

# The Role of Small and Medium Enterprises in Achieving Sustainable Development of Drinking Water Purification

Maher Ali Ahmed\* <sup>1</sup>, Nasreen Mustafa Sajid <sup>2</sup>

<sup>1</sup> College of management and economy, University of Kirkuk (Iraq), Email: maherali@uokirkuk.edu.iq

<sup>2</sup> Education Directorate of Anbar (Iraq)

reçu: .././2022

Accepté: .././2022

Publié: .././2022

## Abstract:

Sustainable development represents one of the effective approaches to evaluate performance improvement, as it represents a vital production of its requirements and the most effective element. Therefore, sustainable development is the essence of performance, and there is no performance improvement without sustainable development. The results indicated a lack of concern in the sustainable development process, which was reflected in the organization's performance and the absence of coordination between administrations and environmental actors, in addition to poor environmental awareness among many social strata resulting in absence of a continuous environmental evaluation, down to the low level of environmental performance. It was also found that most of the enterprises owners are those whose ages range from 20 to 50 years, which indicated that the conducted enterprises are not constrained to a specific age. It is also found that marketing problems have achieved (3.236) with a relative weight of (64.7%) indicating the sample approval on-axis average. The statements' means ranged between (2.94-3.54) with relative weight (58.8%-70.8%) and those percentages showed the study sample's approval on the phrases in an average level concerning the marketing problems.

**Keywords:** The environment; sustainable development; small and medium enterprises; drinking water

\* Corresponding author.: Maher Ali Ahmed

## **1. INTRODUCTION**

There is a lot of concern in small and medium enterprises by economists in various developed and the underdevelopment world states alike, as it has become a vital role in achieving economic and social goals.

Those in charge are directed to state the issue of sustainable development for being the strict approach for improving environmental performance to reach overtly to the recognition of its importance. The mechanisms provided by sustainable development may astonish the minds, as it brings the prospected hope, perpetuates communication seizes the unknown, and puts every resource in terms of its activating effects, which explains to us that the active attitude towards improving environmental performance which derives its vitality and its action power and the more extended scope of its influence from the results of the prevailing attitudes concerning the sustainable development.

### **1.1 The Study Problem:**

Small and medium enterprises face many obstacles during the performance of their work, which were formulated in the following:

1. What are the obstacles facing small and medium enterprises in their field of work?
2. What is the support required to increase the effectiveness of the performance of small and medium enterprises through sustainable development?

### **1.2 Study Objectives:**

1. Identify the obstacles facing small and medium enterprises and find quick solutions to benefit from the role of small enterprises Medium enterprises.
2. Determine the required support for small and medium enterprises in the field drinking water purification.

### **1.3 Study Significance:**

1. Increasing the effectiveness of the role that small- enterprises play in the field of water purification, which leads to the success of these enterprises and increase their economic role.
2. Restricting the size of external importation and establishing private projects that can serve the country, which leads to creating job opportunities and saving the foreign currency spent annually on importing waters.

### **1.4 Study Hypotheses:**

#### **1.4.1 The main hypothesis:**

## **The Role of Small and Medium Enterprises in Achieving Sustainable Development of Drinking Water Purification**

---

The marketing technical, and financial problems do not affect significantly the effectiveness of performance degree of small and medium enterprises during the implementation of drinking water enterprises.

**From this major hypothesis, the following three sub-hypotheses are derived:**

1. The marketing problems does not affect significantly the degree of effectiveness of the a performance of small and medium enterprises during the implementation of drinking water enterprises.
2. The technical problems do not affect significantly the degree of effectiveness of the small and mid performance measurement during the implementation of drinking water projects.
3. Funding problems do not affect the degree of effectiveness of the during the implementation of drinking water projects.

### **1.5 Review of Literatures:**

The study of (Washington, D.C World Bank, 2008), entitled: "**Strategies of Small and Medium Enterprises in the Automotive Sector**" , for obtaining the necessary financing in the field of vehicles. The study drives at identifying the problems encountering the small and medium enterprises in vehicles sector in order to fulfill commitments and presenting necessary suggestions for improving the financial support through a study conducted on (50) small and medium companies in India that enjoy access to credit facilities in banks. The study found that most companies rely on financial financing to operate their projects and increase investments by 66% for the study sample and 24% rely on the private financing.

### **1.6 The Theoretical Framework**

This theoretical framework drives at identifying the concept of small and medium enterprises, their life cycle, problems and effectiveness.

A- The nature of small and medium enterprises, and understanding their life cycle, problems and effectiveness.

### **1.7 The Concept and Characteristics of Small and Medium Enterprises**

The concept small- enterprises is considered one the important projects. These standards differ from one country to another; since the bodies that adopt small enterprises are the international organizations of the United Nations, including the governmental, and the semi-governmental ones that aim to public and private benefit 9Ali, 2010), which also drives at easy access and availability

of information and the ease of obtaining it to apply a specific criterion to measure the size of the project.

Small and medium enterprises (Saleh, 2009) are divided into the small enterprises which number of workers range from (10 to 50) workers, and the value of the assets in them is certified to (630) thousand pounds, while medium enterprises are enterprises which number of workers are not less than (51) workers and not more than (100) workers, whose assets are between two and a half (2.5) million pounds to 3.3 million pounds.

**The characteristics of small and medium enterprises represented in the following:**

- A. **Ownership:** It is owned by one family and most of them have plans to change ownership.
- B. **Leadership Decision-making:** Their decisions are effective through motives and behavior of the institution Manager.
- C. **Patterns of Organization:** The work within the organization is clear and the work teams accomplish the work entrusted to them.
- D. **Customers:** There will be a direct relationship between clients and project workers.
- E. **Values:** Values are considered one of the most important things for the owner of the project to establish the attitudes of institution.
- F. **Financing:** It should rely on self-financing due to the difficulty of providing guarantees to obtain loans.
- G. **Market position:** It is established by reliance on the local market and it has a market share.
- H. **The Small and Medium Enterprises life cycle Concerning Funding:** The first stage, (the beginning), companies face difficulty in funding from external sources, and this due to the lack of transparency of information, which depends on personal savings, i.e. self-financing, which exposes the company to financial deficit.

The second stage, (growth), in this stage, the company is making an overdraft from banks to meet problems, which expose the company to the rise of short-term debts for small and medium-sized companies, but they are insufficient and unsuitable for companies; while the long-term debts will be more appropriate, being funded through subscription or shares.

## **The Role of Small and Medium Enterprises in Achieving Sustainable Development of Drinking Water Purification**

---

The third stage (maturity), funding becomes long-term in this stage and suitable for fulfillment of requirements due to selling the company's shares. This is considered a loss of control over the management of the company.

The fourth stage, (deflation), most companies stay in a state of deflation due to a decrease in revenues, liquidation of the company, or seized by a more honorable leveling and bigger company.

### **Thirdly, the financing problems facing small and medium enterprises:**

- A- Increase of burdens of taxes and fees.
- B- The expansion of credit sales.
- C- The high degree of risk.
- D- The high cost of insurances and pensions.
- E- The high rate of interest.
- F- The lack or deficiency of capital.
- G- The mainly dependence on loaning (borrowing).
- H- The high rates of inflation.
- I- The high fixed costs.
- J- The weak financial capabilities of small enterprises make them in Weak position in competing with the large establishment.
- K- Difficulty in obtaining loans.
- L- High cost of wages and salaries
- M- The use of the loan in other purposes.
- N- The bad financial management and the lack of administrative experience.
- O- The lack of progress in some developing countries' governments in any organized or long-term programs to guide and support small enterprises technically and financially.
- P- Exaggeration of guarantees by banks and financial institutions.
- Q- Fluctuation in the exchange rate.
- R- Shortness of funding institutions and lack of advertising them.
- S- High costs of the feasibility study carried out by accounting offices to be considered.
- T- The difficulty of financial control.
- U- Fluctuation of financial incoming inflows.
- V- The inappropriateness of the bank financing formula for small enterprises.

The following table is a table that illustrates the strengths and weaknesses of small and medium enterprises using the SWOT theory

<b>Strengths (S)</b>	<b>Weaknesses (W)</b>	<b>Opportunities (O)</b>	<b>Threats (T)</b>
<ul style="list-style-type: none"> <li>▶ Easy foundation</li> <li>▶ Providing work opportunities</li> <li>▶ Low risk of capital reduction</li> <li>▶ Independence &amp; Flexibility of management</li> <li>▶ Adaptability with new changes</li> <li>▶ Increasing the capacity for innovation and innovation</li> <li>▶ High production quality</li> <li>▶ Means of spreading Industrial settlement geographically through geographical spread Industrial facilities</li> <li>▶ Training opportunities</li> </ul>	<ul style="list-style-type: none"> <li>▶ difficulty in obtaining financing</li> <li>▶ The lack of information on the markets</li> <li>▶ the existence of self-structural obstacles for the absence of administrative &amp; marketing skills</li> <li>▶ Lack of linkage between projects &amp; lack of forward and horizontal interconnection</li> <li>▶ Lack of opportunities for technology transfer and its high cost</li> <li>▶ Lagging of organizational and institutional support programs For enterprises</li> <li>▶ Lack of industrial clusters</li> </ul>	<ul style="list-style-type: none"> <li>▶ the exploit local resources</li> <li>▶ facing inflationary pressures</li> <li>▶ competition and opening the doors to export</li> <li>▶ Providing opportunity for renewal and innovation</li> <li>▶ Creating a basement of business pioneers &amp; encouraging individual initiative</li> <li>▶ Reducing monopoly</li> <li>▶ Reducing importations</li> <li>▶ The contribution to industrial development and restructuring the industry</li> </ul>	<ul style="list-style-type: none"> <li>▶ Tax treatment</li> <li>▶ Custom treatment</li> <li>▶ Protection and combating dumping</li> <li>▶ Lowering wages</li> <li>▶ Insurance and pensions</li> <li>▶ The seasonal unemployment</li> <li>▶ Productive art</li> <li>▶ Conditions of Quality</li> <li>▶ Environmental safety</li> <li>▶ Education development</li> <li>▶ Legislation and organizing laws</li> </ul> <p>Registration procedures and start of activity and exit from the market</p>

Source: Hussein Abdul-Muttalib Al-Asraj, The role of In the The Us, Smb (Small and Medium Enterprises) Industrial Development in th Arab Countries, Emirates Center for Strategic Studies and Research, Emirates, Issue 140,

#### **4- He effectiveness of performance of medium and small enterprises and their indicators.**

##### **A- The concept of Performance efficiency**

It is meant by the level to which the project is achieving its targets including the economic performance and social responsibility. These goals are determined according the company strategies because it focuses on the market and the

## **The Role of Small and Medium Enterprises in Achieving Sustainable Development of Drinking Water Purification**

---

product, which means that it relies during the decision-making process in advance rather than being a reaction on tests carried out by other companies (Harvard Institute for International Development, 2010).

**Cost:** Reducing the total costs associated with the transportation and selling of the product.

**Quality:** Improving the quality level of the product and service through good product specifications.

**Innovation:** Innovation of product - Productive process – Services.

**Marketing:** Improving the impression of customers about the brand.

Systems of performance measurement (**tatechi 2010**). They are measures to determine each of the efficiency and effectiveness of the organization's movements and actions and the benefit of using performance measurement systems. It is the language of progress for the organization where the direction of the organization indicates performance measurement works that demonstrate either the organization achieving its goals or not.

### **B- The indicators of performance measurement:**

It is called for scale or the indicator. It is a relationship between two elements that measures the growth or development of a particular element for several years. It could be vertical for two elements may exist between them, with an economic or technical link between them. This relationship evaluates the overall performance of the company and its internal activity.

### **The determinants should be available in performance evaluation:**

- 1- The appropriateness of indicators of each industry according to its activity.
- 2- The total indicators are sequential at the level of the company, and all of them are connected to the analytical indicators.
- 3- Determine a specific goal that the company seeks to achieve either it is a major goal or detailed one.
- 4- There will be follow-up on the indicators that occur in the company and their rates in order that they can be developed in light of the expected changes.

### **C- Types of indicators used in measuring performance:**

#### **Qualitative & Quantative indicators:**

In fact, quality is the element that define using a nominal set of techniques that presents good acceptable results in the application that do not submit to quantative measurement.

On the other hand, the quantitative element is defined through using an amount of techniques such as tests of variables viable for measurement.

There are two types of indicators, the financial and non-financial indicators. Regarding the financial, they are the indicators associated with revenues, costs and size of annual works of the company; while the non-financial indicators are the ones associated with clients' satisfaction level and other variables.

### **D-The Relationship between sustainable Development and Improvement of Performance:**

Sustainable development is considered mobilization of all energies existed in employees or workers that guarantee their human rights. It requires adhering to legitimate procedures , defining as well, the moral responsibility level and defining its dimensions means modifying human behavior which emphasize the contents of the green environment. This is embodied in moving activities necessary for obtaining the green seal certificate. This reflects the performance level, meaning that performance is the legitimate son of the sustainable development process for achieving indicators of sustainable development. The improvement level is determined in performance, as without good performance, there is no sustainable development which determine in turn, impact and effect levels.

This seal is granted by an American organization that doesn't seek achieving profits, as it also provides products that fulfill the environmental standards which have been developed through its processes of utilization of resources optimally and correctly. The World Health Organization (WHO) has reported in Geneva 1993 that environment's deterioration is considered the first responsible for the increasing violence cases, addiction and depression. Also, the absence of healthy safe residence leads to prevalence of the socio-psychological diseases.

The bottom line, sustainable development and improvement of environmental performance are two elements necessary for each other that one can't be achieved in absence of the other and they are active factors in the equation of serving humanity. Moreover, sustainable development is based on processes of improving performance, affecting it and reflected in its different indicators.

Actually, the level of concern with pillars of sustainable development in a way that directs the orientations of administrative leaderships within tight paths that may not fulfill the required tasks either in that regards to the present generations or the coming ones.

# The Role of Small and Medium Enterprises in Achieving Sustainable Development of Drinking Water Purification

---

## 3. THE ANALYSIS RESULTS

### 3-1- Measurement of Dependency (Questionnaire Reliability and Validity)

#### 3-1-1- The Questionnaire's Reliability

For checking the questionnaire's reliability to count on the questionnaire results, the researcher has used Alpha Cronbach's Coefficient. The table shows the results. exposes the reliability this equation's coefficients.

**Sample (1) The Reliability of the a word of the Three paragraph of Research**

distance	No. of Phrases	Value of Alpha
Marketing Problems	5	0.654
Technical Problems	5	0.683
Financing Problems	3	0.698
Total of Questionnaire	13	0.709

**Source: It really is designed by the researcher to use data list of subjects**

Given the previous table, it is indicated evidently that the reliability of the coefficient's values are all high values, as they are (0.654, 0.683, 0.698) respectively. The Alpha value of the total sample is (0.709) They're all high values, too. and higher the (0.5). These reliability values coefficients refer to the validity and reliability of the phrases and the potentiality of counting on their outcomes.

#### 3.1-2- Validity of Questionnaire

The correlations coefficients of each question's dimension are counted according to the full questionnaire scores which result in the application of the questionnaire on the study sample.

The validity of the internal consistency was calculated as follows by the researcher:

**Table (2) the Research Dimensions' Axes Validity of the Internal Consistency of**

Dimensions	Pearson Coefficient Correlation	Significance
Marketing Problems	(**) 0.738	0.001
Marketing Problems	(**) 0.745	0.001

Financing Problems	(**) 0.642	0.001
--------------------	------------	-------

**\*\* The Statistical Significance at (0.0001) Significance Level**

Source: It is designed by the researcher using the of the statistical analysis results

The previous table of validity of internal consistency indicates that the coefficient correlation is significant at (0.05) significance level, asserting the validity of internal consistency. The values of Pearson 's coefficients correlations are as follows: (0.642, 745, 0.738) respectively.

### **3.1.3 The Qualitative Results of the Demographic Data of the Study Sample:**

Table (3) the Results of the qualitative statistics of the study sample according to the variable of the Project's owner's age

The Project's Owner's Age	Number	Percentage
20-30 years	5	10
30-40 years	20	40
40-50 years	23	46
50 – 50 >	2	4
<b>Total</b>	<b>50</b>	<b>100%</b>

It is indicated by the previous table that the questionnaire is applied to a sample of (50) items, as the bigger number of the study sample is the age stage (20-50) which is the highest ratio representing (46%), followed by the age stage (30-40) representing (40%), then the age stage (20-30) for (10%), and finally, the stage of (50 and over).

Table (4) shows the findings of qualitative (descriptive) statistics. The study sample due to the variable of education level

Education Level	Number	Percentage
Medium	18	36
Bachelor	17	34
University	15	30
<b>Total</b>	<b>50</b>	<b>100%</b>

It is indicated from the previous table that the questionnaire is applied to a sample of (50) items, most of it from (medium) educational level (36%) followed by the bachelor degree representing (34%), and finally, the university education representing (30%).

## **The Role of Small and Medium Enterprises in Achieving Sustainable Development of Drinking Water Purification**

---

Table (5) summarizes the findings of the qualitative (descriptive) statistics. The study sample due to project's life variable

<b>Project life</b>	<b>Number</b>	<b>Percentage</b>
5 years	17	34
10 years	23	46
12 years	10	20
Total	50	100%

It is indicated from the previous table that the questionnaire is applied to a sample of (50) items, and the biggest number due to project's life is (10 years) representing (46%) which is the highest followed by the (5 years) representing (34%), and finally, the (12 years) representing (20%).

### **4. CONCLUSIONS**

▶ The low level of concern in sustainable development pillars in a way that directs the orientations of the administrative leaderships within tight paths that may not fulfill the requirements either in that concerns the present generations or the coming ones.

▶ Ignoring the concomitance cases of civil responsibility or moral responsibility towards the environment to the extent they are incapable to go along with their roles.

▶ The overwhelming of the industrial selfishness on lots of ecological behaviors either by the industrialists themselves or those involved in the same work cycle.

▶ It is indicated that the age stage (20-50) years old is the overwhelming stage that are owners of projects.

▶ The poorness of the environmental awareness among a wide class and segment of social classes in a way that contributes in the absence of continuous environmental auditing reaching to the low level of environmental performance.

### **5. RECOMMENDATIONS**

▶ Dedicating all efforts to fulfill the current and future generations' demands being a trust and a security in the necks of those who are in charge.

▶ Working on stating questioning that concerns all the environmental challenges in a way that adds efficacy to the questioning, being an imperative demand and an essential matter that can't be avoided in all activities.

▶ Establishing legislations and controls and support them with regular rules for proper utilization of environmental resources in line with development; as any

violation can lead to the penalty of deprivation from actual practice of any activity.

► The acknowledgment of culture's interest in sustainable development to the extent of emphasizing the best investment and preservation of resources without extravagance and waste.

► Directing attentions towards the concern with sustainable development and applying it within vital facilities.

## **6. REFERENCES**

- Al-Asraj, Hussain Abdul-Muttalib, (2020), The Role of Small and Medium Enterprises in Industrial Development in the Arab Countries, Emirates Center for Strategic Studies and Research, UAE, Issue 140.
- Ali, Rasha Saeed Mohamed, (2010), The Role of Commercial Banks in Financing Small and Medium Enterprises, a master's thesis submitted to the Institute of African Research and Studies, Department of Politics and Economics, Cairo University.
- Al-Mahrooq, Maher Hassan and Ehab Mqabalah, (2006), Small and Medium Enterprises, Their Importance and Obstacles, from the publications of the Small and Medium Publications Center of the Arab Academy for Banking Sciences, Jordan.
- El-Beltagy, Muhammad, (2006), Financing Small Enterprises in Islamic Financing Forms, Banking Bulletin.
- Hatice J. (2010), Commercial Bank and Performance in Micro Enterprises / Small Business Finance, Cambridge, Harvard University, Harvard Institute for International Development .
- Kanjo, Abboud Kanjo, (007), Investment and Financing Strategy in Small Enterprises, A field study of small businesses in the city of Aleppo, research presented to the Fifth Scientific Conference, Philadelphia University, College of Administrative and Financial Sciences, Amman, Jordan.
- Mayada M. (1997), ommercial Banks in Microfinance: A New Actors in the World, Washington, D.C Agency for International Development ..
- Mohamed, O. (2008). SMEs stock exchange in Egypt: Cairo Alexandria stock exchange Web: [www.sme.or.eg.Englishpublication/Financingoppourtinnting](http://www.sme.or.eg.Englishpublication/Financingoppourtinnting)
- Saleh, Idris Mohamed, (2009), Small and Medium Enterprises in Libya and Their Role in the Development Process, Master's thesis submitted to the Arab Open Academy in Denmark .
- Thorsten, B. (2008). Banks in Finance for SMEs around the World Drivers, Obstacles, and Business Models and Lending Practices: Washington, D.C World Bank.