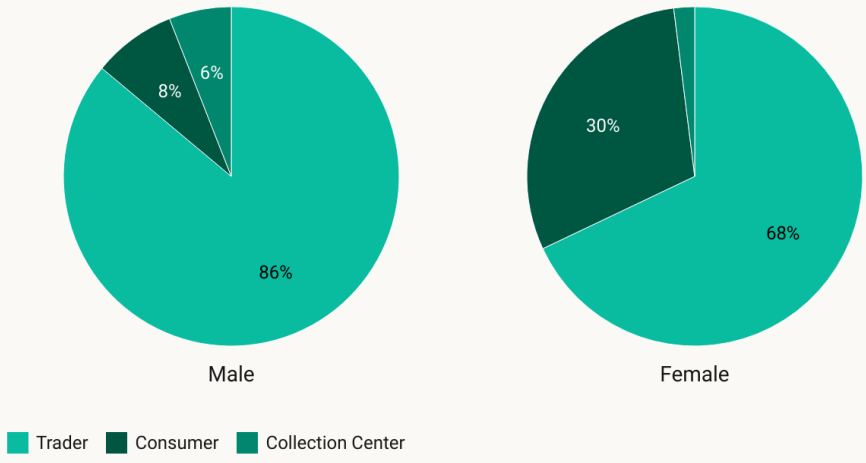

Figure 4: Selling point

market prices from talks with other farmers and traders, their husbands and other family members usually make the pricing decisions and manage the selling and marketing.

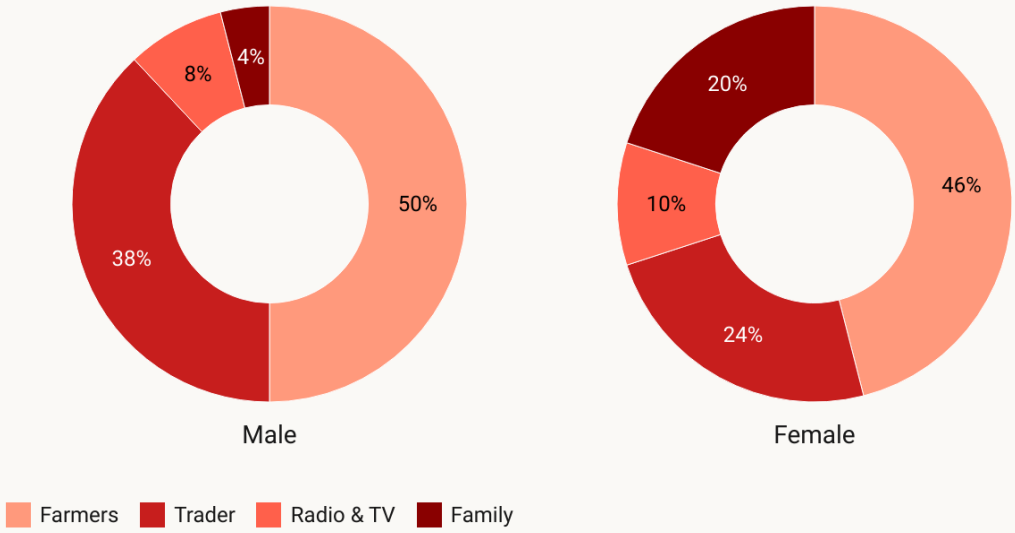

Figure 5: Source of market information

MARKETING AND CONTROL OVER BENEFITS

Male and female smallholder farmers alike face numerous obstacles in marketing their products. Their primary obstacle is the lack of market information. Men complained more than women about competition, a lack of storage space, and limited transportation, stating that these obstacles limited their expansion into new markets.

As previously stated, while women are just as involved as men in selling crops within local markets, they are not expected to engage directly with external markets. While both men and women sell crops, women's access to and control over their sales appear to be extremely limited, and income generated is rarely distributed equally. In terms of expenditure, the men interviewed stated that women are expected to cover household expenses and save money for their daughters' weddings. In contrast, men are expected to bear the lion's share of agricultural costs, including loan repayments (used to purchase improved seeds and fertilisers), new materials and tools, transportation costs, and worker wages.

INCOME MANAGEMENT

As the two graphs below demonstrate, men are typically the ones who receive and control revenue from crop sales and make decisions about income distribution.

The focus groups confirmed similar findings, with women respondents agreeing that their husbands and male family members make most income management decisions. Women farmers contributed to decision-making processes indirectly most of the time, and these decisions mainly were related to family and household matters, as per cultural norms.

Figure 6: Income management

ACCESS TO TRAINING

According to the survey findings, the majority of female and male smallholder farmers in the studied value chains receive no training. Only a few respondents (13 men and 9 women of the 100 farmers interviewed) reported receiving training, covering topics such as farming best practises to boost productivity, marketing, and more efficient fertiliser use. Male respondents perceived a need for training on new irrigation practises that conserve water, and best cultivation practises that improve product quality and improved input supply utilisation. However, none of the female respondents indicated a desire for training, revealing a lack of awareness and a reliance on their male relatives for information.

> “I never received a training before and I don’t know what my training needs could be.”
>
> Female worker, Garlic and onion Post Harvest Center, Minya Governorate

The focus groups also showed that women have little access to agricultural information and extension services and rely on their husbands and other family members for information on farming techniques. Several female respondents stated that they obtained their information “through experience.” The majority of women interviewed believed they did not receive training because none was available or due to a “lack of training centres.” Another reason female processors gave was “lack of information regarding the training offered.” Respondents agreed that they gained professional experience solely by observing their supervisors and on-the-job practise.

According to interviews with members of the Ministry of Agriculture and Land Reform (MALR), women farmers’ ability to improve agricultural practises, increase productivity, correct their input use, and conduct sustainable farming is limited due to lack of knowledge and access to information. On the other hand, female processors’ career development and advancement are constrained by a lack of training. They are relegated to seasonal work, performing the same tasks with little opportunity to find better alternatives. A factor limiting women’s access to agricultural information,

technology, and extension services is that these services are primarily targeted at farmers of strategic crops (e.g., maize, cotton, wheat, and rice), the majority of whom are male. Farmers growing vegetables and fruits, where women have more opportunities to be involved, receive minor extension services.

ACCESS TO INFORMATION TECHNOLOGY AND MOBILE USAGE

The study talked to the participants about their mobile usage and found that women farmers use mobile phones less. The focus group discussions with women farmers and processors showed that mobile phones were neither used to access information, search for best practices or receive business information. The women said they use mobiles exclusively to communicate with family and friends. On the other hand, men confirmed that they used mobile phones to market their crops and communicate with their business network. In one of the focus groups with male farmers, a mention was made to a WhatsApp group created by the MALR, where the participants received information on agriculture convenient quantities for their cultivation.

ENTREPRENEURSHIP

The study interviewed two groups of Beni Suef University graduates from the Agriculture Faculty, both male and female. Most participants agreed that they would rather start their own business than work in a waged job. They cited “lack of job opportunities in Beni Suef’s labour market,” and a desire for “greater independence as a self-employed person” as reasons for their preference. In addition, participants expressed a desire to establish their own start-ups. Still, they said they lacked the knowledge to conduct market research to identify project ideas and lacked the technical capacity and financial resources.

Women processors who responded to the survey also stated that they preferred starting a small project, which they attributed to their work being lowly valued and due to its informal nature. They cited lack of hard and soft skills necessary for business management, as well as lack of access to knowledge and resources, as their primary impediments.

The assessment also included interviews with groups of women entrepreneurs contacted through the Life Vision NGO in Minya. Their endeavours included the manufacture of detergents, cattle raising, dairy products, an apiary, and greenhouses. They reported receiving training in entrepreneurship, financial management, marketing, land preparation, packing and packaging, and agricultural best practises.

Additionally, they received technical assistance and mentoring to help them launch their small businesses. They finance their projects through group savings, personal savings, loans from the agriculture bank or non-governmental organisations, like an

organisation such as Life Vision. Life Vision, for example, connects women entrepreneurs with exhibitions in the Minya governorate and provides free transportation to help them expand their markets and attract new clients. However, due to the COVID-19 pandemic, exhibitions like that organised by Life Vision were cancelled, and the projects suffered as a result.

2.3 Initiatives to Minimise the Economic Gender Gap

NATIONAL PLANS TO MINIMISE THE ECONOMIC GENDER GAP

Egypt's "Sustainable Development Strategy 2030" prioritises gender equality, with gender-sensitive performance indicators to reduce female poverty and unemployment and increase women's formal labour participation. In addition, the National Council for Women (NCW) launched a strategy aligned with the United Nations Sustainable Development Goals (SDGs) that is built on four pillars: political empowerment, economic empowerment, social empowerment, and protection from all forms of violence. In February 2021, the Egyptian government, represented by the Ministry of International Cooperation (MoIC) and the National Council for Women (NCW), announced the adoption of an action plan for the Closing the Gender Gap Accelerator, a public-private partnership model endorsed by the World Economic Forum. The ministry announced that the plan will be implemented in collaboration with private sector members and will prioritise women's representation on boards of directors, work/life balance, safe workspaces, women in technology-related fields, women in leadership, gender equality models and empowerment principles, financial inclusion for women, and closing the gender pay gap.

Furthermore, Egypt is a signatory to the Maya Declaration. The declaration, launched in 2011 at the World Economic Forum in Mexico, champions financial inclusion and contributes explicitly to SDG 1 (No poverty) by creating an enabling environment, implementing the appropriate framework, and tracking financial inclusion efforts through data. Egypt's commitment included the development of supply-side indicators for women's financial service usage and access, intending to halve the gender disparity by the end of 2021.

Despite government efforts, several factors remained a barrier, including the limited range of financial products targeted at women and women's low level of financial literacy. Egypt has 38 banks with 4,534 branches per 100,000 people (or 1 branch per 22,000 people), a banking density that is significantly lower than the global average of 15,527 branches per 100,000 adults (1 branch per 8,000 people). Due to banks' risk aversion, a sizable segment of the population, including women, is

excluded from corporate and retail financing products. The high illiteracy rate among women, particularly rural women, makes access to formal finance more difficult.[5] Additional constraints include restrictive social and cultural norms, legal and regulatory impediments, limited financial access, and capacity gaps.

INSTITUTIONAL EFFORTS FOR THE FINANCIAL INCLUSION OF WOMEN IN EGYPT'S AGRICULTURAL SECTOR

On an institutional level, the National Council for Women (NCW), the Micro, Small and Medium Enterprise Development Agency (MSMEDA), and the Federation of Egyptian Industries (FEI) initiatives are particularly pertinent to this assessment's subject.

a) The National Council for Women (NCW)

The NCW implemented the Village Savings Loan Association (VSLA) programme, which Care Egypt launched in 2009.

As with the traditional 'game'ya' or ROSCA, the VSLA scheme enables women to form savings groups and take out loans to meet basic needs or to invest in enterprise development and income-generating activities. In addition, members of the VSLA group receive various financial and business development training. Initially implemented in Upper Egypt's Minya and Sohag, it is now being implemented as Kadam El Kheir in Assuit and Beni Suef, under the auspices of the NCW and the Ministry of Social Solidarity (MOSS), and as part of the European Union's (EU) 'Securing Rights and Improving Livelihoods' programme in collaboration with the United Nations Entity for Gender Equality and Women's Empowerment (UN Women).

b) The Micro, Small & Medium Enterprise Development Agency (MSMEDA)

MSMEDA serves as the lead institution for developing small businesses, providing financial and non-financial services. Micro and small enterprises together account for over 99 percent of private enterprises in Egypt and account for 85 percent of employment in the country's non-agricultural private sector.

MSMEDA recognises the entrepreneurial potential of women and has implemented a number of initiatives geared towards them. The most recent of which is the One Village One Product (OVOP) initiative, which began in 2014 and was implemented in collaboration with UN Women by the Social Fund for Development (SFD). The project's primary objective was to advance rural women's economic empowerment through the promotion of successful start-up enterprises and the facilitation of productive alliances. Additionally, MSMEDA is currently pursuing two additional initiatives. The first is the 'Women in Business' initiative, which is being implemented

[5] https://documents1.worldbank.org/curated/en/861491551113547855/pdf/134846-WP-PUBLIC-march-2-WB-Women-Study-EN.pdf

in partnership with Egyptian banks and is being financed by the European Bank for Reconstruction and Development (EBRD). The MENA transition fund launched the project in 2013. The program's mission is to advance women's entrepreneurship by providing advisory services, training, mentoring, and networking opportunities to women who have operated a business for at least two years.

The World Bank is funding the second initiative, Promoting Innovation for Inclusive Financial Access. The goal is to increase access to finance for micro and small businesses (MSEs) through innovative financing mechanisms, with a particular emphasis on youth and women and underserved regions. The project provides MSMEDA with a line of credit to lend to financial intermediaries to reach out to SMEs.

c) The Federation for Egyptian Industries (FEI)

The FEI was founded in 1922. It is one of the largest employers' associations in the country, with 20 industrial chambers representing over 60,000 industrial enterprises – more than 90% of which are private – employing more than 7 million people and accounting for 20% of the national economy.

In 2014, with the support of the International Labour Organization (ILO), FEI established a Women in Business Unit (WIB Unit). The unit's objectives are as follows:

1. Enhance the economic performance of women in business in Egypt; 2. Establish and strengthen partnerships and networks in order to create an economic ecosystem that supports women's work in Egypt; 3. Create and promote a supportive environment for policies, laws, and legislation that support women in business in industrial sectors; 4. Expand the role and inclusion of women in business associations; and 5. Guide Corporate Social Responsibility (CSR) efforts to support women in industrial business.

The WIB Unit is comprised of a diverse group of individuals, including but not limited to women board members and CEOs of FEI member companies, women employees, women entrepreneurs, women FEI staff, and women workers in industry. The WIB Unit aims to provide a range of services to its constituents, including training, advocacy and research, as well as data collection to assist policymakers in their efforts to advance gender equality.

3. Conclusions and Recommendations

According to the GVCA, women in the targeted value chains in Minya and Beni Suef are disproportionately concentrated in seasonal, informal, and low-paid jobs, primarily as unskilled labour. The majority of women are illiterate and have little access to formal professional education. They lack access to information, credit, and established distribution channels. Women are rarely included in decision-making phases, such as farm management or marketing operations training, and they are underrepresented in farmer associations and cooperatives. Men control most of the selling and income management aspects of the farming business. Additionally, rural community norms and customs restrict women's mobility and market access and land ownership.

3.1 Recommendations

Given the cultural norms and traditions of the villages in which the initiative will operate, the project will take a gender transformational strategy that promotes women's participation while being consistent with local traditions and customs. Thus, the project will implement the following measures to increase women's participation in decision-making and optimise their opportunities.

INCREASE LITERACY RATES AMONG FEMALE FARMERS

Adult education can be implemented independently—often through adult literacy classes—or as part of other activities, such as training on improved farming practises delivered through farmer field schools. A basic level of literacy and numeracy competency expands women's access to information. It builds their confidence to interact with other value chain actors, gain access to and engage with the market. It is possible to use pre-existing curricula for such literacy training for women farmers. Additionally, private sector companies may be approached and encouraged to incorporate adult literacy classes for women farmers into their Corporate Social Responsibility (CSR) strategy in the area.

PROVIDE WOMEN ACCESS TO TRAINING AND EXTENSION SERVICES

Farmer Field Schools create an environment conducive to accelerating and sustaining the adoption of more sustainable agricultural practises. It is an educational intervention that employs intensive discovery-based learning methods with the goal of equipping and empowering farmers.

The training approach is adaptable to women's needs. Separating groups of farmers by gender will support an ideal learning atmosphere and will allow the alignment of training locations and timings with the needs of female participants. A farmer field school facilitator should guide each group of farmers through a season-long learning process that involves cultivating a selected crop (to be chosen from the crops covered by the AIP project). The season-long training approach will provide participants with knowledge and skills regarding all the production process steps, which can be empowering for women who had been limited to contributing to singular tasks, like weeding or harvesting.

At a farmer field school, the primary teaching medium is the field. Experiential, participatory, and learner-centred educational methods are used at the farmer field school. Farmer field schools address best cultivation practises, modern farming techniques, the selection of high-quality inputs and pesticides, as well as farming tools and fertilisers, with an emphasis on teaching women new and improved farming

practices, providing literacy and numeracy classes, basic life skills training, as well as health and nutrition education. In this case, they should also consistently address gender in order to resolve disparities.

ENGAGE WOMEN IN BUSINESSES

Providing training to improve women entrepreneurs' basic business skills is critical to support the development of economically viable start-ups/businesses that can compete in the market. Training should focus on pricing, entrepreneurship, business management, market engagement, and negotiation skills. The development of women's entrepreneurship networks can assist women in acquiring these skills and learning from and supporting one another.

While most do not own or run the farms, women farmers need support in developing their current activities and acquiring new ones. In addition, promoting higher-quality crops and varieties and adopting organic and low-cost fertility and pest management methods can increase their income from farming.

FACILITATE WOMEN'S ACCESS TO MARKETS

Access to markets may be achieved by improving women's access to marketable crops and establishing and monitoring contractual relationships with buyers. Institutional and technical assistance can be provided to establish Women's Marketing Associations, while continuous market information services should be made available for women via Agriculture Extension Officers. Such officers would be responsible for connecting them to information sources and assisting them in utilising this information. The project could also facilitate linkages between Women Marketing Associations and potential wholesalers and processors of horticulture products.

FACILITATE WOMEN'S ACCESS TO FINANCE

Greater access to finance may be achieved by introducing financial services tailored for women, such as saving schemes loans. Village Savings and Loan Associations (VSLA) can provide a pathway for women to access funds for income-generating activities and for obtaining quality inputs needed to adopt new agricultural technologies.

INCREASE WOMEN REPRESENTATION IN FARMER ASSOCIATIONS AND COOPERATIVES

Women's participation and membership in farmer associations (FAs) may be increased by focusing on gender-related issues and inequities, mobilising women's committees within FAs, raising gender awareness among FAs' management and,

reactivating and mobilising the FA's women's committees around the issue of women's work and economic empowerment. Participation in FAs may also be enhanced by developing awareness among female farmers and processors. Additionally, the project could assist in developing the structures of women's committees within FAs and increasing women's participation on the board to ensure female representation.

Farmer organisations will allow female farmers to bulk up their produce and conduct larger transactions and enjoy lower transportation costs. In addition, they will enable female farmers to connect with buyers, provide them with production support services, and strengthen their market power by allowing them to negotiate better prices and payment terms for both their produce and inputs.

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