

# A Theoretical Study On The Environmental Management System And Its Role In Establishing Sustainable Development In Business Organizations

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## **Abstract**

*This research paper aims to shed light on the relationship of the Environmental Management System with the dimensions of sustainable development by researching how to achieve it. To address this topic, this research paper has been divided into two main axes. Through the first axis, some basic concepts about the environmental management system will be presented in terms of its concept, requirements, benefits for business organizations, as well as obstacles that may prevent its application, while the second axis is devoted to showing how the environmental management system contributes to establishing each of the main dimensions of sustainable development.*

**Key words:** Environment, Environmental Management System, sustainable development.

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## **INTRODUCTION:**

Recently, there has been an increased interest in environmental conservation issues, both at the local level and at the international level, which has made many institutions seek to integrate the environmental dimension into their overall goals, and they have become aware that they are concerned with contributing to achieving sustainable development, so they have adopted several systems such as the quality management system, Environmental Management System and other the advantages through this system, whether in the marketing field, in the environmental field, in the legal field, or otherwise, but they do not realize the importance of this system for the performance of its factors, so this research paper comes to answer the following main question:

**How can an environmental management system contribute to the establishment of Sustainable Development Dimensions in business organizations?**

The main question includes the following sub-questions:

- What is the purpose of the Environmental Management System, and what are its benefits for business organizations?
- What are the challenges of implementing the Environmental Management System in business organizations?
- What is the role of the Environmental Management System in achieving the dimensions of sustainable development in business organizations?

**First: a theoretical introduction about the Environmental Management System**

Through this axis, it will be discussed what an environmental management system is in terms of the concept and the main requirements to be met in its construction, as well as the desired benefits from its application in the economic enterprise.

**1- the concept of Environmental Management System:**

The researchers presented several definitions of the environmental management system, including those who defined it as: "a tool for the management of an enterprise and a group of people, as it enables them to achieve an organization that allows them to control their activities and reduce their impact on the environment"<sup>1</sup>.

The environmental management system can be defined as follows: "it is a set of policies, concepts, procedures, obligations and action plans that will prevent the occurrence of environmental pollution elements of all kinds and understand the employees of different companies, each in its competence, in addition to the application of these methods and procedures in practice and the preparation of periodic reports on the results of that application"<sup>2</sup>.

Whereas, the technical committee 207 of the Met defined the environmental management system as: "part of the overall management system that includes the organizational structure, planning activities and responsibilities, procedures and processes, resources for the development, implementation, investigation, audit and maintenance of environmental policies"<sup>3</sup>.

It can also be said that the environmental management system is that subsystem of the larger system (organization) is used as an effective tool to maintain sustainability and development through the functions granted to it, and the application of this system makes management look like a link between the organization and the natural environment with all its contents to suit the continued compatibility of the two systems together without the existence of conflicts between them<sup>4</sup>.

Mohammed Mustafa Al Qassimi defines the environmental management system as follows: it is a set of procedures and policies that determine how the organization manages its potential impacts on the natural environment and on the health of individuals<sup>5</sup>.

It is clear from the previous concepts of the Environmental Management System, which differ in their wording and often agree in their content, that a brief definition of this system can be made as follows: an environmental management system is a set of procedures that take into account the improvement of the organization's performance in the field of environmental protection from environmental pollution and ensures rational exploitation of Natural Resources .

## **2- the main requirements of the Environmental Management System in accordance with the international standards ISO 14001**

The international standard (ISO14001) sets out the main requirements to be implemented in organizations wishing to obtain a certificate of conformity with this standard, and these requirements can be stated as follows<sup>6</sup>:

**2-1-environmental policy:** it is usually in the form of a written statement expressing the commitment of the institution to a series of environmental purposes, as it reflects its intentions and the extent of its concern for the environment<sup>7</sup>.

The basis for building any environmental management system is to develop a clear and documented environmental policy by senior management, adhere to it and declare it, it explains the basics of the system, and this policy must confirm the organization's commitment to the following points:

- Compliance with relevant environmental legislation and instructions :
- Continuous improvement of the system to improve environmental performance :
- Take the necessary measures to prevent pollution in all activities of the organization.

### **2-2. planning: it comprises the following steps:**

**A-identification of environmental aspects:** the planning process begins with an inventory and identification of environmental aspects, which represent the activities of the institution affecting the environment, and we mention the following:

- Emission of gases;
- ↳ Power consumption ;
- Leakage of toxic substances ;
- Waste;
- Waste of water ;
- Soil pollution ;
- Sewage water.

**B-legal and other requirements:** the organization must draw up a list in which all laws and legislation related to environmental conservation, and then work on the application of these laws<sup>8</sup>.

The standard (ISO14001) obliges the organization to establish and maintain procedures that determine the legal and other requirements that the organization is subject to related to the environmental aspects of its activities, products and services, whether related to production processes or related to products, examples of such requirements can be mentioned the following:

- Applicable environmental laws ;
- Controls and instructions related to production activity ;
- Controls and instructions related to products and services ;
- Regulations and instructions for general environmental issues ;
- Global guidelines for Environmental Conservation.

**C-goals and objectives:** first, it is necessary to distinguish between the environmental goal and the environmental goal by defining them as follows: <sup>9</sup>

- **Environmental goal:** it is the general environmental goal resulting from the environmental policy that the organization seeks to achieve.

- **Environmental objective:** it is a measurable performance requirement that can be applied in an organization where objectives are set to achieve a certain goal.

One of these contradictions can be said that environmental goals are general and long-term (for example, reducing untreated waste), while environmental goals are specific and short-term (for example, the enterprise determines this year the amount of waste that will be thrown away without treatment) and are set to achieve a certain goal.

It should be noted that the standard (ISO14001) obliges the organization to establish and maintain clear, documented and consistent environmental goals and objectives consistent with the declared environmental policy for each function and level in the organizational structure.

When setting and reviewing its goals and objectives, the organization should take into account the following issues:

- Legal and other requirements that the organization has complied with;
- Important environmental aspects of the organization's activity, products and service;
- Alternatives and technological options available to the organization;
- Financing requirements of the organization;
- Stakeholder perspectives;

Among these environmental goals and objectives we mention the following: <sup>10</sup>

- Reduction of resource depletion;
- Reducing the spread of pollutants in the environment ;
- Control of the environmental impact of raw material sources ;
- Promotion of environmental awareness among workers and society ;
- Designing goods based on low environmental impact in production and use.

**D-environmental management program:** The organization in accordance with the standard (ISO14001) must develop a program to achieve and maintain environmental goals and objectives, provided that it includes the following points:

- Determine the responsibility for achieving the goals and objectives at each function and level in the organizational structure ;
- Identify the means to achieve those goals and objectives ;
- Set a specific timeline for everything that needs to be achieved. That is, the organization should determine (what to do And how And by whom And when The program must also be practical and documented, and be communicated to all its employees.

**2-3 implementation and operation:** The implementation of the Environmental Plan requires the presence of qualified and trained people, documented procedures and clear communications, as well as the need to adjust processes, documentation and emergency preparedness<sup>11</sup>. Which can be stated as follows:

**A-structure and responsibilities:** the standard (ISO14001) requires the organization to define in a documented manner the roles, responsibilities and powers of each individual in the organization with regard to environmental matters, and to declare this so that everyone can work effectively, and the department must provide the necessary resources (technological, financial, specialized skills, etc.)...Etc.) to apply and review various environmental plan procedures.

The standard also requires the appointment of a representative of the department responsible for environmental management with all responsibilities, authority and resources, regardless of his other responsibilities, in order to ensure the proper application of the system and follow-up, and to inform senior management of any deviations or problems that arise during the application through sending reports, which facilitates the management to quickly make the necessary decisions for correction.

**B-training and awareness:** the standard (ISO14001) obliges the organization to determine its training needs, and this standard refers to two types of training: the first is specialized for individuals whose actions have environmental impacts, it urges to ensure an appropriate level of training for them, and the second takes the form of environmental awareness of the following issues:

- The importance of matching the environmental policy with the requirements of Environmental Management;

- The role and responsibilities assigned to them in applying the requirements of the Environmental Management System;
- Understand the environmental impacts resulting from activities affecting the environment, and the environmental benefits envisaged from improved individual performance;
- The consequences that arise as a result of non-compliance with the established procedures.

**C-communication:** the standard obliges the organization to develop procedures that take into account the following aspects:

- Internal communication between the different levels of the organization to ensure the effective implementation of the system ;
- External communications: they shall be between the organization and the entities interested in environmental affairs, so that the subject of these communications relates to the environmental performance of the organization and must be responded to.

**D-environmental management system documentation:** it is a description of the basic elements of the system and the documentation of the environmental management system varies from one organization to another, depending on the size, type, activities and products of the organization<sup>12</sup>. The organization must keep information on the main requirements of the Environmental Management System, and this information can be documented in paper or electronically, including the following:

- **Environmental guide:** it contains environmental policy, goals, objectives, environmental responsibilities and any other information ;
- **Procedural documentation:** clarifies the flow of existing activities and processes in the organization ;
- **Work instruction documents:** they detail the work directions of various activities in the organization ;
- **Records:** includes all documents that demonstrate the organization's compliance with the requirements of the Environmental Management System.

**E-document control:** according to the standard (ISO14001), the organization must have clear procedures for controlling all documents of the environmental management system, to ensure the achievement of the following points:

- The location information should be kept in an organized manner;
- To be reviewed periodically;
- Be available on all sites to all workers who are related to it ;
- To withdraw the canceled documents to ensure that they are not used.

**F-process control:** the process of process control is one of the basic requirements of the environmental management system, as the standard obliges the organization to identify those processes related to important environmental aspects to comply with environmental policy and achieve environmental goals and objectives For the organization, so that the following points are guaranteed to be achieved:<sup>13</sup>

- Develop, implement and maintain documented procedures to control cases whose absence leads to deviation from environmental policy and from environmental goals and objectives;
- Develop, implement and maintain procedures related to the environmental aspects of goods and services used by the organization and communicate these procedures and applicable requirements to suppliers and contractors.

**G-emergency preparedness and response:** according to the standard (ISO14001), the organization must be ready to respond to emergency conditions resulting from fires, sudden emissions or otherwise. Preparation for this is carried out in three ways as defined by the standard for the organization, which are as follows:

- Establish procedures that identify potential incidents and how to respond to them;
- Review and update emergency response procedures whenever possible;
- To conduct periodic applied tests of these procedures.

**2-4-examination and corrective actions:** Where the application and operation of the system is confirmed by checking it and detecting and correcting possible problems, this is done through the following steps:

**A-monitoring and measurement:** the standard (ISO14001) obliges the organization to establish and maintain documented procedures on a systematic basis to follow and measure its activities with an important environmental impact.

It is also necessary to carry out the maintenance of measuring devices and keep documented records of this process.

**B-non-conformity and corrective and preventive measures:** <sup>14</sup> after conducting the follow-up and measurement process, the officials reach either a match between the planned and the actually completed or A mismatch, and here the standard (ISO14001) obliges the organization to:

- Identification of the reasons for non-conformity:
- Implementation of corrective actions.

**C-control of records:** the standard emphasizes the need for the organization to set environmental records for training and the results of periodic audits, provided that these records are kept in an accessible way without being damaged or lost, specifying And record its validity period. D-Environmental Management System Audit: an environmental management system audit is a verification process carried out by an internal or external audit team, aimed at objective evaluation of the system and its compliance with the requirements of the standard (ISO14001) through documented evidence and observation, and senior management must be informed of the results of that audit.

**2-5-Management Review:** The management review is the final stage of the implementation of the environmental management system, as the standard obliges the organization to review the top management of the system at specified intervals, to ensure its continued adequacy and effectiveness, so that this periodic review highlights the need to make changes in the environmental policy, objectives and other requirements of the system, provided that this is done in the light of the audit results.

What has been mentioned can be clarified in the following table, which summarizes the main requirements of the Environmental Management System in accordance with the international standards ISO 14001:

**Table No. (01): the main requirements of the Environmental Management System according to the international standards ISO 14001**

Numbering	the requirement number in the specification	requirements	Description Summary
1	4.2	environmental policy	is a statement prepared and endorsed by senior management that declares the organization's commitment to the environment and is used as a framework for planning and implementation.
2	4.3.1	environmental aspects	identification of activities and products that have an important impact on the environment.
3	4.3.2	legal and other requirements	n the sense of specifying laws and instructions on Environmental Conservation.
4	4.3.3	goals and objectives	setting environmental goals for the organization that correspond to its environmental policy and the views of stakeholders.
5	4.3.4	Environmental Management Program	planning actions in order to achieve environmental goals and objectives.
6	4.4.1	structure and responsibilities	in the sense of defining the roles and responsibilities of workers.
7	4.4.2	training and awareness	training and sensitization of employees on environmental issues.
8	4.4.3	communication	establish procedures for internal and external communication on environmental issues.
9	4.4.4	Environmental Management System Documentation	the preservation and maintenance of information related to the Environmental Management System and associated documentation.
10	4.4.5	document control	define and manage processes and activities in accordance with environmental goals and objectives.
11	4.4.6	process control	define and manage processes and activities in accordance with environmental goals and objectives.

12	4.4.7	emergency preparedness and response	identify potential emergencies and how to respond to them.
13	4.5.1	monitoring and measurement,	monitoring activities affecting the environment.
14	4.5.2	nonconformity and corrective and preventive actions	identify and correct problems and ensure that they do not recur.
15	4.5.3	record keeping	in the sense of keeping records related to the Environmental Management System.
16	4.5.4	Environmental Management System Audit	a periodic audit to ensure that the system is operating as planned.
17	4.6	management review	a periodic review of the system with a focus on continuous improvement.

**Source:** Abdul Karim Khalil Al-Saffar: "a model for evaluating the Environmental Management System in accordance with the requirements of international standards ISO 14001", Journal of the University of Babylon for the humanities, Vol.19, No. 01, 2011, University of Babylon, Iraq, P. 11.

### 3- the benefits of applying the Environmental Management System in business organizations

The application of an environmental management system in an business organizations has several benefits for the enterprise and for stakeholders (employees, customers, Society, etc.)... At the same time, some of these benefits can be mentioned as follows:

#### 3-1. increase productivity and reduce costs:

The higher the productivity of the enterprise and the lower its costs, it will be able to set prices either lower than its competitors by accepting the lowest margin of profit, or to choose to sell at the same selling price as competitors and thereby achieve a higher profit margin, and in this area, the Environmental Management System helps the economic enterprise to reduce its costs and contributes to increasing productivity by achieving the following:<sup>15</sup>

**A**-rationalizing the use of resources and reducing energy waste

**B**-reduce the percentage of defective in production

**C**-increasing the efficiency of the performance of employees through training programs and the selection of competencies

**D**-improve the relationship with suppliers

**E**-increase the productivity of workers by making the working environment environmentally friendly, as some studies have recently indicated Environmentally friendly buildings can increase worker productivity by up to 15 %

**F**-cost savings resulting from:

- Reduction in energy consumption and other resources;
- Reduce, reuse and recycle waste and thus reduce disposal expenses ;
- Savings from the sale of waste ;
- Reducing the burden of transportation and storage due to the rationalization of resource consumption ;
- Reduction of financial burdens and penalties imposed due to pollution due to the reduction of pollutants, which in turn leads to a decrease in insurance expenses and compensation for environmental damage ;
- Investment in fixed capital: the focus on preventive measures for the effects of pollution leads to a reduction in investment in the requirements for remedial measures ;
- Reduce training costs in the long term
- Making appropriate decisions as the Environmental Management System helps to assess the costs and profits associated with improvements<sup>16</sup> ;
- Benefit from financing advantages: organizations that comply with environmental legislation can benefit from loans and credit facilities from banks or receive government subsidies.

#### 3-2-achieve benefits in the field of marketing:

Enterprises that produce environmentally friendly products have a larger market share because they help customers achieve their environmental goals. products that can be recycled after use or produced using clean technology increase the competitive strength of the enterprise.

Here Comes the role of environmental posters, environmental advertising and disclosure in disseminating information about the environmental aspects of the enterprise's products, which leads to improving the reputation of the enterprise among the public and then to increasing the demand for its products and contributes to opening new marketing outlets for it, as a result of which the volume of sales and profitability of the enterprise increases compared to enterprises that do not take into account environmental considerations.

In this regard, a German study indicates that Sony's global market share has decreased by 11% in the field of televisions compared to an increase of 57% for Nokia due to the publication of the German consumer magazine evaluation of televisions in which Nokia TVs are considered environmentally better.

The application of the Environmental Management System also strengthens the position of the enterprise in the global markets, through reviewing the production process by carrying out a number of measures, including the production of goods with specifications that meet the environmental requirements of importing countries, meeting their environmental demands on the packaging and shipping of products, and other measures aimed at making goods suitable for the international market, all this will give the enterprise the opportunity to gain a competitive advantage among its competitors in this market.

Moreover, registration in the ISO14001 standard has become a prerequisite in many international markets, which makes registered institutions enjoy a competitive advantage that increases their new market opportunities and strengthens their position in tenders. It helps to obtain the European badge (CE), which serves as a passport to enter the European market.

### **3.3-achieving benefits in the administrative field:**

Studies have confirmed that the application of the environmental management system achieves a number of benefits that positively affect the improvement of the performance of administrative functions in the institution, and the most prominent manifestations of this improvement are the following:

A-increase employee satisfaction: the involvement of employees in the implementation of the requirements of the environmental management system increases their awareness of the importance of the environmental issue and raises their morale, which is reflected in their job satisfaction

B-improvement of the procedures already followed in the field of Environmental Management

C-taking advantage of the management review of environmental systems internally as a distinct management mechanism that contributes to the continuous improvement of the environmental performance of the organization

D-encouraging cooperation and coordination between the various departments of the institution, and improving internal communications. As well as improving Channels of communication between the foundation and government agencies specialized in the field of Environmental Protection<sup>17</sup>:

E-prior managerial awareness of problems will provide the best opportunity for competent solution<sup>18</sup>;

F-new employees get acquainted with the work required of them quickly thanks to the clear documentation of responsibilities, powers and work instructions.

### **3-4-achieving social and environmental benefits:<sup>19</sup>**

A-protection of natural ecosystems

B-rationalization of the use of Natural Resources (Water, Energy,...)

C-reduce the amount of waste

D-reducing the risks affecting human health and security resulting from emissions and industrial releases

E-improving human health at work

F-improving the public image of the institution in front of its society and its active forces in the field of consumer protection<sup>20</sup>:

G-improving the performance of employees by raising their morale and satisfaction

H-contribute to the sustainable development of society<sup>21</sup>:

I-contribute to addressing the problems of global warming and the ozone hole that threaten the future of future generations.

## **4 obstacles to the application of the Environmental Management System in business organizations**

The application of the Environmental Management System in business organizations faces several obstacles and challenges, especially in the third world countries, some of these obstacles can be mentioned as follows:

4.1 -apprehension of the necessary requirements for the establishment and operation of the system (time, costs, effort)<sup>22</sup> ;

4.2-the prevailing culture in some organizations that are not interested in environmental conservation issues ;

4.3-lack of independence in making decisions of this form for organizations subordinate to the state, which carry out only the orders of the supreme body subordinate to it ;

4.4-the ineffectiveness of lobbyists who seek to preserve the environment in some countries. This can be illustrated in the following table, which summarizes the environmental impacts of various pressure bodies:

**Table No. (02): environmental effects of various pressure bodies**

Lobbyists	environmental influences
<b>Government</b>	comprehensive laws and government instructions, which represent the greatest pressure on polluting organizations.
<b>Customers and consumers</b>	there is a great knowledge and awareness of the concept of the environment and the extent of consumers ' impact on it, the acceptance of the concept of green products by industrialists and consumers will reduce waste and make the organization control pollutants.
<b>Investors</b>	by examining the basic environmental records of organizations, as investors have become aware of the disadvantages of not protecting the environment by their organizations.
<b>Manpower through</b>	recruitment practices that require highly skilled personnel to operate complex equipment by which pollution can be controlled.
<b>Local groups</b>	have complaints that accompany noise, odors and various pollutants, especially complaints that are referred to the courts.
<b>Financing</b>	the use of the method of surveying environmental risks by banks and insurance companies that the organization wants to deal with.

**Source:** Najm al-Azzawi and Malek al-Nazer: environmental management and international standard requirements (ISO 14001), international conference on environmental economics and globalization, Al-Zaytuna University, Amman, Jordan, April 20-23, 2009, p.05.

#### 4-5-financial, technical and informational obstacles:<sup>23</sup>

**A-financial constraints:** they consist of the following points:

- **Limited ability to provide internal financing:** The Prevention of pollution of organizations is hampered by several complex obstacles with regard to internal financing, since the element of risk and doubt in the performance of certain technologies and management practices can cause industrial organizations to be reluctant to invest through the application of the Environmental Management System. Internal financial obstacles to the implementation of the system may include:

\* Lack of understanding and difficulty in predicting the costs that the organization will incur in the future (e.g. waste disposal costs)

‡\* Focus on the short-term benefit achieved and the impact of this on the reluctance to invest in which the payback time is long

‡\* A sense of risk when investing in the adjustment of production processes, as it may not bring the desired results in the eyes of some organizations.

- **Difficulty in obtaining external financing:** Just as the limited ability to provide internal financing is one of the obstacles to investing in the implementation of the Environmental Management System, the difficulty of obtaining external financing is another obstacle. This problem is especially experienced by small and medium-sized organizations due to the lack of necessary guarantees for obtaining financing.

- **Limited economic incentives:** The economic support that the organization receives from the state as a result of the implementation of the environmental management system may be insufficient in its view, on the one hand, and on the other hand, there may be no deterrent taxes for polluting organizations to force them to apply this system.

- **Lack of markets for the disposal of products made from recycled materials:** One of the main obstacles limiting the creation of these markets is the lack of data on the types and quantities of waste required to open markets for them.

**B-technical obstacles:** Some organizations may lack technical knowledge related to practices that waste natural resources and opportunities for development and improvement of environmental performance.

They may also not have the technology required to implement EMS requirements, and this problem is more pronounced in small and medium-sized organizations that lack technical and financial resources that are available to larger organizations.

**C-information constraints:** This includes a lack of public awareness among the management of the organization (senior management) or at the decision-making level of the advantages of applying the Environmental Management System.

**6-4** Some organizations consider the application of the environmental management system as a return to the bureaucratic system because of the precise procedures and steps used by this system<sup>24</sup>.

## **SECOND: the contribution of the environmental management system to achieving sustainable development**

### **1-the concept and objectives of sustainable development**

#### **1.1. the concept of sustainable development:**

The concept of sustainable development emerged during the 1972 Stockholm conference on the human environment, organized by the United Nations, which marked a step towards global attention to the environment.

It was agreed that development and the environment are two inseparable processes, and their goals cannot be separated, because if the environment is the conditions surrounding man, then development is man's quest to develop his natural and living conditions in general.

The Stockholm conference discussed for the first time environmental issues and their relationship to the reality of poverty and the absence of development in the world, and it was announced that poverty and the absence of development are the most serious enemies of the environment, on the other hand, the Stockholm Conference criticized countries and governments that still ignore the environment when planning development<sup>25</sup>.

It can also be said that sustainable development has several definitions, from the economic side sustainable development means a reduction in energy consumption and resources, as well as the use of resources in order to raise the standard of living and reduce poverty.

From the social side, sustainable development is meant to seek to stabilize population growth and raise the level of Health and educational services, especially in the countryside.

At the environmental level, it means the protection of Natural Resources and the optimal use of Agricultural Land, Water Resources and other resources found in nature.

And finally, at the technological level, it means transferring society to the era of clean industries that use environmentally friendly technologies and produce a minimum of polluting, heat-trapping and harmful gases to the ozone layer<sup>26</sup>.

The United Nations Development and Environment Programme also defines it as: development that allows meeting the needs and requirements of present generations without compromising the ability of future generations to meet their needs<sup>27</sup>.

While there are those who define sustainable development as the management of available resources to ensure the need of future generations in quantity and quality of those resources. This involves achieving a quality of the environment acceptable to society through the control of environmental pollution. In other words, achieving a balance between growth and conservation of resources to ensure the need of future generations of these resources, and this means that the flow of economic activities must take into account the natural environment<sup>28</sup>.

Through what has been mentioned before, a brief definition of sustainable development can be put as follows: it is a development that allows the needs of society to be met in a way that ensures that the needs of future societies are not compromised.

#### **1.2. Sustainable Development Goals:**

Researchers differed in setting clear goals for sustainable development, but some opinions on this topic can be presented as follows:

- Sustainable Development aims to bring about fundamental changes in society without negatively affecting the environment, including the following:<sup>29</sup>

**A-increasing national income:** increasing national income is one of the most important sustainable development goals in underdeveloped countries, as the main motivation that drives these countries to achieve sustainable development lies in their poverty and the low standard of living of their populations, but increasing income depends on the capabilities of the state, the more capital and greater efficiencies are available, the possibility of achieving a higher percentage of the increase in national income.

**B- Improving the standard of living:** Improving the standard of living is one of the important goals that sustainable development seeks to achieve, and an increase in national income does not necessarily lead to an improvement in the standard of living, increasing the population by a greater percentage than the increase in national income makes it difficult to achieve an increase in the average per capita income, and the inequity of income distribution will lead to the transfer of most of the increase to a certain category of individuals, and therefore, increasing income must be linked to regulating population increase, achieving a fair distribution of national income, and from it, sustainable development improves the quality of life of individuals by focusing on the qualitative aspects of growth, and in this context, work to satisfy the basic needs of current individuals Improving the quality of life through the provision of employment opportunities, as well as education, health care and social services, in addition to respecting the rights of individuals and enabling them to participate in decision-making.

**C-reducing inequality in incomes and wealth:** this falls within the social dimensions of the sustainable development process, and in this area, underdeveloped countries suffer from significant disparities in the distribution of incomes, where the majority of society members own a small percentage of wealth and a modest share of national income, while a small group owns a large part of wealth and a high share of income.

**D-rationalization of the use of natural resources:** improving the quality of human life should not be at the expense of the environment through the conservation of Natural Resources and rational use of them, so that this use does not exceed the rates of their natural regeneration, in addition, alternative resources should be sought so that natural resources remain for a long period of time and should not put waste in quantities that the environment is unable to absorb.

**E-linking modern technology with the goals of society:** modern technology should be employed to serve the goals of society by raising society's awareness of the importance of modern technologies and how to use them in order to improve the quality of life while working to find solutions to control the risks and environmental problems caused by the use of technology.

- Sustainable Development seeks to achieve four goals that can be mentioned as follows:<sup>30</sup>

**A-social equality :** equality is considered one of the most important social issues in sustainable development, as it reflects to a large extent the quality of life and public participation, and equality is associated with the degree of justice and inclusiveness in the distribution of resources, opportunities and decision-making, and includes access to employment for all members of society and the fight against poverty and the provision of public services, including health and education.

**B-Public Health:** there is a close link between health and sustainable development.access to clean drinking water, healthy food and health care are among the most important principles of sustainable development. health is one of the issues of concern to sustainable development. therefore, health care needs, especially in rural areas, and Disease Control must be achieved.

**C-education:** education is a key requirement for achieving sustainable development, and it has been focused on because it is one of the most important resources that people can get to achieve success in life. There is a direct mathematical correlation between the level of education in a country and its socio-economic progress.

Many countries of the world have achieved tangible success in education and in training their population with modern information, which has led to their prosperity.

**D-employment:** it is necessary to provide more opportunities for employment and reduce the size of unemployment because one of the requirements to improve the quality of human life is to provide employment positions.

## **2-the environmental dimension of sustainable development and its relationship to the Environmental Management System:**

The relationship between Sustainable Development and environmental protection is a close relationship, as the issue of Environmental Protection is considered as the first goal in sustainable development programs, due to the fact that the environment is the primary source of all the resources required by sustainable development programs and projects, and disruption of the environmental balance leads to the destruction of ecosystems and the deterioration of the state of Natural Resources (living and non-living) and accelerate the depletion of some or spoil them so that they cannot be used appropriately economically, therefore the environment was a real dimension of sustainable development<sup>31</sup>.

Here Comes the role of the Environmental Management System in carrying out several actions aimed at protecting the environment, among which we mention the following<sup>32</sup>:

Protection of natural ecosystems from various pollutants of the enterprise  
Rationalization of the use of Natural Resources (Water, Energy, land...Etc.)

Reduce the amount of waste and reuse materials

Contribute to addressing the problems of global warming and the ozone hole that threaten the future of future generations by providing the foundations to support these efforts.

### **3-the economic dimension of sustainable development and its relationship to the Environmental Management System:**

The economy is considered to be an engine for sustainable development, but it is not possible to build this development without natural and human resources, and that is why the concept of sustainable development came up with the need to include environmental and social costs in economic calculations, where economic development must take into account environmental changes, especially the Environmental Management System, and social changes such as the right to housing, etc., in order to get rid of the previous development methods that were achieving economic well-being, bringing with it natural and human disasters as a result of environmental pollution<sup>33</sup>.

Here Comes the role of the Environmental Management System in combining the fight against environmental pollution with the contribution to achieving economic growth, and when addressing the economic dimensions of sustainable development, we find that among them are the following<sup>34</sup>:

- The use of economic tools to preserve the environment (such as levying fees and granting subsidies).
- Encouraging the initiatives of institutions in the field of Environmental Conservation, such as the development of measures to reduce pollution, etc.
- Developing financial resources and mechanisms for Environmental Conservation, such as providing soft loans to institutions that want to integrate the environmental aspect into their policy.
- Changing production and consumption patterns and making them more sustainable, including the use of clean technologies and green consumption.

When reflecting on these dimensions, we find that the institution's application of the environmental management system contributes to its achievement, and from this it can be said that the environmental management system plays a major role in achieving sustainable development.

### **4-the social dimension of sustainable development and its relationship to the Environmental Management System:**

Although the social dimension of sustainable development concerns improving the standard of living of society, protecting it from diseases, eliminating poverty, illiteracy and other social ills, the relationship of the environmental management system to this dimension is to protect society from diseases caused by pollution posed by institutions, especially near residential complexes. Environmental pollution of all kinds is considered one of the factors affecting the quality of life of individuals, especially in poor areas, where studies indicate that more than (20%) of the diseases suffered by individuals are caused by environmental pollution<sup>35</sup>.

## **CONCLUSION:**

At the conclusion of this research paper, it must be emphasized that it is necessary to preserve the environment if the organization wants to contribute to achieving sustainable development. In order to achieve this, the environmental management system must be applied, as the application of this system will bring with it several benefits to the organization, including improving the performance of employees through three basic elements: increasing the productivity of employees, improving their physical and psychological health, and increasing job satisfaction.

It can also be said that the application of the environmental management system by the institution will contribute to achieving sustainable development either directly (through protecting the environment and society from environmental pollution), or indirectly, which is through the results that result from improving the performance of the worker thanks to the application of the system.

## **LIST OF FOOTNOTES**

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