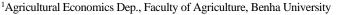
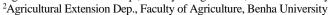
### Journal of Agricultural Economics and Social Sciences

Journal homepage & Available online at: www.jaess.ekb.eg

# The Socioeconomic Role of Small and Micro Agricultural Projects in Supporting Sustainable Development in Qalyubia Governorate

Elhabbaq, M. M.<sup>1</sup>; Rabab S. A. Mohammed<sup>2</sup> and Fatma A. M. ElBateh<sup>1\*</sup>











#### **ABSTRACT**

This research delves into the pivotal role of micro and small enterprises (MSEs) in propelling economic growth and social development within Qalyubia Governorate, Egypt, spanning the period from 2010 to 2022. By employing a data for the study was derived from both secondary and primary sources which collected through a questionnaire administered to a random sample of micro and small enterprises owners in Qalyubia. The study examines the sectoral composition, create job opportunities, and economic contributions of MSEs while identifying the challenges they encounter. Findings underscore the dominance of the service sector within the MSEs landscape yet highlight the substantial growth potential residing in the industrial and agricultural sectors. Micro-enterprises, particularly those led by women, emerge as key drivers of job creation. Despite operational constraints, including limited access to finance and infrastructure, MSEs demonstrate resilience and substantial contributions to the local economy. To optimize the role of MSEs in sustainable development, the study emphasizes the necessity of targeted policy interventions. These include enhancing access to finance, improving infrastructure, and streamlining bureaucratic processes. Economic efficiency analysis reveals variations across sectors, with organic fertilizer manufacturing emerging as a particularly viable option. By addressing the identified challenges and capitalizing on the strengths of MSEs, Qalyubia Governorate can foster a more inclusive and sustainable economic trajectory. The research concludes that MSEs are vital contributors to the governorate's economy and social fabric. To fully unlock their potential, a comprehensive policy framework is essential, encompassing financial support, capacity building, infrastructure development, and regulatory reforms.

*Keywords:* micro and small enterprises, MSEs, Qalyubia Governorate, socioeconomic impact, sustainable development

### INTRODUCTION

Micro and Small Enterprises (MSEs) play a pivotal role in driving Egypt's economic development. They contribute approximately 43% of the total gross domestic product (GDP), and provide over 75% of the total employment in the Egyptian market(Ministry of Planning and Economic Development, 2023). Egypt is one of the largest Arab countries in terms of the number and density of MSEs, with approximately 2.45 million projects, to which about 39,000 new projects are added annually (Ministry of Planning and Economic Development, 2022).

Recognizing the significance of this sector, the Egyptian government is actively supporting it through initiatives aimed at providing financing, empowering women, offering various services, training and qualifying human resources, and establishing a culture of self-employment (Ministry of State for Financial Affairs, 2022).

Data from 2022 indicates that the total financing provided to small and micro projects amounted to 6.8 billion Egyptian pounds. During 2022, 221.8 thousand small and micro projects were established, creating 367.6 thousand job opportunities, with the commercial sector leading in terms of financing (Central Agency for Public Mobilization and Statistics, 2023).

Law No. 152 of 2020 promulgating the Micro, Small and Medium Enterprises Development Law (updated until

2023) clearly defines a newly established project as one that has not been established, registered, or carried on its activity for more than two years. (FAOLEX Database, 2023)

The Law defines SMEs based on turnover and capital, categorizing them into Medium Projects (EGP 50 million to EGP 200 million), Small Projects (EGP 1 million to less than EGP 50 million), and Micro Enterprises (annual turnover below one million pounds or capital below 50 thousand pounds).

#### **Research Problem:**

Despite government efforts to support it, the Micro and Small Enterprises (MSEs) sector in Egypt faces significant challenges that hinder its growth and development. These challenges include weak growth rates, financial, production, and marketing risks, and a lack of comprehensive understanding of the impact of MSEs on the economy, and Egypt's ranking of 120 in the ease of "DoingBusiness" index, among 190 countries, and the rank 160 in "Access to Credit" index, in addition to the rank 171 in the "Cross-Border Trade" index, which limits their impact on achieving economic and social development goals. (Qandil, 2019)

#### **Study Objectives:**

This study aims to:

1.Identify the current status of small and micro enterprises in Egypt in general, with a focus on Qalyubia Governorate.

\* Corresponding author. E-mail address: fatma.albth@fagr.bu.edu.eg DOI: 10.21608/jaess.2024.311203.1322

- 2.Analyze the economic and social impacts of small and micro enterprises in Qalyubia Governorate, by studying five types of enterprises:
- Yogurt production plants.
- Organic fertilizer (compost) manufacturing projects.
- Apiaries for producing white honey from wooden hives.
- Rabbit breeding projects in batteries.
- Livestock breeding projects.
- 3.Determine the economic and social characteristics of the owners of small projects from the sample.
- 4.Assess the economic efficiency of the five mentioned projects.
- 5.Identify the main obstacles hindering the operation of these projects.
- 6.Develop solution mechanisms for the advancement of small and micro enterprises in Qalyubia Governorate, in a way that contributes to achieving sustainable development goals.

#### **Research Methodology and Data Sources**

The study employed a combination of descriptive and quantitative analysis. Descriptive statistics, such as means and percentages, were used to characterize the sample and analyze the data.

Data for the study was derived from both secondary and primary sources. Secondary data was collected from government agencies like the Ministry of Planning, Ministry of Agriculture, and the Social Development Fund, as well as international organizations, previous research, and online government databases.

Primary data was collected through a questionnaire administered to a random sample of micro and small enterprise (MSE) owners in Qalyubia Governorate. The sample consisted of 120 respondents. The sample was distributed across five different project types: yogurt

production plants (25 respondents), organic fertilizer (compost) manufacturing (15 respondents), honey production from wooden hives (20 respondents), rabbit farming in batteries (35 respondents), and livestock farming (25 respondents). Respondents were randomly selected from villages within the chosen centers: Moshtohr, Beltan, and Mit Kenana in Tukh Center; Dugwi, Tahla, and Mitel Attar in Benha Center; and Abu Zabal, Kafr Hamza, and Arab elAyaida in Khanka Center.

#### **RESULTS AND DISCUSSION**

First: Analysis of the Current Status of Micro and Small Enterprises (MSEs) During the Period (2010-2022):

### 1- Distribution of Micro and Small Enterprises (MSEs) in Qalyubia Governorate during 2020-2023

Table (1) presents a sectoral distribution of micro and small enterprises (MSEs) in Qalyubia Governorate during the period 2020-2023. The data underscores the dominance of the commercial sector, which constitutes 47.5% of total enterprises and 61.2% of total employment opportunities, signifying its pivotal role in the local economy. The Service sector follows, accounting for 39.4% of enterprises and 23.6% of employment, emphasizing its significance in consumer goods and services provision.

Conversely, the industrial and agricultural sectors, represented by 4.5% and 8.0% of total enterprises respectively, demonstrate a relatively smaller scale of operation. These sectors face challenges in terms of expansion and job creation due to factors such as competition and production costs. The agricultural sector, particularly characterized by micro-enterprises, reflects a focus on subsistence farming and Creating jobsin rural areas.

Table 1. the Number of Micro and Small Enterprises in Oalyubia Governorate during the Period (2020 – 2023)

	Micro	Micro Enterprises					Small Enterprises				Total			
Sector	Number of		Number		Number of		Number		Number of		Number			
	Job	<b>%</b>	of	%	Job	<b>%</b>	of	<b>%</b>	Job	%	of	<b>%</b>		
	Opportunities		<b>Enterprises</b>		Opportunities		<b>Enterprises</b>		Opportunities		<b>Enterprises</b>			
Industrial Sector	2659	10.5	877	6.2	125	3.29	24	0.4	2784	9.5	901	4.5		
Livestock Production	1202	4.7	1530	10.8	233	6.14	85	1.41	1435	4.9	1615	8.0		
Service Sector	5627	22.1	2438	17.3	1261	33.2	5497	91.3	6888	23.6	7935	39.4		
Commercial Sector	15698	61.8	9148	64.9	2170	57.2	412	6.84	17868	61.2	9560	47.5		
Freelance Professions	227	0.9	110	0.8	6	0.16	1	0.02	233	0.8	111	0.6		
Total	25413	100	14103	100	3795	100	6019	100	29208	100	20122	100		

Source: Micro, Small and Medium Enterprises Development Agency (MSMEDA), MSMEDA Achievements Report, Qalyubia Governorate, 2023.

A notable observation is the prevalence of small enterprises within the service sector, constituting 91.3% of total enterprises in this category. While contributing to employment generation, these small enterprises often face limitations in terms of growth and productivity.

To enhance the contributions of these sectors to the local economy, strategic interventions are necessary. These include investment incentives for the industrial sector, support for farmers through financing and training in the agricultural sector, and comprehensive support for micro and small enterprises across all sectors to foster growth and competitiveness.

#### 2. Analysis of the Total Number of Micro and Small Enterprises from 2010 to 2022

Data from Table (2) indicates that the total number of micro and small enterprises averaged around 189.2 thousand projects during the study period. The number of micro and small enterprises (MSEs) exhibited significant fluctuations between 2017 and 2020, ranging from a low of 138,100 in 2020 to a peak of 252,240 in 2017. This represents approximately 114,140 MSEs, or 82.6% of the total number of MSEs in 2020. These fluctuations indicate a dynamic and responsive MSE sector influenced by various economic and policy factors.

An examination of the time trend of the total number of micro and small enterprises reveals, according to Equation (1) in Table (4), that the total number of micro, small, and medium-sized enterprises (MSMEs) has taken a positive but statistically insignificant trend, which reflects the relative stability of it around its annual average.

### 3. Evolution of the Number of Micro-Enterprises from 2010 to 2022

Data from Table (2) indicates that the average number of micro-enterprises during the study period was approximately 171 thousand projects, representing around 90.4% of the total number of micro and small enterprises during the study period. The number of micro-enterprises witnessed a decline in 2020, reaching approximately 120.1 thousand projects. An examination of the overall time trend of the number of micro-enterprises reveals, according to Equation (2) in Table (4), that the number of micro-enterprises exhibited a statistically non-significant increasing trend, which reflects the relative stability of it around its annual average.

### 4.Analysis of the Number of Small Enterprises from 2010 to 2022

During the study period, the average number of small enterprises stood at approximately 18,200 projects, representing around 9.6% of the total number of micro and small enterprises. The number of small enterprises fluctuated between periods of growth and decline, reaching its highest level in 2021 with approximately 35,000 projects, constituting about 17.6% of the total number of small enterprises in that year. An estimation of the annual growth rate for the number of small enterprises revealed a generally increasing trend that is statistically significant at a significance level of 0.05. The estimated annual increase in the number of small enterprises is approximately 1,113 thousand projects, with an annual growth rate of around 6.12% during the study period. These findings underscore the significant importance placed by the Egyptian government on micro and small enterprises due to their crucial role in achieving economic and social development.

Table 2. Evolution of the Number of Micro and Small Enterprises and Beneficiaries in the Arab Republic of Egypt during the Period (2010-2022)

Year		Number of Micro Enterprises (Thousand)	%	Number of Male Beneficiaries from Micro Enterprises (Thousand)	%	Number of Female Beneficiaries from Micro Enterprises (Thousand)	%	Total Number of Small Enterprises (Thousand)	%	Number of Male Beneficiaries from Small Enterprises (Thousand)	%	Number of Female Beneficiaries from Small Enterprises (Thousand)	%
2010	165.4	155.9	94.3	70.6	45.3	85.3	54.7	9.43	5.7	6.8	72.11	2.6	0.28
2011	145.1	127	87.5	60.6	47.7	66.4	52.3	18.13	12.5	13.4	73.91	4.7	0.26
2012	166.3	148.2	89.1	77.3	52.2	70.9	47.8	18.10	10.9	13.6	75.14	4.5	0.25
2013	186.9	174.3	93.3	97	55.7	77.3	44.3	12.60	6.7	9.4	74.60	3.1	0.25
2014	178.4	162.4	91.0	86.7	53.4	75.6	46.6	16.04	9.0	12.5	77.93	3.5	0.22
2015	207.6	188.3	90.7	104.9	55.7	83.4	44.3	19.34	9.3	15	77.56	4.4	0.23
2016	204.7	187.6	91.6	96.8	51.6	90.8	48.4	17.05	8.3	12.2	71.55	4.8	0.28
2017	252.2	236.1	93.6	114.8	48.6	121.3	51.4	16.17	6.4	11.2	69.26	5	0.31
2018	251.1	234.6	93.4	120.2	51.2	114.3	48.7	16.50	6.6	12.1	73.33	4.5	0.27
2019	211.5	195.3	92.3	101.4	51.9	93.8	48.0	16.30	7.7	12.5	76.69	3.8	0.23
2020	138.1	120.1	87.0	61.6	51.3	58.51	48.7	18.10	13.1	12.5	69.06	5.6	0.31
2021	199	164.03	82.4	76	46.3	88.03	53.7	34.98	17.6	14.6	41.74	20.38	0.58
2022	221.81	194.121	87.5	105.8	54.5	88.32	45.5	27.69	12.5	15.29	55.23	12.4	0.45
Mean	189.2	171.0		88.1		82.9		18.2		12.0		6.1	

Source: Government of Egypt, Micro, Small and Medium Enterprises Development Agency (MSMEDA), MSMEDA Achievements Reports,

Table 3. Evolution of the Number of Social Fund for Development (SFD) Beneficiaries, Total Loans, and Employment Opportunities for Micro and Small Enterprises in the Arab Republic of Egypt during the Period (2010-2022)

	Total		%		%	Total		%		%
	Loans for	Micro-	of	Small	of	Micro and	Micro-	of	Small	of Total
	Micro and	Enterprise	Total	Enterprise	Total	Small	Enterprise	Total Micro	Enterprise	Micro and
Year	Small	Loans	Micro and	Loans	Micro and	Enterprise	Employment	and Small	Employment	Small
	Enterprises	(Million	Small	(Million	Small	<b>Employment</b>		Enterprise	Opportunities	Enterprise
	(Million	EGP)	Enterprise	EGP)	Enterprise	Opportunities	(Thousand)	<b>Employment</b>	(Thousand)	Employment
	EGP)		Loans		Loans	(Thousand)		Opportunities		Opportunities
2010	1105.6	497.9	45.03	607.7	54.97	228.7	171.5	74.99	57.2	25.01
2011	1759.8	472.3	26.84	1287.5	73.16	218.1	139.7	64.05	78.4	35.95
2012	2175.9	630.5	28.98	1544.6	70.99	213.7	163.4	76.46	50.7	23.72
2013	2375.9	863.7	36.35	1512.2	63.65	229.7	191.7	83.46	38	16.54
2014	3029.8	918.7	30.32	2111.1	69.68	218.3	151.6	69.45	66.7	30.55
2015	4485.3	1414.1	31.53	3071.2	68.47	299.7	211.5	70.57	88.2	29.43
2016	3765.3	1537.9	40.84	2227.2	59.15	265.4	207.7	78.26	57.8	21.78
2017	5083.8	2268.4	44.62	2815.4	55.38	341.7	277.6	81.24	64.1	18.76
2018	5476.5	3127.7	57.11	2348.8	42.89	407.2	357.8	87.87	49.4	12.13
2019	5513.6	2817.6	51.10	2696	48.90	345.5	295.4	85.50	50.1	14.50
2020	4372.3	1891	43.25	2481.3	56.75	224.82	182.41	81.14	42.41	18.86
2021	7173	4502	62.76	2671	37.24	430.79	388.55	90.19	42.24	9.81
2022	6797.5	4278.3	62.94	2519.2	37.06	367.235	331.569	90.29	35.666	9.71
Mean	4048.5	1987.1		2061.4		285.0	232.7		52.4	

Source: Government of Egypt, Micro, Small and Medium Enterprises Development Agency (MSMEDA), MSMEDA Achievements Reports, Various Years.

Table 4. Time Trend Analysis of Micro and Small Enterprises and Beneficiaries in Egypt (2010-2022)

No.	Dependent Variable	Equation	Mean	R <sup>2</sup>	F
1	Total Number of Enterprises (Thousand)	$\hat{Y}_t = 165.3 + 4.17 X_t$ (1.68)	189.2	0.21	2.83
2	Number of Micro Enterprises (Thousand)	$\hat{Y}_t = 154.6 + 3.06 X_t$ (1.18)	171	0.11	1.40
3	Number of Small Enterprises (Thousand)	$Y_t = 10.7 + 1.113 X_t$ $(3.02)^*$	18.2	0.45	9.15
4	Number of Male Beneficiaries from Micro Enterprises (Thousand)	$\hat{Y}_t = 78.2 + 1.73 X_t$ (1.21)	88.1	0.12	1.48
5	Number of Female Beneficiaries from Micro Enterprises (Thousand)	$\hat{Y}_t = 76.4 + 1.33X_t$ (1.02)	82.9	0.08	1.04
6	Number of Male Beneficiaries from Small Enterprises (Thousand)	$\hat{Y}_t = 10.2 + 0.314 X_t$ $(2.16)^*$	12	0.28	4.27
7	Number of Female Beneficiaries from Small Enterprises (Thousand)	$\hat{Y}_t = 0.472 + 0.803X_t$ $(2.74)^*$	6.1	0.41	7.5
8	Total Loans for Micro and Small Enterprises (Million EGP)	$Y_t = 820.02 + 466.53 X_t$ $(9.77)^{**}$	4048.5	0.90	95.5
9	Total Loans for Micro Enterprises (Million EGP)	$\dot{Y}_t = -329.5 + 324.21 \text{ X}_t$ $(7.46)^{**}$	1987.1	0.83	55.7
10	Total Loans for Small Enterprises (Million EGP)	$\hat{Y}_t = 1149.3 + 142.3 X_t $ $(4.14)^*$	2061.4	0.61	17.17
11	Total Employment Opportunities in Both Micro and Small Enterprises (Thousand)	$\hat{Y}_t = 187.5 + 14.87 X_t $ $(3.64)^*$	285	0.55	13.22
12	Total Employment Opportunities in Micro Enterprises (Thousand)	$\dot{Y}_{t} = 118.1 + 16.87 \ X_{t}$ $(4.17)^{**}$	232.7	0.61	17.38
13	Total Employment Opportunities in Small Enterprises (Thousand)	$\hat{Y}_t = 69.52 - 2.01 X_t$ $(-1.9)^*$	52.4	0.25	3.66

Where:  $\hat{Y}_t$  = Predicted value of the dependent variable \*\*Significant at the 0.01 level, \* Significant at the 0.05 level Source: Compiled and calculated from data in Tables 2 and 3

 $X_t = \text{Time variable, where } t = 1, 2, 3, ..., 13$ 

( ) Numbers in parentheses below the regression coefficient refer to (t-statistic)  $\,$ 

#### Second: Analysis of the Number of Beneficiaries from Micro and Small Enterprises during the Period (2010-2022)

## 1. Analysis of the Number of Male Beneficiaries from Micro Enterprises from 2010 to 2022

Data from Table (2) indicates that the average number of male beneficiaries from micro enterprises was approximately 88.1 thousand individuals during the study period. The number of male beneficiaries from micro enterprises increased from around 60.6 thousand individuals in 2011 to approximately 120.2 thousand individuals in 2018, representing an increase of approximately 59.6 thousand individuals, which constitutes around 98.3% of the total number of male beneficiaries from micro enterprises in 2011.

An estimation of the annual growth rate for the number of male beneficiaries from micro enterprises, as shown by Equation (4) in Table (4), reveals a generally increasing trend that is statistically insignificant, which reflects the relative stability of it around its annual average.

### 2. Analysis of the Number of Female Beneficiaries from Micro Enterprises from 2010 to 2022

Data from Table (2) indicates that the average number of female beneficiaries from micro enterprises was approximately 82.9 thousand individuals during the study period. The number of female beneficiaries reached a maximum of approximately 121.27 thousand individuals in 2017.

An estimation of the annual growth rate for the number of female beneficiaries from micro enterprises, as shown by Equation (5) in Table (4), reveals a statistically non-significant increasing trend, which reflects the relative stability of it around its annual average.

### 3. Analysis of the Number of Male Beneficiaries from Small Enterprises from 2010 to 2022

Data from Table (2) indicates that the average number of male beneficiaries from small enterprises was

approximately 12 thousand individuals during the study period. The number of male beneficiaries from small enterprises increased from around 6.8 thousand individuals in 2010 to approximately 15.3 thousand individuals in 2022, representing an increase of approximately 8.49 thousand individuals, which constitutes around 124.6% of the total number of male beneficiaries from small enterprises in 2010.

An estimation of the annual growth rate for the number of male beneficiaries from small enterprises, as shown by Equation (6) in Table (4), reveals a statistically significant increasing trend at a significance level of 0.05. The estimated annual increase is approximately 0.314 thousand beneficiaries from these enterprises per year. If the number of male beneficiaries from small enterprises continues to increase at this rate, it is expected that by 2030, the number of male beneficiaries from small enterprises will reach approximately 16.79 thousand individuals.

#### 4- Study of the Development of the Number of Female Beneficiaries from Small Projects from 2010 to 2022

Data from Table (2) indicates that the average number of female beneficiaries from small projects was approximately 6,100 during the study period. This average ranged from a low of 2,600 femalebeneficiaries in 2010 to a high of approximately 20,400 female beneficiaries in 2021, representing an increase of about 17,800 female beneficiaries or 684.6% compared to 2010.

An analysis of the annual growth rate in the number of female beneficiaries of small projects, as shown in Equation (7) in Table (4), reveals a statistically significant upward trend at the 0.05 significance level. The annual growth rate was calculated to be approximately 13.16%, equivalent to an increase of about 803 female beneficiaries per year. If this growth rate persists, the number of female beneficiaries from small projects is projected to reach approximately 17,300 by 2030.

### Based on the preceding analysis, the following observations can be made:

- 1.Despite the government's efforts to empower women in micro and small enterprises, the number of male beneficiaries from these enterprises has consistently exceeded that of female beneficiaries during the study period. Male beneficiaries accounted for approximately 52.93% of the total number of beneficiaries from micro and small enterprises during the study period.
- 2. There is a higher inclination among males to engage in micro enterprises compared to small enterprises. Male beneficiaries from micro enterprises constituted approximately 88% of the total number of male beneficiaries from both micro and small enterprises during the study period.
- 3.A similar trend is observed among females, with a higher preference for micro enterprises compared to small enterprises. Female beneficiaries from micro enterprises represented approximately 93.14% of the total number of female beneficiaries from both micro and small enterprises during the study period.

Third: Study on the Development of Total Loans and Employment Opportunities in Micro and Small Enterprises in the Arab Republic of Egypt During the Period (2010-2022)

#### 1. Development of Loans:

### a) Development of Total Loans for Micro and Small Enterprises from 2010 to 2022:

Data from Table (3) indicates that the total loans for micro and small enterprises averaged approximately 4048.5 million Egyptian pounds during the study period. Loans for micro and small enterprises have shown an increasing trend, rising from a minimum of approximately 1105.6 million Egyptian pounds in 2010 to a maximum of approximately 7173 million Egyptian pounds in 2021. This represents an increase of approximately 5691.9 million Egyptian pounds, constituting around 548.8% of the total loans for micro and small enterprises in 2010. This increase highlights the government's attention to the micro and small enterprise sector and its significant role in contributing to economic development.

An analysis of the overall time trend for the development of total loans for micro and small enterprises reveals, as shown by Equation (8) in Table (4), that total loans for micro and small enterprises have exhibited a statistically significant increasing trend at a significance level of 0.01. The estimated annual increase in loans for micro and small enterprises is approximately 466.53 million Egyptian pounds, with a growth rate of 11.52%. Additionally, the coefficient of determination (R2) is approximately 0.90, indicating that the changes reflected by the time element account for approximately 90% of the changes that occurred in total loans for micro and small enterprises.

### b) Development of total loans for micro enterprises from 2010 to 2022:

Data from Table (3) indicates that the average total loans for micro enterprises were approximately 1987.1 million Egyptian pounds during the study period. Loans for micro enterprises have shown an increasing trend, rising from a minimum of approximately 472.3 million Egyptian pounds in 2011 to a maximum of approximately 4502 million Egyptian pounds in 2021. This represents an increase of approximately 4029.7 million Egyptian pounds,

constituting around 853.2% of the total loans for micro enterprises in 2011. This increase highlights the government's attention to the micro enterprise sector and its significant role in contributing to economic development.

An analysis of the overall time trend for the development of total loans for micro enterprises reveals, as shown by Equation (9) in Table (4), that total loans for micro enterprises have exhibited a statistically significant increasing trend at a significance level of 0.01. The estimated annual growth rate in loans for micro enterprises is approximately 16.32%, equivalent to around 324.21 million Egyptian pounds based on the average annual loans for micro enterprises during the study period. If funding for micro enterprises continues to increase at this rate, by 2030, it is expected that loans for micro enterprises will reach approximately 6478.9 million Egyptian pounds. This further emphasizes the government's commitment to the role of micro enterprises in achieving economic development.

### c) Development of total loans for small enterprises from 2010 to 2022

Data from Table (3) indicates that the total loans for small enterprises averaged approximately 2061.4 million Egyptian pounds, representing around 50.92% of the total loans for micro and small enterprises during the study period. This average ranged from a minimum of approximately 607.7 million Egyptian pounds in 2010 to a maximum of approximately 3071.2 million Egyptian pounds in 2015, representing an increase of approximately 2463.5 million Egyptian pounds. This increase highlights the government's attention to small enterprises and their role in promoting economic activity in Egypt.

An analysis of the overall time trend for loans to small enterprises reveals, as shown by Equation (10) in Table (4), that loans to small enterprises have exhibited a statistically significant increasing trend at a significance level of 0.05. The estimated annual increase in loans to small enterprises is approximately 142.3 million Egyptian pounds, with a growth rate of 6.9%. Additionally, the coefficient of determination (R-squared) is approximately 0.61, indicating that the changes reflected by the time element account for approximately 61% of the changes that occurred in total loans for small enterprises.

### 2. Development of Employment Opportunities: a) Development of Total Employment Opportunities

## a) Development of Total Employment Opportunities in Micro and Small Enterprises from 2010 to 2022:

Data from Table (3) indicates that the total employment opportunities provided by micro and small enterprises averaged approximately 285 thousand opportunities during the study period. This average ranged from a minimum of approximately 213.7 thousand opportunities in 2012 to a maximum of approximately 430.8 thousand opportunities in 2021. This represents an increase of approximately 217.9 thousand opportunities, constituting around 101.6% of the total employment opportunities in 2012. This increase highlights the crucial role of these enterprises in reducing unemployment and their ability to provide suitable employment opportunities.

An analysis of the overall time trend for employment opportunities provided by micro and small enterprises reveals, as shown by Equation (11) in Table (4), that these opportunities have exhibited a statistically significant increasing trend at a significance level of 0.05. The estimated annual increase in employment opportunities is approximately

14.87 thousand opportunities, with a growth rate of 5.22%. Additionally, the coefficient of determination (R-squared) is approximately 0.55, indicating that the changes reflected by the time element account for approximately 55% of the changes that occurred in total employment opportunities provided by micro and small enterprises.

#### b) Development of Total Employment Opportunities Provided by Micro Enterprises from 2010 to 2022:

Data from Table (3) indicates that the total employment opportunities provided by micro enterprises averaged approximately 232.7 thousand opportunities during the study period. This average ranged from a minimum of approximately 139.7 thousand opportunities in 2011 to a maximum of approximately 388.6 thousand opportunities in 2021. This represents an increase of approximately 248.85 thousand opportunities, constituting around 178.2% of the total employment opportunities in 2011. This highlights the significant role of these enterprises in reducing unemployment and their ability to provide suitable job opportunities.

An analysis of the overall time trend for employment opportunities provided by micro enterprises reveals, as shown by Equation (12) in Table (4), that these opportunities have exhibited a statistically significant increasing trend at a significance level of 0.01. The estimated annual increase is approximately 16.87 thousand opportunities, with a growth rate of approximately 7.25%. Additionally, the coefficient of determination (R-squared) is approximately 0.61, indicating that the changes reflected by the time element account for approximately 61% of the changes that occurred in total employment opportunities provided by micro enterprises.

#### c) An Analysis of the Trend in Total Employment Opportunities Generated by Small Enterprises in Egypt (2010-2022)

The average number of employment opportunities generated by small enterprises in Egypt during the study period was approximately 52.4 thousand. This represents a substantial contribution to the overall employment landscape, accounting for 18.39% of the total employment opportunities provided by both micro and small enterprises.

However, the trend in employment opportunities generated by small enterprises was characterized by significant fluctuations over time. The minimum number of opportunities was observed in 2022, with 35.6 thousand, while the maximum was recorded in 2015, at 88.2 thousand.

#### **Key Findings and Implications**

- 1.Government's Commitment to Micro and Small Enterprises (MSEs): The Egyptian government has demonstrated its strong commitment to supporting MSEs, recognizing their pivotal role in achieving economic and social development. This commitment is evident in various initiatives aimed at fostering entrepreneurship, providing financial assistance, empowering women, facilitating access to marketing, logistics, and technology services, training and qualifying human resources, and promoting a culture of self-employment.
- 2.Disproportionate Employment Generation and Loan Allocation: While the proportion of loans allocated to financing micro-enterprises is lower compared to small enterprises, the employment opportunities generated by micro-enterprises surpass those created by small enterprises.

This highlights the significance of micro-enterprises in generating employment, reducing unemployment, and contributing to Egypt's sustainable development goals.

#### Fourth: The Most Important Economic Characteristics of the Owners of Micro and Small Enterprises in the Study Subject in Qalyubia Governorate in 2023/2024

These characteristics are represented in each of the following:

#### The educational level of the project owner:

It is clear from Table No. (5) that the majority of the owners of micro and small enterprises are concentrated in the categories of secondary and university education, as they together represent 84%, 92%, 95%, 86.6%, 91.5% for the study projects, respectively. This is due to the lack of job opportunities for these qualifications within the governorate, whether in the public or private sectors, which pushes them to search for work and a source of livelihood. The researcher also noticed that many holders of higher qualifications, even employees, are looking for another source of income to improve their income and standard of living. This is a result of the low government salaries.

#### **Project ownership:**

The results indicate that the vast majority of the respondents to the questionnaire are the sole owners of these projects, at a rate of 67%, 92%, 85%, 100%, 82.9%, followed by joint ownership at rates of about 16% - 8% - 15% - 0% - 17.1% of these projects, respectively. Finally, the remaining percentage of these projects are rented, as shown in Table No. (5).

#### **Full-time dedication to the project:**

The results shown in Table No. (5) indicate that the majority of project owners are fully dedicated to working in the project. This is fully consistent with the nature of these projects, as cattle and rabbit pens require care and attention throughout the season. Therefore, the owner of the establishment must be fully dedicated. This is followed by the owners of projects who are dedicated for some time, as most of them have other jobs, but they manage these projects during the operating seasons. This applies to fertilizer manufacturing projects as well as yogurt factories, and these projects are linked to the harvesting seasons of these crops. The least share was for the owners of projects who are not fully dedicated to the project, and therefore it is managed by a manager present at the project site.

#### **Project financing sources:**

The data in Table No. (5) clarified that the financing sources for the study projects are: (Cattle fattening project - yogurt production factories - apiaries for the production of white honey from wooden cells - organic fertilizer manufacturing project (compost) - rabbit breeding project in batteries) in the financing category from the first phase of the Small Enterprise Development Fund, representing about 48%, 56%, 55%, 80%, 42.9%, respectively, followed by self-financing, then the commercial bank, and finally participatory financing.

#### Loan size:

As the data in the same table shows, the size of the loans provided to rural projects varies, as cattle breeding projects were concentrated in the loan category (100-500 thousand pounds) and the category of more than 500 thousand pounds by 40%, 32% for each of the two

categories, respectively. While yogurt production factories fertilizer manufacturing - and rabbit breeding projects were concentrated in the loan category (50-100 thousand pounds), respectively.

Table 5. Key Socioeconomic Characteristics of Owners of Micro and Small Enterprises in Qalyubia Governorate, 2023/2024

2023/2024	Live			gurt		eeping		Fertilizer			To	tal
Characteristic	Rea			on Units		nits %		acturing		atteries	NT.	0/
	No.	%	No.	%	No.		No.	%	No.	%	No.	%
Can read and write	4	16		tional Leve	or the			13.3	2	8.6	12	10
	4	16 24	2 6	8 24	3	5 15	2 5	33.3	3 10	8.6 28.6	30	10 25
Intermediate qualification	6		6 17	68	-	80	-		22	28.6 62.9	78	
Higher education	15 25	100		100	16 20	100	8	53.3			120	65
Total	25	100	25			100	15	100	35	100	120	100
0	19	76	23		Owner		15	100	29	82.9	102	85.8
Owner			23 2	92 8	17	85 15					103	
Partnership	4 2	16	_	-	3		0	0	6	17.1	15	12.5
Rent Total	25	100	25	100	20	100	15	100	35	100	120	1.7
Total	23	100	23				13	100	33	100	120	100
Eulle, de dieses d	22	02	25	Dedication			12	90	16	157	02	767
Fully dedicated	23	92	25	100	16	80	12	80	16 12	45.7	92	76.7
Partially dedicated	2	8	0	0	3	15	3	20		34.3	20	16.7
Not dedicated	<u>0</u> 25	100	<u>0</u> 25	100	20	5 100	0 15	100	7 35	20 100	8 120	6.7 100
Total	23	100	23				13	100	33	100	120	100
C-16 6:	0	22	_	Fundi	ng Sour	ces	2	12.2	10	20.6	20	24.2
Self-financing	8	32	5 2	20	4	20 15	2	13.3		28.6	29	12.5
Partner	4	16 48	14	8	3		0	0	6 15	17.1	15 64	
Project Development Agency	12			56	11	55	12	80.0		42.9	12	53.3
Commercial Bank Total	25	100	<u>4</u> 25	16 100	20	10 100	1 15	6.7 100	<u>4</u> 35	11.4 100	120	10.0
Total	25	100	25		n Value		15	100	33	100	120	100
None	2	8	3	12	m vaiue	5	4	26.7	2	5.7	12	10
10-50Thousand EGP	2 2	8	8	32	9	45	4	26.7	13	37.1	36	30
50-100Thousand EGP	3	12	13	52 52	5	25	7	46.7	20	57.1	30 48	40
100-500Thousand EGP	10	40	13	4	5	25 25	ó	0	0	0	16	13.3
More than 500,000 EGP	8	32	0	0	0	0	0	0	0	0	8	6.7
Total	25	100	25	100	20	100	15	100	35	100	120	100
Total	23	100	23	Direction		100	13	100	33	100	120	100
Family expenses	2	8	5	20	4	20	3	20	2	5.7	16	13.3
Savings	5	20	6	24	5	25	2	13.3	9	25.7	27	22.5
Project expansion	18	72	14	56	11	55 55	10	66.7	24	68.6	77	64.2
Total	25	100	25	100	20	100	15	100	35	100	120	100
Former Collected and colorated		100		100		100	13	100	33	100	120	100

Source: Collected and calculated from survey questionnaire data in 2023/2024.

As for wooden honey apiaries projects, they were concentrated in the loan category (10-50 thousand pounds), (50-100 thousand pounds) at a rate of about 45%, 25% of the total sample of the study for this project.

#### Profit Allocation:

The data in Table No. (5) shows that most of the owners of the study projects direct the return of their projects to expand the project at rates of 72%, 56%, 55%, 66.7%, 68.6% of the total sample of the study. While about 20%, 24%, 25%, 13.3%, 25.7% of the project owners directed the return to savings from the total sample of the study. As for the Profit Allocation of the project owners, the category of family spending, the percentage was about 8%, 20%, 20%, 20%, 5.7% of the total sample, respectively.

#### Fifth: Contribution of Micro and Small Enterprises to Employment Generation and GDP During the Period (2010-2022)

This section explores the relationship between micro and small enterprises, employment generation, and GDP growth in Egypt between 2010 and 2022.

## Impact on Employment Generation Micro-enterprises:

A positive correlation exists between the number of micro-enterprises and employment opportunities. A one thousand project increase in micro-enterprises leads to approximately 1,300 additional jobs, with statistical significance at the 0.01 level.

Micro-enterprises account for 38% of the variation in employment opportunities within the sector.

#### **Small enterprises:**

No statistically significant relationship was found between the number of small enterprises and employment generation.

#### **Contribution Rate:**

Micro-enterprises contributed an average of 0.904% to the overall employment rate during the study period, increasing from 0.587% in 2011 to 1.434% in 2021.

The contribution rate of small enterprises to the overall employment rate was 0.209% on average and exhibited a non-significant downward trend, which reflects the relative stability of it around its annual average.

#### Impact on GDP

An increase in both micro and small enterprises by 1% is associated with a 7.41% and 102.8% increase in GDP, respectively. These relationships are statistically significant at the 0.05 level. Approximately 55% of the variation in GDP can be attributed to changes in the number of micro and small enterprises.

The findings underscore the substantial role of microenterprises in driving employment growth in Egypt. While small enterprises also contribute, their impact is less pronounced. Both sectors collectively contribute significantly to GDP expansion. These results emphasize the importance of fostering a supportive environment for micro-enterprises to maximize their potential for job creation and economic growth.

Table 6. Contribution of Micro and Small Enterprises to Job Creation and Efficiency during the Period (2010-2022)

	Number of	GDP	Total Job Opportunities	% Contribution of	Total Job Opportunities	s % Contribution of
Year	Employed	(Billions of	in Micro Enterprises	Micro Enterprises	in Small Enterprises	Small Enterprises
	(Million)	EGP)*	(Thousand)	in Job Creation	(Thousand)	in Job Creation
2010	23	4983.2	171.5	0.746	57.2	0.249
2011	23.8	5070.1	139.7	0.587	78.4	0.329
2012	23.6	5183.4	163.4	0.692	50.7	0.215
2013	24	5296.4	191.7	0.799	38	0.158
2014	24.3	5451.6	151.6	0.624	66.7	0.274
2015	25	5689.3	211.5	0.846	88.2	0.353
2016	25.3	5936.1	207.7	0.821	57.8	0.228
2017	26	6184.9	277.6	1.068	64.1	0.247
2018	26	6514.4	357.8	1.376	49.4	0.19
2019	26.1	6875.8	295.4	1.132	50.1	0.192
2020	26.2	7121.6	182.41	0.696	42.41	0.162
2021	27.1	7353.2	388.55	1.434	42.24	0.156
2022	27.9	7842.5	331.569	1.188	35.666	0.128
2023	28.9	8137.3	186.766	0.646	12.152	0.042
Average	25.5	6259.99	232.7	0.9	52.4	0.2

\*GDP according to expenditure elements, market prices, constant prices of 2021/2022 - Ministry of Planning and Economic Development Source: Collected and calculated from Central Agency for Public Mobilization and Statistics (CAPMAS) data, Annual Statistical Book, various issues.

Table 7. Economic Impact of Micro and Small Enterprises during the Period (2010-2022)

Table 7. Economic impact of where and Sman Enterprises during the Feriod (2010-2022)								
No.	Statement	Equation	Mean	$\mathbb{R}^2$	F			
1	Employment in Micro	$Y_1 = 9.87 + 1.30 X_1$	282.2	0.38	7.44			
1	Enterprises (Thousand)	(2.73)*	282.2	0.38	/. <del>44</del>			
2	Contribution of Micro	$Y_1 = 0.646 + 0.03 X_1$	0.91	0.26	4.16			
	Enterprises to Job Creation	(2.04) *	0.91	0.20	4.10			
2	Employment in Small	$Y_2 = 57.04 - 0.255X_2$	52.4	0.007	0.086			
3	Enterprises (Thousand)	(-0.29)	32.4	0.007	0.080			
1	Contribution of Small	$Y_2 = 0.312 - 0.013X_2$	0.2	0.51	12.37			
4	Enterprises to Job Creation	aterprises to Job Creation (-3.52)*		0.31	12.57			
5	GDP	$Y_3 = 2910.5 + 7.41X_1 + 102.82 X_2$	7842.5	0.55	6.169*			
3	(Million EGP)	$(9.34)^{**}$ $(-3.52)^*$	1042.3	0.55	0.109			

Where:

 $Y_1$  = Employment in Micro Enterprises (Thousand)  $Y_2$  = Employment in Small Enterprises (Thousand)

 $Y_3 = GDP$  (Million EGP)

Source: Collected and calculated from data in Table(6)

Sixth: The Most Important Economic and Social Impacts of the Studied Micro and Small Enterprises and Their Role in Achieving Some Sustainable Development Goals:

Economic and Social Impacts of Micro and Small Enterprises in Qalyubia Governorate and Their Role in Achieving Sustainable Development Goals

The results of the study in Table (8) indicate that micro and small enterprises in Qalyubia Governorate have many positive economic and social impacts and play an important role in achieving some sustainable development goals, as follows:

- **1. Increased Employment Opportunities:** Micro and small enterprises have contributed to creating permanent job opportunities by 75%.
- They have also contributed to creating temporary job opportunities by 18.3%.
- They have provided job opportunities for family members by 96.7%, which supports family cohesion.

#### 2. Human Capital Development:

- Micro and small enterprises have contributed to training workers by 81.7%, which enhances their skills and capabilities.
- They have contributed to job stability by 93.3%, which creates a safe and stable work environment.

#### 3. Productivity Development:

 All micro and small enterprises have achieved the production k8of final products (100%). • 73.3% of micro and small enterprises have provided intermediate products that need to be remanufactured.

 $X_1$  = Number of Micro Enterprises (Thousand)

 $X_2$  = Number of Small Enterprises (Thousand)

#### 4. Marketing Network Development:

- Micro and small enterprises have contributed to opening multiple marketing channels by 80%.
- Sales outlets have diversified to include 62.5% of micro and small enterprises.
- 37.5% of micro and small enterprises have provided their products at prices suitable for all segments of society.

#### 5. Cash Capital:

- Micro and small enterprises have contributed to increasing household spending rates and improving living standards by 93.3%.
- They have contributed to increasing savings by 65%.
- The revenues of 95.8% of micro and small enterprises have contributed to the expansion of the project.

#### 6. Environmental Development:

- 45.8% of micro and small enterprises have contributed to maximizing the utilization of waste.
- 40% of micro and small enterprises have contributed to increasing awareness of environmental laws governingwork.
- 29.2% of micro and small enterprise owners have assessed the environmental impact of the project at the Environmental Affairs Agency.

Table 8. Economic and Social Impacts of Micro and Small Enterprises and Their Role in Achieving Sustainable

D	evelopmen	t Caale

Development Goals				G <sub>4</sub> 1 1	O 60° 1 4
Key	Frequency	%	Mean	Standard	Coefficient
Indicators	- 17			Deviation	of Variation
Job creation					
The project contributed to creating permanent job opportunities	90	75	2.45	0.79	32.24
The project contributed to creating temporary job opportunities	22	18.3	2.57	0.72	28.02
The project contributed to creating job opportunities for family members	116	96.7	2.37	0.59	24.89
Human Capital Developmen	t				
The project contributed to training workers	98	81.7	2.08	0.77	37.02
The project contributed to job stability	112	93.3	2.79	0.5	17.92
Production Efficiency Developm	nent				
The project achieved the provision of final products	120	100	2.87	0.36	12.54
The project achieved the provision of intermediate products	88	73.3	2.55	0.49	19.22
The project contributed to the knowledge of using automation technology	78	65	2.25	0.57	25.33
The project contributed to the development of the production method	65	54.2	2.92	0.27	9.25
Marketing Network Developme	ent				
The project contributed to opening multiple marketing channels	96	80	2.97	0.16	5.39
The project contributed to the diversity of sales outlets	75	62.5	2.17	0.52	23.96
The project contributed to providing the product at appropriate prices for different					
community groups	45	37.5	2.26	0.49	21.68
Cash capital					
The project contributed to increasing household spending rates and improving					
living standard	112	93.3	2.22	0.45	20.27
The project contributed to increasing savings	78	65	2.26	0.53	23.45
The project's revenues contributed to the expansion of the project	115	95.8	2.55	0.56	21.96
Environmental Development		75.0	2.00	0.50	21.50
The project contributed to maximizing the utilization of waste	55	45.8	2.77	0.53	19.13
The project contributed to increasing awareness of environmental laws governing	33	45.0	2.11	0.55	17.13
project work	48	40	2.52	0.55	21.83
The environmental impact of the project has been assessed by the Environmental					
	35	29.2	2.82	0.43	15.25
Affairs Agency.					

Source: Collected and calculated from 2023/2024 questionnaire data.

As indicated by the results in Table [8], the farmers in the study sample considered the most significant economic impact of the project to be the expansion of marketing channels. This item received a high average rating of 2.97, with a standard deviation of 0.16 and a coefficient of variation of 5.27, indicating the significance of this impact on improving their economic conditions. On the other hand, the item related to worker training ranked lowest in terms of impact, with an average rating of 2.08, suggesting the need for more attention to providing targeted training programs.

In general, micro and small enterprises have contributed to achieving many sustainable development goals, including:

- Goal 1: End poverty.
- Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- Goal 9: Build resilient infrastructure that is inclusive and sustainable for all and everyone.
- Goal 10: Reduce inequality within and among
- Goal 12: Ensure sustainable patterns of consumption and production.
- Goal 13: Take urgent action to combat climate change and its impacts.

These results support the importance of supporting micro and small enterprises as a driver of sustainable development in Egypt.

#### Seventh: Key Economic Efficiency Indicators for the Studied Projects for the Year 2023/2024:

These indicators were calculated based on average data collected through field studies in Qalyubia Governorate in 2023/2024.

These indicators vary from project to project depending on several factors such as project size, management efficiency, and market prices.

#### 1. Return on Investment:

The organic fertilizer manufacturing project from agricultural waste is the most feasible, achieving the highest return on investment (92%), followed by the livestock breeding project (51.2%), then the rabbit breeding project (47.2%), then the honey production apiaries (40.2%), and finally the yogurt production plant (22.9%).

#### 2. Total Revenue to Total Cost Ratio:

The organic fertilizer manufacturing project from agricultural waste is the most feasible, achieving the highest total revenue to total cost ratio of 1.9%, followed by the livestock breeding project and the rabbit breeding project (1.5%), then the honey production apiaries (1.4%), and finally the yogurt production plant (1.2%).

#### 3. Gross Profit Margin:

The livestock breeding project is the most feasible, achieving the highest gross profit margin (502 thousand Egyptian pounds), followed by the organic fertilizer manufacturing project from agricultural waste (380 thousand Egyptian pounds), then the honey production apiaries (210.5 thousand Egyptian pounds), then the rabbit breeding project (26.5 thousand Egyptian pounds), and finally the yogurt production plant (3,516 Egyptian pounds).

Table 9. Economic Efficiency Indicators for Micro and Small Enterprises in the Study Sample in Qalyubia Governorate during the Period 2023/2024

	Livestock Breeding	Yogurt	Honey	Organic Fertilizer	Rabbit Breeding
Indicator	Project	Production	Production	Manufacturing Project	Project
	(13heads/cycle)	Plant	Apiaries	(2000 m3 compost)	in batteries
Total Fixed Costs (L.E.)	150000	2075.8	134000	83000	14568
Total Variable Costs (L.E.)	537950	4220	49500	240000	10700
Total Costs (L.E.)	687950	6295	185500	323000	25268
Total Revenue (L.E.)	1040000	7736	260000	620000	37200
Net Income (L.E.)	352050	1440.3	74500	297000	11932
Gross Profit Margin (L.E.)	502050	3516	210500	380000	26500
Return on Investment (L.E.)	0.51	0.23	0.40	0.92	0.47
Return on Investment(%)	51.2	22.9	40.2	92.0	47.2
Total Revenue to Total Cost Ratio	1.5	1.2	1.4	1.9	1.5
Product Profit Margin(%)	33.9	18.6	28.7	47.9	32.1

Gross Profit Margin = (Total Revenue - Total Variable Costs)

Return on Investment (ROI) = Net Income / Total Costs(Al-Rashidi, et al 2021)

Total Revenue to Total Cost Ratio = Total Revenue / Total Costs

Product Profit Margin= (Net Income / Total Revenue) × 100 (Eissa, et al 2019)

Source: Compiled and calculated from data collected through a field survey conducted in Qalyubia Governorate during the 2023/2024 season.

#### 4. Product Profit Margin:

The organic fertilizer manufacturing project from agricultural waste is the most feasible, achieving the highest product profit margin (47.9%), followed by the livestock breeding project (33.9%), then the honey production apiaries (28%).

Based on the calculated economic efficiency indicators, the organic fertilizer manufacturing project from agricultural waste emerges as the most economically viable among the studied projects. This project demonstrated superior performance in terms of return on investment, total revenue to total cost ratio, and product profit margin.

The livestock breeding project also showed promising results, ranking second in terms of gross profit margin and return on investment. However, the yogurt production plant exhibited the lowest performance across all indicators, suggesting potential areas for improvement in terms of cost management and revenue generation.

## **Eighth: Key Challenges Facing Micro and Small Enterprises and Mechanisms for Advancement:**

The study revealed that micro and small enterprises in Qalyubia Governorate face numerous obstacles and challenges that hinder their growth and development. These obstacles include:

#### 1. Production Constraints:

- Lack of experience in dealing with lending institutions:
   Many owners of these enterprises lack the necessary experience to deal with lending institutions, making it difficult for them to obtain the required financing.
- High financing risks for these enterprises: These enterprises are considered high-risk for lending institutions due to the lack of sufficient guarantees.
- **High cost of borrowing:** The costs of borrowing (interest and commissions) are high for these enterprises, putting a strain on their owners.
- Lack of vocational training and education systems: These enterprises suffer from a shortage of skilled and trained technical labor due to the lack of appropriate vocational training and education systems.
- Weak capacities and technical skills among enterprise owners: The owners of these enterprises lack the necessary technical skills and capacities to manage their enterprises efficiently.

#### 2. Financial Constraints:

 Difficulty in obtaining financing: These enterprises face difficulty in obtaining the required financing from lending institutions for the reasons mentioned above.

Net Income = (Total Revenue - Total Costs)

- Lack of adequate collateral: These enterprises lack the adequate collateral to convince lending institutions to provide loans.
- High cost of borrowing: The costs of borrowing (interest and commissions) are high for these enterprises, putting a strain on their owners.

#### 3. Legal Constraints:

- Excessive regulations and laws: These enterprises suffer from an abundance of regulations and laws governing their operations, which places a burden on their owners.
- Lack of transparency: These enterprises suffer from a lack of transparency in government procedures, making it difficult for them to make sound decisions.
- Unnecessary government and administrative restrictions: These enterprises are subject to many unnecessary government and administrative restrictions, which hinder their growth and development.

#### 4. Marketing Constraints:

- Lack of marketing research: These enterprises lack the necessary marketing research to understand market needs and competitors.
- Lack of market information: These enterprises lack sufficient market information regarding competitors, suppliers, modern technological tools, and export markets.
- Limited marketing channels and distribution networks: These enterprises suffer from limited marketing channels and distribution networks, making it difficult for them to reach customers.
- Absence of specialized marketing companies: These enterprises lack specialized marketing companies in the field of domestic and foreign trade, hindering their marketing efforts.

These findings indicate the need to take serious steps to address these obstacles and challenges in order to promote the growth of micro and small enterprises and their role in achieving economic and social development in Qalyubia Governorate.

Table 10. Key Obstacles and Challenges Facing Micro and Small Enterprises and Mechanisms for Advancement Based on Proposals from Study Sample Owners

	_		tudy Sample Owners
Type of Problem	Frequency	Kank	
Administrative,			- Facilitate and streamline the procedures for establishment, registration, and licensing of
institutional,	58	5th	micro and small enterprises.
and			- Avoid excessive regulations and laws, and avoid unnecessary government and
legal obstacles			administrative restrictions.
			- Activate seminars to raise awareness among project owners about the services of the Enterprise Development Agency and the benefits of the new Enterprise Development Law 152/2020 and how to benefit from them.
			- Reduce the prices of production inputs, including feed and energy prices by using solar energy in fattening calf farms, rabbit farms, honey apiaries, and other projects.
			- Activate the role of the Agricultural Quarantine Authority to prevent the import of bees from abroad and limit the arrival of unknown diseases to Egypt.
Production-			- Establish apiaries in reclaimed lands to preserve the purity of breeds.
related	112	1st	- Eliminate the random use of pesticides to preserve the production efficiency of the study
obstacles	112		projects.
			- Consider biosafety factors when establishing farms or projects under study.
			- Establish apiaries in reclaimed lands to preserve the purity of breeds.
			- Facilitate the procedures for obtaining the necessary licenses to establish cattle fattening
			farms.
			- Subject to veterinary supervision and eliminate the random establishment of farms and
			provide supervision and veterinary care for licensed fattening farms.
E' '1			- Feel financial security and facilitate guarantees.
Financial	98	3rd	- Increase the grace period.
obstacles			- Reduce the installments paid.
Madratina			<ul> <li>Project owners contract with specialized sales outlets for food products through the Enterprise Development Agency by participating in exhibitions and displaying products in major commercial chains.</li> </ul>
Marketing- related	102	2nd	- Networking with commercial chains and listing in government records of small suppliers.
problems	102	ZIIQ	<ul> <li>Access to new markets to distribute large quantities of the products of the projects under study and qualify for export.</li> </ul>
			- Provide adequate support from the Enterprise Development Agency to market the
			products of the projects.
			- Develop technical skills and the skills required for the labor market through a package of
Technical	7.6	4.1	sequential training programs.
obstacles	76	4th	- Conduct training courses for workers on modern production methods.
			- Training in entrepreneurship skills and increase.

Source: Collected and calculated from the study sample questionnaire in Qalyubia Governorate in 2023/2024.

#### **CONCLUSION**

The findings of this study illuminate the pivotal role of micro and small enterprises (MSEs) in the socio-economic fabric of Qalyubia Governorate, Egypt. While the service sector dominates the MSE landscape, the industrial and agricultural sectors present untapped potential for growth and job creation. However, the development of MSEs is hindered by a constellation of challenges, including limited access to finance, inadequate infrastructure, and a restrictive regulatory environment.

To unlock the full potential of MSEs, a comprehensive policy framework is essential. This framework should prioritize enhancing access to credit, improving business skills through vocational training, and streamlining bureaucratic processes. Additionally, fostering a conducive business environment through supportive infrastructure and market development initiatives is imperative. By addressing these challenges and capitalizing on the strengths of MSEs, Qalyubia Governorate can accelerate economic growth, reduce unemployment, and achieve broader sustainable development objectives.

Further research is warranted to delve deeper into the specific challenges faced by different sub-sectors of MSEs, as well as to assess the impact of digital technologies on their operations. By understanding these dynamics, policymakers

can tailor interventions to optimize the contributions of MSEs to the local economy.

#### **REFERENCES**

Central Agency for Public Mobilization and Statistics. (2023).

Data on the Size and Contribution of Small and Medium Enterprises to the Egyptian Economy. Cairo.

Central Bank of Egypt. (2023). Report on the Contribution of Small and Medium Enterprises to the Egyptian Economy. Cairo.

Falah Marzouk Sandal Al-Rashidi, Talat Hafiz Ismail, Ahmed Ibrahim Mohamed Ahmed (2021). Economics of Small and Medium Enterprises in Egypt, Journal of Research and Studies on Africa and the Nile Basin Countries, Vol 2 (1).

Government of Egypt, Micro, Small and Medium Enterprises Development Agency (MSMEDA), MSMEDA Achievements Reports, Various Years.

Ibrahim El-Sayed Eissa, Eman Ramzy El\_fahl, and Naglaa El-Sayed Shaaban. (2019). The Economic Efficiency of some Small Agricultural Projects with Its Problems In Gharbia Governorate, Egyptian Journal of Agricultural Economics, Vol. 29, No. 2, June B.

#### Elhabbaq, M. M. et al.,

- Helmy Salama Mahmoud Qandil.(2019). Challenges of small and medium enterprises in Egypt and ways to address them in light of international experiences, Scientific Journal of the Faculties of Commerce Sector, Al-Azhar University, Vol. 21 (1).
- https://www.fao.org/faolex/results/details/en/c/LEX-FAOC221908/
- Ministry of Planning and Economic Development. (2022). Comprehensive and Sustainable Development Strategy: Egypt Vision 2030. Cairo.
- Ministry of Planning and Economic Development. (2023).

  BUSINESS ENABLING ENVIRONMENT FOR SMES TOWARDSGREEN ECONOMY DEVELOPMENT IN EGYPT. Cairo.
- Ministry of State for Financial Affairs. (2022). Government Initiatives to Support Small and Medium Enterprises. Cairo.
- Sherien Mohamed Efat Elfar and Doaa Ibrahim A. hamid Hashem (2020). Small Agricultural Projects and their role in Reducing Unemployment and its Impact on Sustainable Development in Egypt, Journal of the Advances in Agricultural Researches, Vol 25 (3).
- UNIDO. (2023). Definition of Small and Medium Enterprises. United Nations Industrial Development Organization. Vienna.
- World Bank. (2023). Classification of Small and Medium Enterprises. Washington, D.C.

### الدور الاقتصادي والاجتماعي للمشروعات الزراعية الصغيرة والمتناهية الصغر في دعم التنمية المستدامة بمحافظة القلبوبية

### محمود مصطفى الهباق $^{1}$ ، رباب سعيد عبدالقادر محمد $^{2}$ و فاطمة أحمد مصطفى البطح $^{1}$

اقسم الاقتصاد الزراعي - كلية الزراعة – جامعة بنها 2قسم الارشاد الزراعي - كلية الزراعة – جامعة بنها

#### الملخص

يتناول هذا البحث بالدراسة الدور المحوري للمشروعات الصغيرة والمتناهية الصغر في دفع النمو الاقتصادي والتنمية الاجتماعية في محافظة القليوبية بجمهورية مصر العزبية خلال الفترة من 2010 إلى 2022. واعتمدت الدراسة على منهجية البحث المختلط، حيث ثم جمع البيانات من مصادر ثانوية وأولية من خلال استبيان ثم توزيعه على عينة عشوائية من أصحاب المشروعات الصغيرة والمتناهية الصغر، و مساهمتها في توليد العمالة والناتج المشروعات الصغيرة والمتناهية الصغر، و مساهمتها في توليد العمالة والناتج المحلي الإجمالي، والتحديات التي تواجهها. و تكشف النتاج عن هيمنة قطاع الخدمات على المشهد، مع إبر از إمكانات النمو الكبيرة في القطاعين الصناعي والزراعي. وقد برزت أهمية المشروعات المتناهية الصغر، ولا سيما تلك التي تقودها المرأة، كمحركات رئيسية لخلق فرص العمل. و على الرغم من القيود التشغيلية، بما في ذلك محدودية الوصول إلى التمويل والبنية التحتية، إلا أن المشروعات الصغيرة والمتناهية الصغر أظهرت مرونة ومساهمات كبيرة في الاقتصاد المحلي. ولتعظيم دور المشروعات المغيرة والمتناهية المستهدفة. ويشمل ذلك تعزيز الوصول إلى التمويل وتحسين البنية التحتية وتبسيط الإجراءات البيروقراطية. يكشف تحليل الكفاءة الاقتصادية عن اختلافات بين القطاعات، حيث يبرز تصنيع الأسمدة العضوية كخيار عملي بشكل خاص بالمقارنة بالمشروعات الأخرى محل الدراسة وذلك من خلال معالجة التحديات والاستفادة من نقاط القوة في المشروعات الصغيرة والمتناهية الصغر، حيث يمكن لمحافظة القليوبية تعزيز مسار اقتصادي أكثر شمولية واستدامة. تخلص الدراسة إلى أن المشروعات الصغيرة والمتناهية التحبية، وإصلاحات تنظيمية.

الكلمات الدالة: المشروعات الصغيرة والمتناهية الصغر، محافظة القليوبية، الأثر الاجتماعي والاقتصادي، التنمية المستدامة.