

RURAL WOMEN'S EMPOWERMENT IN AGRICULTURE IN EGYPT

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ABSTRACT: The critical importance of empowering rural women within the agricultural sector in Egypt underscores the crucial importance, reflecting their pivotal role in enhancing economic resilience. Evidence suggests that addressing existing gender disparities not only alleviates economic hardships for women but also contributes significantly to broader agricultural productivity and sustainability. This aligns with the overarching objectives highlighted in (William and Flora Hewlett Foundation, 2013), which emphasize the necessity of comprehensive strategies for women's economic empowerment as fundamental to achieving gender equity and economic growth. Ultimately, sustained efforts to empower women in agriculture will be crucial for propelling Egypt towards sustainable development goals and ensuring the long-term viability of rural economies. This present study used the WEAI index to define the level of agricultural empowerment for rural women in two villages of Kafr Elshiekh governorate one of them is considered a highly developed village (Um-Alqura) and another one is considered low developed village (Arimon). The study employed five domains, ten indicators, and 56 questions. The total arithmetic mean for the index was 25.20 in Um-Alqura village, which is classified as a high-developed village, with a standard deviation of 23.56. In Arimon village, which is classified as a low-developed village, the arithmetic mean for the index was 40.16, with a standard deviation of 37.36. This indicates that the numbers in the first low-developed village are larger, or that the average in that group is more significantly influenced by higher values. This may also reflect differences in performance, productivity, or comparative characteristics between the two villages. So, the degree of women's empowerment in agriculture in the low-developed village (Arimon) was more than in the high-developed village (Um-Alqura). It implies that the agricultural empowerment in the low-developed village is greater than that in the high-developed village. This is likely due to the urgent need, as farmers in the less developed and resource-scarce villages are more motivated to enhance their agricultural situation and achieve sustainability. In contrast, the residents of a village with a high level of development may be less motivated to enhance or develop their agricultural practices due to the availability of resources and amenities. Alternatively, this could suggest that agricultural practices, government support, educational resources, and agricultural services are more effective in the low-development level village, even though expectations may be the opposite in higher-developed environments.

Keywords: Rural Women in Egypt, Women's empowerment, Agricultural empowerment, Gender in Agriculture.

INTRODUCTION

Societal transformations and economic pressures frequently intersect to create unique challenges and opportunities for rural women, particularly within agricultural contexts. In Egypt, where agriculture plays a crucial role in the national economy, analyzing the empowerment of women in rural areas has become increasingly relevant. Despite their significant contributions to agricultural production, rural women often

encounter systemic barriers that hinder their access to resources, training, and decision-making processes. This analysis aims to explore the multifaceted dimensions of empowerment, encompassing social, economic, and political aspects, while emphasizing the need for targeted interventions that promote gender equity. As such, a thorough examination of existing frameworks, both formal and informal, will provide insights into how rural women can enhance their roles within agriculture.

In the context of Egypt's agricultural sector, rural women serve as pivotal contributors to both productivity and food security, often bearing the dual burdens of labor and household responsibilities. Their engagement encompasses a broad spectrum of activities, from planting and harvesting to post-harvest processing, which underscores their integral role in sustaining agricultural output (Alexandra *et al.*, 2023). Despite their significant contributions, these women frequently confront systemic barriers that hinder their economic empowerment and limit their decision-making power. The prevailing gender disparities in employment and access to resources exacerbate these challenges, revealing the urgent need for targeted interventions. Empowering rural women not only enhances their socio-economic status but also promotes broader community resilience, reinforcing the notion that gender equality in agriculture can catalyze sustainable development. Addressing these issues is essential for realizing the full potential of Egypt's agricultural landscape (William and Flora Hewlett Foundation, 2013).

Throughout history, women's roles in agriculture have been profoundly influenced by cultural norms and socio-economic structures, particularly in regions like Egypt. Traditional agricultural practices often embedded women within the domestic sphere, relegating them to roles that emphasized subsistence farming while denying them ownership rights. This patriarchal framework severely limited women's agency in land management, thereby impacting agricultural productivity and overall community well-being. Notably, pre-colonial African cultural systems, while diverse, often exhibited common threads of gendered land access, reinforcing systemic inequalities that disadvantaged women (Adeoye, 2018). Understanding this historical backdrop is crucial for developing effective interventions that foster true gender equity in Egypt's agricultural landscape.

The historical trajectory of women's roles in agriculture within Egyptian society underscores a significant transformation influenced by socio-economic and cultural shifts. Initially, women's participation was often relegated to informal

roles, primarily within the household, where they managed subsistence farming tasks and food production, thereby playing a crucial yet undervalued part in local economies. However, as the agricultural sector evolved due to modernization and broader market integration, women began to assert themselves more visibly in formal roles, challenging traditional perceptions and expanding their influence. As evidenced by the methodology described by the Center for International Education (CCEA), this shift coincides with the rise of participatory research projects that prioritize local empowerment and engagement (Ali *et al.*, 2011). Such efforts reflect how enhancing women's participation in agricultural decision-making not only fosters their agency but also contributes to sustainable development outcomes, suggesting that greater societal recognition and support for women's contributions are essential for future advancements in rural empowerment in Egypt (Leach, 2016).

The persistent inequities within agricultural systems significantly hinder the advancement and empowerment of rural women in Egypt. Constrained access to resources such as land, finance, and knowledge exacerbates their challenges, limiting their capacity to contribute effectively to agricultural productivity. Notably, women's labor is often underrecognized and undervalued, relegating them to unpaid or poorly compensated roles within agricultural value chains. As highlighted in the background paper on women's economic empowerment, existing gender disparities in employment and business opportunities severely impact their socio-economic mobility (William and Flora Hewlett Foundation, 2013). Moreover, societal norms and traditional gender roles restrict women's participation in decision-making processes, further marginalizing their voices within communities. Thus, addressing these multifaceted barriers is crucial for fostering a more equitable agricultural environment, as enhancing gender equity can lead to improved livelihood security and overall economic growth in rural settings, a concept echoed in studies on aquatic agricultural systems (Chiuta *et al.*, 2012).

Rural women's empowerment in agriculture is often impeded by entrenched socioeconomic barriers that restrict access to resources and opportunities. Limited financial capital and inadequate access to credit systems inhibit women from investing in agricultural technology and equipment, which can enhance productivity and sustainability. Moreover, the societal perception of women's roles in agricultural practices often relegates them to less significant tasks, thereby perpetuating a cycle of marginalization. As evidenced in studies on women's roles in health care, which highlight the socio-economic disparities influencing service utilization, similar patterns are evident in agriculture, where decision-making often remains a male-dominated domain (Ghimire, 2019). This marginalization extends to the waste management sector, where gendered divisions hinder access to modern techniques and digital literacy that can elevate women's participation and equity in agriculture (Arora *et al.*, 2023). Addressing these barriers is crucial for fostering an inclusive agricultural environment that empowers women as key stakeholders.

Research Objectives

Regarding the research problem, the present study tries to answer the questions:

- 1- What is the level of agricultural empowerment for rural women in the study area?
- 2- What are the main obstacles influencing Agricultural empowerment for rural women in the study area?

Review of Previous Literature

This section presents some of the approaches and theories that delve into women's empowerment in addition to some literature related to women's empowerment. Several theories delve into women's empowerment, each with unique perspectives and applications that focus on women's empowerment, each offering distinct insights. The capability approach emphasizes expanding women's opportunities to realize their potential. The gender and development framework considers social roles and advocates for addressing gender inequalities

in development processes. Feminist theory critiques patriarchy, seeking to dismantle systemic inequalities and promote equal rights for women. Social cognitive theory highlights the importance of self-efficacy and the influence of social experiences on belief in one's agency. Lastly, intersectionality theory examines how overlapping social identities affect experiences of oppression, underscoring the need for policies that tackle multiple forms of discrimination. Together, these theories form a comprehensive understanding of women's empowerment in various contexts (Alexander and Welzel, 2007).

This section presents some of the literature work on the effectiveness of agricultural cooperatives in different parts of the world. Conclusions that could be made from this literature are presented at the end of this section.

Fertó, *et al.* (2024) concurred that agricultural and rural development strategy aims to promote the shift towards environmentally friendly and climate-neutral farming practices, emphasizing human capital, knowledge, and innovation. Gender equality may significantly contribute to the promotion of environmentally sustainable practices within the agricultural sector, especially through the adoption and implementation of Agri-environment-climate schemes (AECS) in the realms of farm, agricultural, and rural development. This study investigates the existence of gender bias in the adoption intensity of AECS through the analysis of farm-level data from Slovenia. This study reveals that women on Slovenian farms implement AECS and obtain subsidies, although a gender imbalance in certain agricultural factor endowment variables that often advantage men. The findings of this study give evidence in support of increasing women's involvement and empowerment in green technology applications and green entrepreneurship, particularly concerning AECS practices.

Quisumbing, Agnes, *et al.* (2023) focus on women's empowerment in agriculture, innovations in measuring, and new evidence. They explain how the notion and measurement of women's empowerment and gender equality have evolved since 2010. Using a gender and food

systems framework and a standardized measure of women's empowerment, the Women's Empowerment in Agriculture Index (WEAI), we review the evidence on "what works" to empower women based on impact evaluations of 11 agricultural development projects with empowerment objectives, as well as a scoping review of livestock interventions. Then examine the research on the links between empowering women and societal benefits such as agricultural output, income, food security, and nutrition. They close with recommendations for measurement and policy.

Alqayam, (2022) pointed look at the effect of financially enabling provincial ladies and its impact on maintainable farming: A case considers of Irbid Governorate. To attain the targets, they think about received a strategy based on graphic examination, where a test of 211 ladies was chosen from the considered populace (111 women) who connected for credits from the Agricultural Credit Institution. Among the foremost critical discoveries of the ponder: The test from the ponder region had statistics and financial characteristics that empowered them to apply economic rural hones at a direct level in their exercises and similarly progress their pay. They are of a young age and have the necessary educational background to carry out these duties. They are also very involved in their agricultural activities, and their large family size and ownership of their rural land help them embrace these practices, as well as the factors that fueled the foundation of the work within the contemplated zone. According to the manager, the extend thought, and the family, the desire was to contribute to the advancement of the family's pay, the expansion of the family's pay, and the extend contribution to the financial empowerment of women in progress at a high rate. The greatest challenge within the provincial community and the troubles confronting the strengthening of provincial ladies is the need for money. The family bolster is the greatest calculation that has driven the victory of ventures that financially enable rustic ladies. The increment in family pay from the extent of the financial effect accomplished a tall rate due to the back of country ladies through the agrarian loaning institution. In

addition to holding training sessions and workshops for country women on viable agricultural endeavors, the study recommended the necessity of developing and implementing admonishing plans and programs that result in the proper financial strengthening of country women. Getting involved with rural women, who make up the largest segment of Jordanian women, helps achieve sustainable development through sustainable farming.

Nasr, (2022) primarily aimed to evaluate the extent to which educated rural women contribute to sustainable human development in the Egyptian countryside. To achieve this, the study examined several key topics, including the needs of educated women in Egyptian villages, their definitions of social empowerment, the concept of sustainable human development in rural Egypt, and the major barriers to rural women's empowerment and strategies for overcoming these barriers. This research, following a descriptive-analytical model with a case study approach, involved data collection through interviews with educated women and girls in select villages in the Alexandria Governorate. Forty cases were purposefully sampled and divided between two villages for comparative analysis.

Kailani, (2022) asses rural women's awareness of empowerment issues in line with feminist movement demands across three main areas: political, social, and economic. It also sought to pinpoint the key social barriers hindering the awareness of these issues among women in the rural regions of Asyut Governorate. Utilizing a field study involving 400 women from rural areas of Asyut Governorate, the research adopted a descriptive scientific method based on the sample social survey technique. A five-point Likert scale was employed to measure the rural women's comprehension of empowerment-related subjects. The field study's critical findings indicate a significant need to enhance rural women's understanding of empowerment issues within Egyptian culture. Despite efforts by relevant authorities to promote empowerment, women's awareness remains lower than expected. The extent of understanding varied across social,

economic, and political domains, influenced by the social structure and cultural norms governing rural women's lives. The main social impediments to rural women's full potential are entrenched cultural norms within the research community and the dominance of male perspectives in rural settings, which can be interpreted through feminist discourse, male viewpoints, and social exclusion. The study recommends conducting more sociological research on gender, focusing on women's marginalization and the impact of gender on development.

Diego, *et al.* (2021) propose an innovative survey-based method for measuring people's empowerment across several aspects of their lives. The method consists of three parts: (i) a direct measurement of decision-making, defined as the ability to make choices; (ii) a measure of whether people have reasons to value those choices; and (iii) a measure of the role that prevailing social norms play in determining people's ability to make strategic life decisions. This paper develops an Empowerment score based on these three elements, assesses the tool's effectiveness using original survey data from India, and demonstrates that using the Empowerment score makes a significant difference when compared to a simpler (and less theoretically rigorous) score based solely on direct measurement of decision making. The study employs the Alkire-Foster approach to create an Empowerment index, allowing for comparisons of empowerment levels across different locations, settings, social groups, and periods. The Empowerment score carries significant policy implications, serving as a variable in assessments to identify not only who makes or refrains from certain decisions but also those who may not value these choices or comply with social norms. Thus, this tool can encourage governments to focus on empowering marginalized groups to make their desired choices instead of pressuring them into unwanted decisions.

Elkhadragy, *et al.* (2021) sought to ascertain the economic and social empowerment levels of rural women, as well as the relationship between the empowerment levels and the independent variables. In addition to identifying the obstacles

that impede the empowerment of rural women from the respondents' perspective, they also sought to identify the differences in levels of economic and social empowerment of rural women and the independent studied variables. They arranged the obstacles according to the respondents' priorities and identified what agricultural extension can do to economically and socially empower women from the respondents' perspective. This study was conducted in Gharbia Governorate, and Samannoud district was chosen randomly from among its eight administrative districts, and three random villages were selected from this district.

The sample was determined using the Krejcie and Morgan method, with a total of 350 individuals randomly selected. The primary findings of the study are as follows: 60% of participants reported an average level of economic empowerment, 56.6% reported an average level of social empowerment, and 86.9% identified male economic dependence and control as significant obstacles to women's empowerment.

Hlil and Bazina, (2021) assess the level of social, economic, and agricultural empowerment among rural women in Beheira Governorate, identify obstacles to their empowerment in these areas, and pinpoint the necessary conditions for their empowerment from the respondents' viewpoint. Conducted on a random sample of 304 families, which constituted 10% of the total family population in the villages of Kom El-Kadah and El-Sidiq El-Gedida associated with the Abu Matamir center in Beheira governorate, the research focused on the wives of household heads as the primary unit for data collection, representing the overall sample. The study encompassed a total of 304 rural women. Field data was gathered using a questionnaire, complemented by personal interviews with the participants. Subsequent application of the appropriate statistical methods yielded the following findings (The analysis indicated that the respondents exhibited a high level of social empowerment (72.7%), while their levels of economic and agricultural empowerment were moderate (68.8% and 58.6%, respectively). Illiteracy emerged as the most significant obstacle

to the social empowerment of rural women, representing 42.8% of the total challenges, whereas the provision of equal educational opportunities for rural women was identified as the most crucial factor facilitating their social empowerment, constituting 56.6%. The primary obstacle to the economic empowerment of rural women is the scarcity of job opportunities available to them, which stands at 60.0%. The most crucial requirement for their economic empowerment is ensuring equal workplace opportunities for rural women, which is at 52.6%. The most significant hurdle to the agricultural empowerment of rural women is the challenge of marketing their agricultural products, at a rate of 49.3%. The essential demand for their agricultural empowerment is the creation of marketing outlets for their agricultural products, at a rate of 53.3%.

Noshaba, *et al.* (2020) the study gathers evidence on the relationship between women's empowerment and food security in rural Azad Jammu and Kashmir (AJK). Data was collected from 600 rural households. The study indicates that enhancing women's food security could be significantly influenced by the areas of legal rights, information and communication technologies (ICTs), social support, and family rights. This is because increased negotiating power regarding resource use may lead to better food selections and potentially higher food expenses associated with these rights. Additionally, a comprehensive understanding of food insecurity requires consideration of gender norms, as evidenced by the surprising finding that infrastructure facilities and perceived land ownership had negligible effects in this research. While women contribute to the increasing needs of their families, they often cannot meet their own nutritional needs due to restricted mobility and economic opportunities. This is largely attributed to insufficient infrastructure and, more importantly, limited access to resources like land, often stemming from a lack of awareness and self-confidence. Additionally, the fear of confrontation and domestic violence can deter women from asserting their rights, further restricting their food access. Therefore, understanding household dynamics through women's viewpoints and traditions is vital, as this

study's insights could help guide policymakers in devising more effective strategies to enhance women's food security.

Salama, *et al.* (2020) tried to delineate the empowerment level of rural women in the area, ascertain the correlation between empowerment and the selected independent variables, evaluate the independent variables' relative impact on the empowerment variance among the rural women surveyed, and pinpoint the primary barriers to women's empowerment in Menoufia Governorate's rural locales, along with key recommendations for overcoming these obstacles. To achieve these goals, a random sample of 400 housewives was selected. Data collection occurred in two villages of Menoufia Governorate: Mit Abu Kom (affiliated with Tila Center) and Zawiyat al-Nahourah (linked to Shibin al-Kawm Center), with each village contributing 200 respondents. Data was gathered through personal interviews utilizing a questionnaire. The study's data underwent analysis employing various statistical techniques to achieve its goals and test its hypotheses. These included descriptive statistics, the simple correlation coefficient, stepwise multiple regression analysis, T-scores, and Cronbach's alpha coefficient. The study concluded that respondents' empowerment levels varied from medium to high, with about 44.5% categorized as medium empowerment and roughly 42% as high empowerment. Additionally, the stepwise multiple regression analysis identified nine independent variables that significantly explain the variance in empowerment levels among rural respondents. These variables were able to explain about 35% of the variance in the empowerment level of rural women.

Cara Holland and Anu Rammohan, (2019) The study highlights that women's empowerment and child stunting are major developmental challenges in Bangladesh. It aims to explore the influence of women's empowerment in agriculture on child food security. Utilizing data from two waves of the Bangladesh Integrated Household Survey (BIHS), which encompasses a substantial panel dataset from more than 6500 rural households in Bangladesh, the study includes

accurate anthropometric measurements for children below the age of five years. The research adopts a comprehensive approach to female empowerment by analyzing five key empowerment factors from the Women's Empowerment in Agriculture Index (WEAI). It employs multivariate regression to explore the relationship between these empowerment factors and child stunting, a measure of child food security. The findings indicate that women's independence in making productive decisions at home and their self-assurance in public speaking are associated with significantly higher height-for-age z-scores (HAZ) and a reduced incidence of stunting among children. These results suggest that enhancing female empowerment could support nutritional strategies to decrease stunting in Bangladesh and contribute to broader social and developmental objectives.

Mahbub, (2019) explores the relationship between life satisfaction and empowerment in rural Bangladesh. Utilizing the BIHS 2012 data, it examines this link across various regions, religions, genders, and income brackets. The dataset includes comprehensive socioeconomic details on cohabiting couples and individual empowerment within households. To address endogeneity, the study incorporates a range of community and household fixed effects to mitigate the influence of unobserved variables and constructs an instrumental variable model using the average community activity participation rate as the identifier. The results are robust, showing a positive correlation between empowerment and life satisfaction. A closer look at the empowerment index's sub-components indicates that women are less content with their influence over production decisions and access to borrowing, yet they express greater satisfaction with their involvement in groups. Consequently, the puzzle of "contented women," or the gender disparity in life satisfaction, is partially resolved by understanding that men and women find satisfaction in different aspects of empowerment.

Ragsdalea, *et al.* (2018) Results from the baseline Women's Empowerment in Agriculture Index Soybean Modules (WEAI+), applied to male and female smallholder farmers in Ghana's

rural Northern Region, have been retrieved. The WEAI+ framework facilitates quantitative analysis of gender equity among participants across four local districts with different levels of soybean production. The analysis of the 10 WEAI indicators indicated that most respondents were not sufficiently empowered in terms of workload, and over one-third did not have adequate autonomy in production decisions (these percentages were similar when gender distinctions were not considered). Nevertheless, women farmers were significantly more likely to experience a lack of empowerment regarding productive decision-making, asset acquisition, sale, or transfer, and public speaking. This disparity persisted even after accounting for variables such as education, socioeconomic status, and district. Women farmers were found to be inadequately empowered in these areas, even when compared to male farmers within the same household. The research suggests that creating culturally relevant opportunities that enhance women farmers' involvement in agricultural decision-making, asset management, public engagement on key agricultural topics, and access to technical training are vital steps toward improving agricultural empowerment for women smallholder farmers in the Northern Region of Ghana. These strategies could potentially be adapted for use in other Sub-Saharan African nations and regions.

Alkire, *et al.* (2013) The Women's Empowerment in Agriculture Index (WEAI) is a dual-subindex metric designed to evaluate women's empowerment, agency, and inclusion in the agricultural sector. The first subindex assesses women's empowerment across five domains: decision-making in agricultural production, access to and control over productive resources, control over income, leadership in the community, and time management. The second subindex measures the proportion of women in households whose achievements match or exceed those of men and the empowerment gap for women who do not have parity with men. This article discusses the development of the WEAI and presents pilot findings from Bangladesh, Guatemala, and Uganda.

Empirical studies regarding rural women's agricultural empowerment reveal significant gender disparities in Egypt, impeding not only individual growth but also broader socioeconomic development. These disparities often stem from entrenched sociocultural norms that limit women's access to resources, decision-making roles, and educational opportunities. For instance, evidence indicates that empowering women through enhanced autonomy and improved access to land and agricultural inputs can lead to better health outcomes for families, thereby reducing issues related to prematurity and infant mortality (UNIDO, 2023). Furthermore, understanding the constraints faced by women, such as domestic responsibilities and limited mobility, is crucial for designing effective interventions (William and Flora Hewlett Foundation, 2013). The existing literature reveals that interventions aimed at increasing women's participation in agricultural practices not only yield better economic outcomes but also empower them socially and politically, ultimately fostering a more equitable rural landscape. Thus, addressing these complexities through targeted research and policies remains imperative for sustainable development in Egypt.

The in-hand paper addresses some of the variables considered in previous studies in the composition of the study variables and the method of understanding rural women's agricultural empowerment. This is based on the nature of agricultural empowerment for rural women in Egypt in general, and specifically in the study area. So, this section defines agricultural empowerment for rural women in Egypt and discusses related concepts.

Empowerment is a multi-level construction that refers to individuals, organizations, and communities. Empowerment involves mutual respect, critical reflection, caring, and group participation, through which people gain greater access to and control over these resources. Also, empowerment means granting power, right, or authority to someone or something to perform various acts or duties. It is the state of being empowered to do something. Through empowerment, individuals acquire the power to think and act freely, exercise choice, and fulfill

their potential as full and equal members of society. There is no single definition of women's empowerment in the literature (Sharma, 2020). As per different studies, the term empowerment is associated with autonomy, freedom, ownership of and control over assets, agency, collective action, power and its redistribution, self-determination, participation, dignity, social inclusion, and choice (Kabeer, 1999; Malhotra and Schuler, 2005; Alsop *et al.*, 2006; Ibrahim and Alkire, 2007; Samman and Santos, 2009). Bold *et al.* (2013) summarized that women's empowerment refers to choice, power, options, control, and agency. Women empowerment is a situation in which women are allowed to participate fully in social, political, and economic spheres of life (Sushama, 1998). Women's empowerment moves them from oppression to social, political, and economic equality (Chattopadhyay, 2005).

Women's Empowerment in Agriculture is a strategy to reduce poverty, enhance food and nutrition security, and achieve Sustainable Development Goals. It involves decreasing the gender gap and expanding females' access to land and resources, which can increase agricultural output in developing countries. Empowering and mainstreaming rural women, workforce in agriculture can bring a paradigm shift towards economic growth (Sonia Akter *et al.*, 2017). Empowerment in agriculture is generally defined as one's ability to make decisions on matters related to agriculture as well as one's access to the material and social resources needed to carry out those decisions (Alkire *et al.*, 2013).

Women's empowerment in agriculture includes several dimensions. These dimensions are crucial for understanding and promoting women's empowerment in agriculture, as they contribute to increased productivity, food security, and overall rural development. These dimensions include (women's involvement in decisions about agricultural production, access to and control over productive resources, and participation in community leadership, women's ownership of land, livestock, and other assets, as well as their control over income and financial resources, women's access to agricultural inputs, credit, training, and extension services, the

distribution of labor and time between men and women in agricultural activities, access to education and training opportunities that can enhance women's skills and knowledge in agriculture, women's participation in agricultural cooperatives, groups, and other social networks) (Bhawariya, 2024).

In this study, Rural women's Empowerment in agriculture refers to the process of enabling women to fully participate in agricultural development activities by giving them the ability to choose and make decisions related to production, the ability to obtain land ownership or agricultural land possession, the ability to control the income from what she produces, the possibility of enjoying time alongside workers in agriculture, and providing her with enough freedom to express her opinions and ideas, and participate in social and union organizations as a working woman in agriculture with wages, which helps in promoting gender equality in agriculture, reducing poverty and hunger, and achieving food security, enabling women to produce and improve the quantity and quality of agricultural output.

As seen in the literature review section, it became clear that they were conducted in numerous studies, each of these studies showed it in different approaches, various locations, and measured with different measures. Nonetheless, all of them concluded that there is a decline in rural women's empowerment in agriculture and there are multiple obstacles that hinder the empowerment of rural women in agriculture.

Data and Methodology

The study was conducted in the Kafr Elsheikh Governorate, which comprises 10 administrative centers. Two centers were randomly chosen: Kafr Elsheikh and Elriyad. Two types of villages are randomly selected from each center to represent the study villages. The selection was made of the village of Arimon from Kafr El-Sheikh Center as a less developed village, and the village of Um Al-Qura from Al-Riyad Center as a more developed village (National Population Council branch for Kafr El-Sheikh Governorate, 2019). The population of this study is the total number of rural families in the study villages, specifically the wives in each household. The study villages have

about 2000 rural families, with 1250 in Arimon and 750 in Um Al-Qura (CAPMAS, 2019). The sample size is 10% of the total population, or 200 rural families in the two study villages. This number was distributed according to the representation ratio of each village with 125 respondents selected from the village of Arimon and 75 respondents from the village of Um-Alqura.

Two sources of data are used in this study, Secondary data such as the mapping of the villages and all the needed information about the villages. This is provided by the Central Agency for Public Mobilization and Statistics and the National Population Council and its related subbranches. In addition, primary data was collected through interviews with respondents with specific questionnaires. The independent variables of the study include Age, Marital status, Sufficiency of monthly income, Household size, Education Level, Community participation, and village type. The dependent variable is Rural women's Empowerment in agriculture which will be measured using WEAI. The Women's Empowerment in Agriculture Index (WEAI) is an innovative tool that seeks to identify such obstacles, and may be used to track gender equality and measure empowerment, agency, and women's inclusion in the agricultural sector. It measures the roles and extent of women's engagement in agriculture across five domains of empowerment (listed below), and it may be used to compare women's empowerment relative to men within the same household. The WEAI was created to track changes in women's empowerment levels as a direct or indirect result of interventions implemented through Feed the Future, the US government's global hunger and food security initiative. It was created in collaboration with the US Agency for International Development (USAID), the International Food Policy Research Institute (IFPRI), and the Oxford Poverty and Human Development Initiative (OPHI). The WEAI is composed of two sub-indices: one measures the five domains of empowerment for women, and the other measures gender parity in empowerment within the household. It is an aggregate index reported at the country or regional level that is

based on individual-level data on men and women within the same household. As shown in Table (1) the five domains included in the WEAI are:

- **Production:** Sole or joint decision-making over food and cash-crop farming, livestock, and fisheries as well as autonomy in agricultural production.
- **Resources:** Ownership, access to, and decision-making power over productive resources such as land, livestock, agricultural equipment, consumer durables, and credit.
- **Income:** Sole or joint control over income and expenditures.
- **Leadership:** Membership in economic or social groups and comfort in speaking in public.

Time: Allocation of time to productive and domestic tasks and satisfaction with the available time for leisure activities.

The WEAI was adapted for use in 2012, the WEAI has inspired the development of other versions of WEAI. The abbreviated WEAI (A-WEAI) was developed in 2014 to provide a

shorter alternative to the WEAI survey instrument. Released in 2018, the project-level WEAI (Pro-WEAI) monitors changes in women’s empowerment at the project level, and includes optional modules relevant to livestock and/or nutrition and health projects. The pro-WEAI for market inclusion (pro-WEAI+MI) seeks to measure women’s empowerment across multiple stages of agricultural value chains (<https://ifpri.org/>, <https://weai.ifpri.info/>).

The five domains in a number range from zero to one, where higher values indicate greater empowerment. The score has two components. First, it reflects the percentage of women who are empowered. Second, it reflects the percentage of domains in which those women are not empowered. The total WEAI score is computed as a weighted sum of the level of study areas (Low developed village, High developed village). Thus, improvements in both the domains and its indicators will increase the WEAI. This is illustrated in the results of the field survey.

Table (1): Domain, Definitions, Indicators of women empowerment in agriculture index (WEAI).

Domains	Definition	Indicators	Score
Production	Sole or joint decision-making over food and cash-crop farming, livestock, and fisheries as well as autonomy in agricultural production.	Input in productive decisions	1/10
		Autonomy in production	1/10
Resources	Ownership, access to, and decision-making power over productive resources such as land, livestock, agricultural equipment, consumer durables, and credit.	Ownership of assets	1/10
		Purchase, sale, or transfer of assets	
		Access to and decisions on credit	1/10
Income	Sole or joint control over income and expenditures.	Control over use of income	1/10
Leadership	Membership in economic or social groups and comfort in speaking in public.	Group member	1/10
		Speaking in public	1/10
Time	Allocation of time to productive and domestic tasks and satisfaction with the available time for leisure activities.	Workload	1/10
		Leisure	1/10

RESULTS AND DISCUSSION

Demographic and Socioeconomic Characteristics in the study areas.

In the following section, Table (2) shows the relative and numerical distribution of the

respondents in each of the study villages according to their socio-economic and demographic characteristics.

This study reveals that 85.33% of women in the highly developed village fall into the category

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of 40 years old or younger, whereas in the low-developed village, this figure stands at 67.80%. The remaining portion consisted of 24.00% of the sample over 40 years old located in the highly

developed village, while 23.20% were found in the low-developed villages, as illustrated in Fig (1).

Table 2: Demographic and Socioeconomic Characteristics in the study areas.

Variables	Villages			
	Um Al-Qura (High-developed village)		Arimon (Low-developed village)	
	frequency	%	frequency	%
Age				
≤ 40	57	76.00	96	67.80
> 40	18	24.00	29	23.20
Total	75	100	125	100
Marital status				
Married	61	81.33	116	92.80
Not Married	14	18.67	9	7.20
Total	75	100	125	100
Education Level				
Illiterate	9	12.00	42	33.60
Read and write	23	30.67	33	26.40
Average Academic Degree	30	40.00	32	25.60
High Educational Degree	13	17.33	18	14.40
Total	75	100	125	100
Household size				
≤ 5	26	34.67	40	32.00
> 5	49	65.33	85	68.00
Total	75	100	125	100
Sufficiency of monthly income				
Sufficient	7	9.33	13	10.40
Not Sufficient	68	90.67	112	89.60
Total	75	100	125	100
Community participation				
Participated	33	44.00	49	39.20
Not Participated	42	56.00	76	60.80
Total	75	100	125	100

Source: Calculated from the study data.

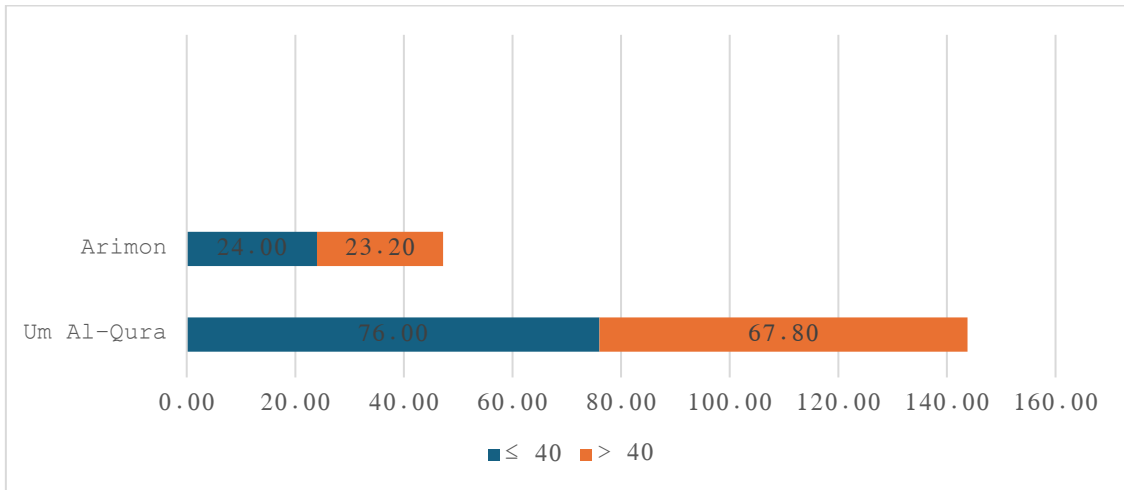


Fig. (1): Respondent's Age.

According to Table (2) and Fig. (2) it seems that 92.80% of the study samples in low-developed villages (Arimon) are married and

81.33% of the study samples are in high-developed villages.

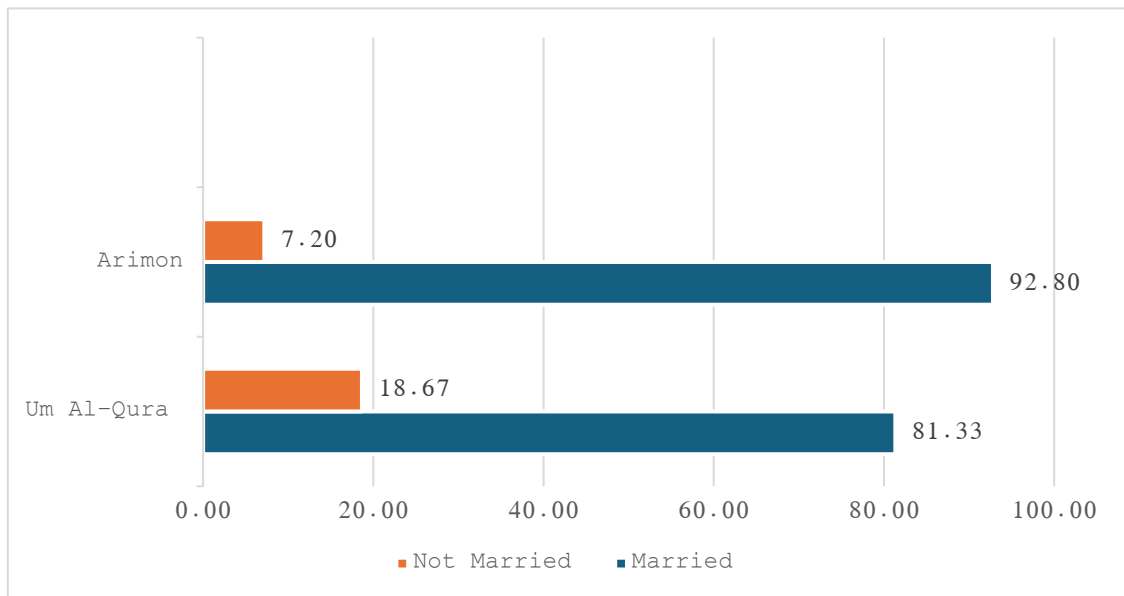


Fig. (2): Respondent's Marital Status.

As shown in Fig. (3), about 40% of the sample represents respondents who possess average education degrees in Um Al-qura village. However, 31% of the sample only knew how to read and write in Um Al-qura village, 27% knew in Arimon village, and 25.60% knew in Arimon village. The set of farmers who have university degrees is 17% of the total sample of Um Al-qura

village and 14% of the total sample of Arimon village.

From Fig. (4) it seems that the total number of households that have more than 5 people in Um Al-qura village was 65% but it was 68% in Arimon village while it was 35% in Um Al-qura village for the households that have fewer than 5 people and 32% for Arimon village.

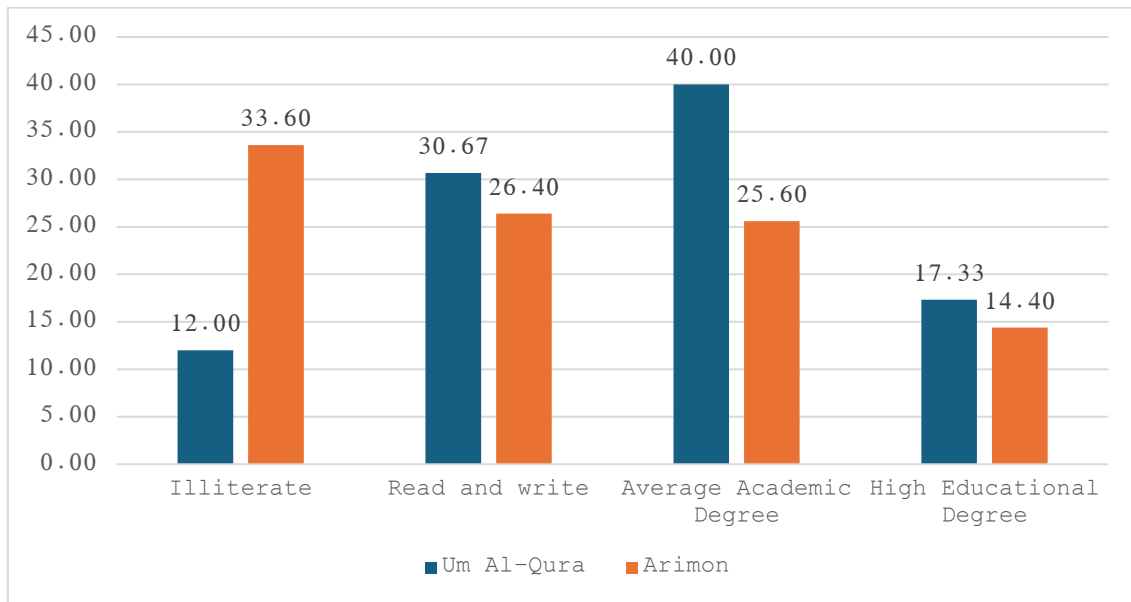


Fig. (3): Respondent's Education Level.

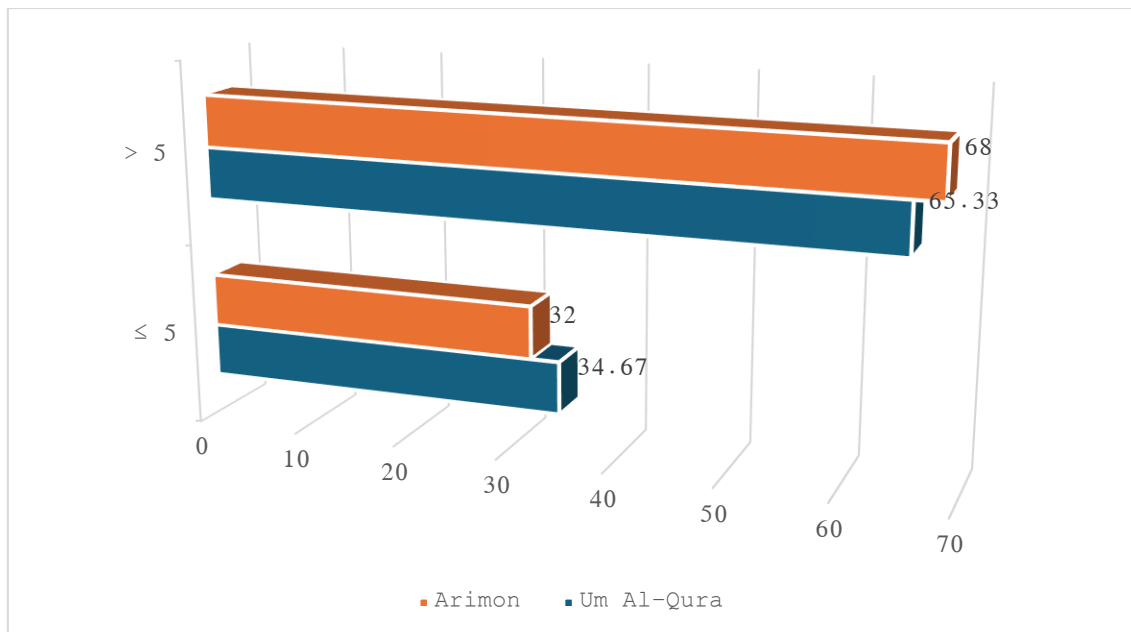


Fig. (4): Respondent's household size.

Figure (5) indicates that the proportion of households perceiving their monthly income as sufficient is 10% in Um Al-qura village, followed by 9% in Arimon village. Conversely, the

percentage of households that do not consider their monthly income sufficient stands at 91% in Um Al-qura village and 90% in Arimon village.

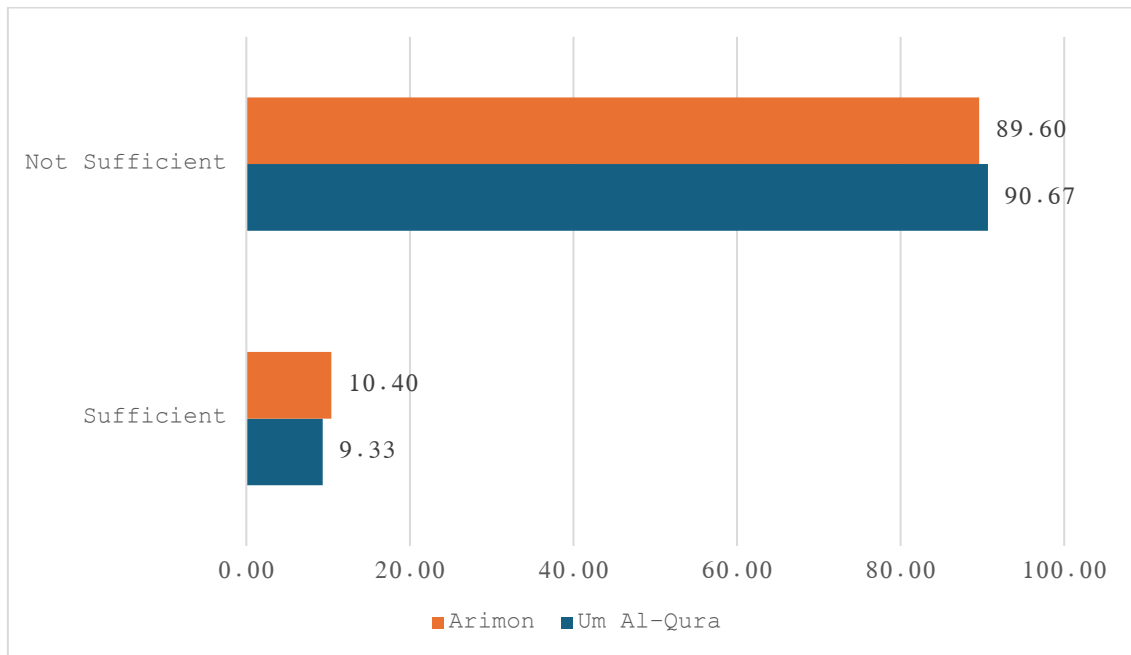


Fig (5): Respondent’s Sufficiency of monthly income.

Fig. (6) shows that the total number of households that participate in community activities was 44% of the total sample in Um Al-qura village followed by 39% in Arimon village,

while 56% of the total sample in Um Al-qura village aren’t participating in community activities to 61% in Arimon village.

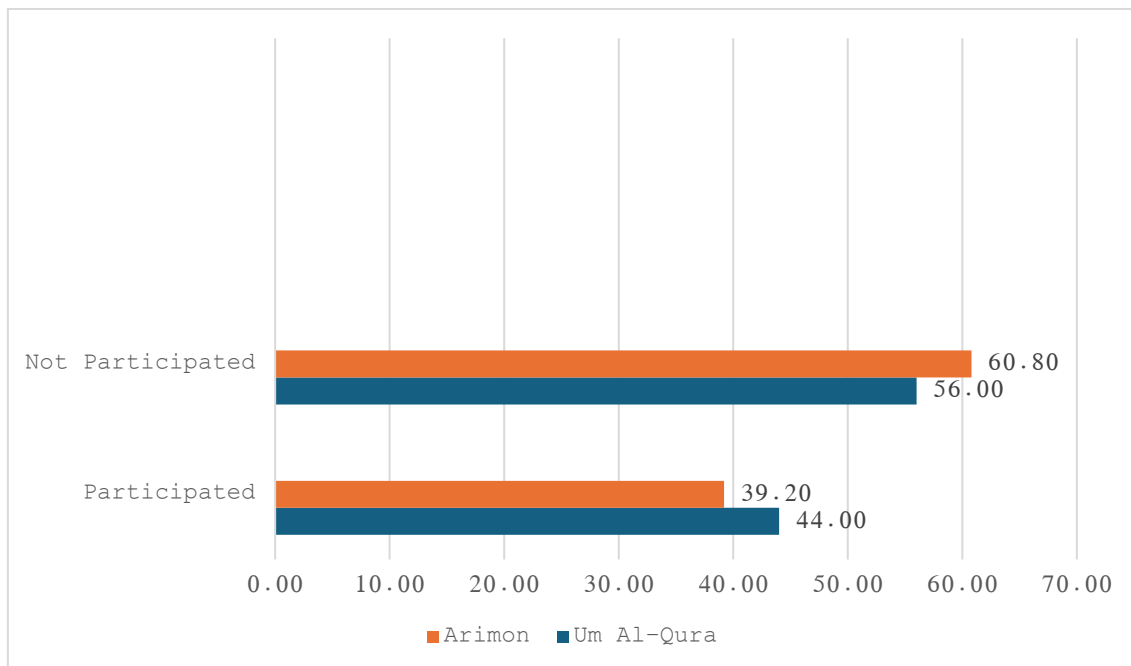


Fig. (6): Degree of Respondent’s Community participation.

Scores for indicators of women empowerment in agriculture index (WEAI) in the study areas.

At the level of questions posed to the respondents women, Table (3) shows that about 39% of women in Um-Alqura village participated in agricultural activities in the last cropping season but they were about 49% in Arimon village, and about 23% from women in Um-Alqura village participated in land Plowing and cultivation while they were about 38% in Arimon village, about 66% of women in Um-Alqura village participated in crop storage but about 62% of them in Arimon village. About 11% of women in Um-Alqura village participated in crop transport and about 9% in Arimon village, Approximately, 59% of women in Um-Alqura village participated in crop packing to 48% in Arimon village, About 81% of women in Um-Alqura village participated in crop harvesting and about 66% of women in Arimon village participated in crop harvesting, 86% of women participated in pest control in Um-Alqura village, but about 66% of women in Arimon village participated in pest control, 4% of women participated in crop irrigation, and 9% of women participated in crop irrigation in Arimon village, In wedding and fertilizing about 9% and 12% of women participated in Um-Alqura village, and 8% and 10% of women participated in Arimon village, About 19% of women participated in sowing seeds in Um-Alqura village, and 16% of them participated in Arimon village, According to making decisions about agricultural activities, households life, using income 28%, 89%, 65% of women participated in Um-Alqura village respectively versus 53%, 79%, 77% of women in Arimon village. About 77% of women own their production items in Um-Alqura village versus 82% of women in Arimon, 49%, and 28% decide the cultivated crops in their farm and cultivated area for each crop in Um-Alqura village respectively versus 54% and 39% in Arimon

village. About 57% of women in Um-Alqura village versus 89% in Arimon village own some assets (land, Livestock, Poultry, Farm equipment, House or building, large durables, golden jewelry, car for agricultural activities.... etc.). In Um-Alqura village 54% of women decide whether to sell, give away, mortgage, or rent out different items that the household currently has, versus 87% of them in Arimon village. Approximately 7% of women have obtained loans or borrowed cash/in-kind from various sources in the past 12 months, with 50% of them possessing the autonomy to decide the allocation of the funds, compared to 23% and 73% in Arimon, respectively. In Um-Alqura village, 57% of women and in Arimon, 82% of women consistently make decisions regarding the allocation of income derived from crop farming, livestock raising, poultry processing, non-farm economic activities, and wage employment. About 79% of women in Um-Alqura and 78% of women in Arimon make an input in decisions on the use of outputs to keep for consumption at home rather than selling from food crop farming, cash crop farming, livestock raising, non-farm economic activities, and wages. In Arimon village, 47% of women were active members of various community groups, while approximately 63% of women in Um-Alqura village were. In Um-Alqura village, 44% of women reported feeling at ease discussing matters that are significant to them, their families, or their community in public, while in Arimon village, this figure was only 50%. In the past week, 28% of women in Um-Alqura village engaged in agricultural activities that lasted for more than 8 hours, while 58% of women in Arimon village did the same. Women in Um-Alqura village are approximately 51% satisfied with their available time for leisure activities, such as visiting neighbors, watching TV, listening to the radio, and watching movies, while in Arimon village, the percentage is 91%.

Table 3: Scores for indicators of women empowerment in agriculture index (WEAI) in the study areas.

Indicators	Questions	Score			
		Um Alqura (High-developed village)		Arimon (Low-developed village)	
		Frequency	%	Frequency	%
Input in productive decisions	I participated in agricultural activities in the last cropping seasons (past 12 months).	29	38.67	61	48.80
	I participated in land Plowing and cultivation.	17	22.67	47	37.60
	I participated in crop storage	49	65.33	77	61.60
	I participated in crop transport.	8	10.67	11	8.80
	I participated in crop Packing.	44	58.67	59	47.20
	I participated in crop Harvesting.	61	81.33	83	66.40
	I participated in Pest control.	51	68.00	58	46.40
	I participated in Irrigation.	3	4.00	11	8.80
	I participated in the Wedding.	7	9.33	10	8.00
	I participated in Fertilizing.	9	12.00	13	10.40
	I participated in sowing seeds.	14	18.67	20	16.00
	Always I make decisions about several agricultural activities.	21	28.00	66	52.80
	I feel that I can make personal decisions regarding these aspects of household life if I want.	33	44.00	99	79.20
	I normally take the decision regarding aspects of household life.	67	89.33	109	87.20
I have a huge input in decisions on the use of income generated from these agricultural activities	49	65.33	97	77.60	
Autonomy in production	My household currently owns several items of production (instruments, land, warehouse, machines...etc).	58	77.33	102	81.60
	I own several items of production.	61	81.33	98	78.40
	I can decide on cultivated crops next season.	37	49.33	68	54.40
	I can decide the cultivated area for each crop.	21	28.00	49	39.20
Ownership of assets	I own some assets (land, Livestock, Poultry, Farm equipment, house or building, large durables, golden jewellery, car for agricultural activities.... etc.).	71	56.80	112	89.60
Purchase, sale, or transfer of assets	I can decide whether to sell, give away, mortgage, or rent different items that the household currently has.	68	54.40	109	87.20
	I can decide whether to purchase different items for my household.	63	84.00	105	84.00
Access to and decisions on credit	I or anyone in my household would be able to take loan/borrow cash or in-kind if you wanted to.	35	46.67	98	78.40
	Some of my household members have taken loans or borrowed cash/in-kind from several sources in the past 12 months.	5	6.67	29	23.20
	I can decide to take a loan or borrow cash/in-kind.	66	88.00	101	80.80
	I decide what to do with loans or cash that I or any one of my households take.	71	49.67	91	72.80
Control over use of income	Always, I make decisions on the use of income generated from crop farming, livestock raising, poultry processing, nonfarm economic activities, and wage and salary employment.	43	57.33	103	82.40
	I make input in decisions on the use of outputs to keep for consumption at home rather than selling food crop farming, cash crop farming, livestock raising, non-farm economic activities, and wages.	59	78.67	97	77.60

Table 3: Cont.

Indicators	Questions	Score			
		Um Alqura (High-developed village)		Arimon (Low-developed village)	
		Frequency	%	Frequency	%
Group member	There are different groups in my community.	57	76.00	49	39.20
	In my community, there is an Agricultural / livestock/ fisheries group.	21	28.00	26	20.80
	In my community, there are producer groups.	10	13.33	11	8.80
	In my community, there are Water user groups.	9	12.00	3	2.40
	In my community, there are Credit or microfinance groups.	39	52.00	23	18.40
	In my community, there is a mutual help or insurance group.	1	1.33	1	0.80
	In my community, there are Trade and business associations.	6	8.00	1	0.80
	In my community, there are Civic groups or charitable groups.	49	65.33	59	47.20
	In my community, there are religious groups.	17	22.66	23	18.40
	I am an active member of different groups in my community.	63	84.00	47	37.60
	I think that I am an active member of a group in the community.	66	88.00	48	38.40
Speaking in public	I felt comfortable speaking in public about issues that are important to me, my family, or my community.	33	44.00	63	50.40
	Already I had spoken up in public in the last three months on an issue that is important to the community.	8	10.66	19	15.20
Workload	I spent more than 8 hours on certain agricultural activities in the last week.	21	28.00	73	58.40
	I spent more time on land Plowing and cultivation during the past week.	9	12.00	22	17.60
	I spent more time on crop storage during the past week.	44	58.66	13	10.40
	Crop transport was the most activity that consumed my time last week.	3	4.00	41	32.80
	My daily schedule is always the same.	69	92.00	108	86.40
	I spent more than 8 hours in crop Packing.	27	36.00	71	56.80
	Crop Harvesting is the most activity-consuming time.	61	81.33	88	70.70
	Pest control is a process that extends to all the seasons.	71	94.66	117	93.60
	My activities change from day to day.	14	18.67	46	36.80
	I spent less time on crop irrigation.	6	8.00	17	13.60
	In the last 24 hours, I worked more than usual, about the same as usual, or less than usual.	53	70.60	79	63.20
	I spent less than 4 hours fertilizing last week.	11	14.66	7	5.60
Leisure	I am satisfied with my available time for leisure activities like visiting neighbors, watching TV, listening to the radio, seeing movies... etc.	38	50.66	113	90.40
	The last 24 hours I spent all my time with myself.	19	25.33	33	26.40
	In my opinion, the word "leisure" means every time I must do my activities for myself.	66	88.00	111	88.80

WEAI consists of 5 Domain with 10 indicators and 56 questions, the total arithmetic mean for the index was 25.20 in Um-Alqura village which is considered high developed village with a standard deviation of 23.56 and the arithmetic mean for the index in Arimon village which is considered low developed village was 40.16 with standard deviation 37.36 which means that the numbers in the first low developed village tend to be larger, or that higher values are affecting the average in that group more significantly. This may also reflect differences in performance, productivity, or comparative characteristics between the two villages. So, the degree of women’s empowerment in agriculture in the low-developed village (Arimon) was more than in the high-developed village (Um-Alqura). Agricultural empowerment in the low-development village exceeds that of the high-development village, as farmers in the resource-scarce area exert greater effort to enhance their agricultural conditions and

attain sustainability, likely due to pressing necessities. Conversely, the high-development level village may enjoy resources and comforts that make its residents less engaged in improving or developing their agricultural practices. or this could indicate that agricultural practices, government support, educational resources, and agricultural services are more effective in the low-development level village, even though expectations might be the opposite in higher-development environments.

On the domain level, it appears that the domain of income comes first, followed by resources, production, time, and finally leadership in the high developed village (Um Alqura), whereas in the low-developed village (Arimon), the domain of income comes first, followed by resources, time, production, and finally leadership, indicating that there are minor differences between the studied villages on WEAI, as shown in Table (4).

Table 4: Domains results of WEAI in the study areas.

Domains	Um Al-Qura (High-developed village)		Arimon (Low-developed village)		Total villages	
	mean	order	mean	order	mean	order
Production	25.24	3	46.36	4	34.21	3
Resources	42.48	2	85.53	2	60.27	2
Income	50.37	1	99.95	1	70.95	1
Leadership	18.14	5	15.71	5	16.88	5
Time	23.88	4	47.01	3	33.51	4
Mean	25.20		40.16		38.33	

This study tried to find the relationships between the degree of women’s empowerment in agriculture and the other independent variables including age, marital status, sufficiency of monthly income, household size, education level, community participation, and village type), many different statistical tests has been done such as chi2 test to measures the relationships between dependent and independent variables, and t-test to measure the mean differences between the studied villages and Kendall’s tau to measure the strength and direction of a relationship between dependent variable and independent variables. The value of

a correlation coefficient can range from -1 to 1, with -1 indicating a perfect negative relationship, 0 indicating no relationship, and 1 indicating a perfect positive relationship. As shown in Table (5) results of the chi2 test emphasize that there is a significant relationship between women’s empowerment in agriculture and variables (Marital status, Sufficiency of monthly income, Household size, Education Level, Community participation, village type) on the significance level 0.01 but here is a significant relationship between women’s empowerment in agriculture and variable (Age) on the significance level 0.05.

Kendall's Tau value shows that there is a negative correlation relationship between women's empowerment in agriculture and variables (Age, Marital status, Sufficiency of monthly income, village type) but there is a positive correlation relationship between women's empowerment in agriculture and variables (Household size, Education Level, Community participation). The chi² value was 7.90 which is mean that there is a significant relationship between women's age and their empowerment in agriculture on the significance level 0.05, chi² value was 95.22 which is mean that there is a significant relationship between women's marital status and their empowerment in agriculture on the significance level of 0.01, chi² value was 35.04 which is mean that there is a significant relationship between women's sufficiency with monthly income and their empowerment in

agriculture on the significance level of 0.01, chi² value was 97.73 which is mean that there is a significant relationship between women's household size and their empowerment in agriculture on the significance level of 0.01, chi² value was 59.28 which is mean that there is a significant relationship between women's education level and their empowerment in agriculture on the significance level of 0.01, chi² value was 73.02 which is mean that there is a significant relationship between women's participation in their local community and their empowerment in agriculture on the significance level of 0.01, chi² value was 44.58 which is mean that there is a significant relationship between villages' development level and women's empowerment in agriculture on the significance level of 0.01.

Table 5: Results for relationships between dependent variable and independent variables.

Independent Variables		Dependent Variable				t
		Um Al-Qura (High-developed village)		Arimon (Low-developed village)		
		Kendall's Tau	Chi ²	Kendall's Tau	Chi ²	
Age	≤ 40	0.117	7.90*	0.164	13.22*	0.975
	> 40					
Marital status	Married	-0.367	95.22**	0.841	136.04**	2.43**
	Not married					
Sufficiency of monthly income	Sufficient	-0.310	35.04**	0.295	27.73**	4.69*
	Not sufficient					
Household size	≤ 5	0.520	97.73**	0.538	130.42**	1.38
	> 5					
Education Level	Educated	0.396	59.28**	0.293	38.59	4.37*
	Not educated					
Community participation	Participated	0.117	73.02**	-0.337	51.01**	3.49*
	Not participated					
village type	High developed	-0.426	44.58**	-0.410	44.588	4.36*
	Low developed					

* Significant on 0.05.

**Significant on 0.01.

t-test values show that there is no relationship statistically significant between the variables of (age and household size) and women's empowerment in agriculture. The villages studied

don't have any significant difference according to these two independent variables. However (sufficiency of monthly income, education level, community participation, and village type) have a

significant difference on the level of 0.05 except the variable of marital status has a significant difference at the significance level of 0.01, which means that there is relationship statistically significant between the variables of (Sufficiency of monthly income, education level, community participation, village type) and women's empowerment in agriculture which is confirmed by the results of Kendall's tau test as it shown in Table (5).

The main obstacles influencing Agricultural empowerment for rural women in the study areas.

Results from Table (6) clear the main obstacles influencing rural women's empowerment in agriculture in the study areas. It is clear that 94% of women in study areas sees cultural and social constraints that restrict the agricultural work of rural women is the most obstacles followed by weak agricultural extension

services and the absence of the role of rural female leaders in enhancing agricultural productivity with approximately 87% then low awareness among women of the importance of their role in rural development in general and economic development in particular with 84.50 then rural women's inability to balance between household duties and agricultural work requirements with 84% then their thinking about the Hard physical effort needed for agricultural work with 78% followed by Lack of governmental support for agricultural sector with 72% then Lack of sufficient education and training that would enable women to develop their agricultural skills with 57% then small size of land ownership for rural women and, in some cases, their complete absence with about 53% then low wage level for rural women with 51% while, difficulty of marketing rural women's products, difficulty for rural women to access agricultural information, Lack of available job opportunities to rural women comes respectively with 45%, 44%, 36%.

Table 6: Main obstacles influencing rural women empowerment in agriculture in the study areas.

Obstacles	Frequencies	%
1- Cultural and social constraints that restrict the agricultural work of rural women.	188	94.00
2- Low awareness among women of the importance of their role in rural development in general and economic development in particular.	169	84.50
3- Weak agricultural extension services and the absence of the role of rural female leaders in enhancing agricultural productivity.	173	86.50
4- Limited access to resources such as land, equipment, fertilizers, pesticides.... etc. for women.	96	48.00
5- Lack of sufficient education and training that would enable women to develop their agricultural skills.	114	57.00
6- Small size of land ownership for rural women and, in some cases, their complete absence.	105	52.50
7- Low wage level for rural women.	102	51.00
8- Lack of available job opportunities to rural women.	71	35.50
9- Difficulty of marketing rural women's products.	89	44.50
10- Rural Women's inability to balance household duties and agricultural work requirements.	168	84.00
11- Hard physical effort is needed for agricultural work.	155	77.50
12- Difficult for rural women to access agricultural information.	87	43.50
13- Lack of governmental support for the agricultural sector.	144	72.00

Conclusion and Recommendation

Empowering women in the agricultural sector, especially in Egypt, goes beyond gender equality;

it's a strategic imperative for sustainable growth and food security. Although women make significant contributions to agriculture, their

efforts are often unrecognized and undervalued. By tackling the challenges they face, we can enable them to realize their full potential and bring about meaningful change in rural areas. The following measures are crucial for empowering women in Egypt's agricultural sector: Policy and legal reforms should be enacted and enforced to ensure women's equal rights to land ownership, inheritance, and access to credit. Policies that promote women's participation in decision-making at all levels of agricultural governance should be developed. Affirmative action policies are needed to enhance women's representation in agricultural extension services and cooperatives, along with improved access to resources and training. Provide women with access to agricultural inputs, loans, and technology to enhance their productivity. Offer targeted training programs in modern agricultural techniques, financial literacy, and entrepreneurship. Establish agricultural extension services tailored for women to meet their specific needs and challenges. Infrastructure Development: Invest in rural infrastructure, such as irrigation systems, roads, and storage facilities, to improve women's access to markets and reduce post-harvest losses. Promote the use of labor-saving technologies to lighten women's workloads and increase their productivity. Social and cultural change: challenge traditional gender norms and perceptions that restrict women's roles and opportunities in agriculture. Raise awareness about the importance of women's empowerment through education and community engagement. Support men's involvement in assisting women's participation in agricultural activities and decision-making processes. Encouraging men to support women in agricultural activities and decision-making is crucial. Gathering gender-disaggregated data is important to monitor women's progress in agriculture and identify their specific needs. Studies on the impact of programs designed to empower women farmers should be conducted. Policies and programs should be shaped by evidence-based methods. Implementing these strategies can help Egypt maximize its female agricultural workforce, leading to increased food production, enhanced livelihoods, and a more equitable society.

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تمكين المرأة الريفية في الزراعة في مصر

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الملخص العربي

إن تمكين النساء الريفيات في القطاع الزراعي في مصر له أهمية بالغة، لما للدور المحوري للنساء الريفيات في تعزيز المرونة الاقتصادية. تشير الأدلة إلى أن معالجة الفجوات القائمة بين الجنسين لا يخفف فقط من الصعوبات الاقتصادية التي تواجه النساء، بل يساهم أيضاً بشكل كبير في تعزيز الإنتاجية والاستدامة الزراعية بشكل عام. هذا يتماشى مع الأهداف الشاملة التي أبرزتها (مؤسسة ويليام وفلوراهيوليت، ٢٠١٣)، والتي تؤكد على ضرورة استراتيجيات شاملة لتمكين المرأة اقتصادياً كأمر أساسي لتحقيق المساواة بين الجنسين والنمو الاقتصادي. وهذه الجهود المستمرة لتمكين النساء في الزراعة ستعمل على دفع مصر نحو أهداف التنمية المستدامة وضمان الاستدامة على المدى الطويل لاقتصاديات المجتمعات الريفية. استخدمت الدراسة الحالية مؤشر WEAI (Women Empowerment in Agriculture Index) لتحديد مستوى التمكين الزراعي للنساء الريفيات في قريتين من محافظة كفر الشيخ، إحداهما تعتبر قرية متطورة (أم القرى) والأخرى تعتبر قرية أقل تطوراً (أريمون) وتستخدم الدراسة ٥ مجالات يعبر عنهم ١٠ مؤشرات و٥٦ سؤالاً، وكان المتوسط الحسابي الإجمالي للمؤشر ٢٥,٢٠ في قرية أم القرى مع انحراف معياري ٢٣,٥٦، وكان المتوسط الحسابي للمؤشر في قرية أريمون ٤٠,١٦ مع انحراف معياري ٣٧,٣٦، مما يعني أن مستوى تمكين النساء الريفيات في الزراعة في القرية الأقل في المستوى التنموي يميل إلى أن يكون أعلى من مستوى تمكين النساء الريفيات في الزراعة في القرية ذات المستوى التنموي الأعلى وهذا قد يفسر بأن المزارعون في القرية الأقل تطوراً وذات الموارد القليلة يسعون أكثر لتحسين وضعهم الزراعي وتحقيق الاستدامة، على العكس، قد تستمتع القرية ذات المستوى التنموي المرتفع بالموارد والراحة التي تجعل سكانها أقل انخراطاً في تحسين أو تطوير ممارساتهم الزراعية. أو قد يشير هذا إلى أن الممارسات الزراعية، والدعم الحكومي، أو الموارد التعليمية والخدمات الزراعية أكثر فعالية في القرية ذات المستوى التنموي المنخفض، على الرغم من أن التوقعات قد تكون عكس ذلك في البيئات ذات المستوى التنموي الأعلى.

الكلمات المفتاحية: المرأة الريفية في مصر، التمكين الزراعي للمرأة الريفية، النوع الاجتماعي في الزراعة.