



The role of environmental communication in the promotion of green industry as an model for moving towards the green economy

Saida Okba *

Badji Mokhtar Annaba University (Algeria), sousokba@yahoo.fr

Received: 11/02/2024

Accepted: 20/03/2024

Published: 31/03/2024

Abstract:

DOI:10.53284/2120-011-001-004

In today's digital age, environmental communication constitutes an essential means of raising the level of environmental awareness among individuals, given the environmental challenges threatening all living organisms, particularly humans. The environmental dimension also plays a pivotal role in the green economy, whose existence has become indispensable worldwide due to its significant benefits, notably in mitigating various environmental risks. It serves as a tool for achieving sustainable development by preserving natural resources, thereby safeguarding the environment and capitalizing on natural assets, such as establishing green industries. These industries advance national economies and enhance social welfare. Recognizing the significance of this topic, this scientific paper explores environmental communication as a supportive mechanism for promoting green industries as a model for transitioning towards a green economy.

Keywords : Environmental communication ; Promotion; Green industry; Green economy.

* Corresponding author



1. INTRODUCTION

The environment today faces a crisis due to various problems , posing a threat to all living beings, especially humans, due to scientific, technological, economic, and demographic developments that have disrupted various ecological systems. Hence, accelerating efforts and searching for solutions to address this dire situation have become imperative. Algeria, like other countries, has made concerted efforts to address environmental concerns through various initiatives, such as establishing a Ministry for Regional Planning and the Environment in 2000. The enactment of laws related to environmental protection within the framework of sustainable development, such as the Law on Waste Management and Control issued in December 2001, highlights Algeria's commitment to environmental conservation. Furthermore, integrating environmental education programs in schools and offering environmental specialties in vocational training centers, along with coordinating efforts between different ministries, underscores the importance of raising awareness about environmental conservation. These actions emphasize the significance of environmental awareness in respecting and preserving the environment, particularly in light of challenges such as industrial pollution, population growth, transportation proliferation, unemployment, and poverty. Currently, the transition to a green economy is gaining importance, representing the future of the global economy.

Due to the importance of the topic and based on what has been mentioned, we can pose the following main question :

To what extent does environmental communication play a supportive role in promoting green industry for the transition towards a green economy ?

Importance of the study :

The significance of the study lies in highlighting the importance of environmental communication and its role in supporting green manufacturing as a viable mechanism for transitioning towards a green economy. This transition is essential for preserving natural resources and protecting the environment, especially given the numerous challenges threatening living organisms today.

Study objectives :

The primary objective of this study is to underscore the importance of environmental communication and its role in promoting green manufacturing as a model for transitioning towards a green economy. This is particularly crucial as the environment faces significant challenges, necessitating attention to safeguarding it, given its critical importance to life and the ecosystem. Additionally, the study aims to introduce green industry and its significance in economic development beyond fossil fuels, or more accurately, the shift towards a green economy.



2. Basic concepts of the study :

2.1 Environmental Communication :

Definition :

Environmental communication refers to the strategic use of media techniques to support and enhance environmental policies and projects. It aims to engage all stakeholders towards the targeted groups, modifying and encouraging positive behaviors among people through supporting policies, projects, and encouraging participation (Ahmed , 2000, p135).

Operationally :

It is a type of communication that focuses on environmental issues, particularly in awareness campaigns and raising awareness about the importance of the environment and warning against current environmental hazards such as pollution, water scarcity, waste disposal, greenhouse gas emissions, etc., which threaten the lives of living organisms, using both traditional and modern means.

2.2 Green Industry :

Definition :

Green industry refers to an industry that meets human needs and promotes social and economic development without harming the environment and natural resources. It involves utilizing renewable resources, recycling materials, reducing waste, and reusing to minimize pollution and improve energy efficiency, thereby preserving natural resources and reducing greenhouse gas emissions using environmentally compatible technology (Hussam Mohammed , 2017, p100).

Operationally :

It is an industry whose products adhere to environmental standards, with its residues not harmful to its surroundings. It may use clean raw materials and also reduces environmental risks through investments in waste valorization, water recycling, and the use of renewable energies, among others.

2.3 Green Economy :

Operationally :

It is an economy that invests in natural resources, utilizing natural capital while considering the ecosystem, without depleting natural resources, and drives economic development. This includes creating wealth outside the scope of fossil fuels, reducing unemployment, and poverty, while preserving natural assets for current and future generations, contributing to sustainable development.



3.Objectives of Environmental Communication :

Educating individuals and generations to love nature and preserve the environment to instill a culture of environmental protection.

Raising awareness in civil society about the importance of the environment as a fundamental requirement for achieving sustainable development.

Changing individuals' negative behaviors towards the environment.

Providing individuals with various information about environmental issues.

Encouraging individuals to participate in addressing environmental problems.

Equipping individuals with the necessary skills to participate in protecting the environment, developing its resources, and gaining the ability to anticipate environmental problems before they occur.

4.Role of Environmental Communication in Environmental Preservation :

The environment encompasses all natural factors surrounding humans, with human existence dependent on it. Hence, the influence is mutual, necessitating adaptation and ensuring non-interference. However, due to industrial and technological advancements driven by population growth and the tremendous advancement in modern communication tools and techniques, coupled with irregular environmental usage, numerous environmental problems have emerged, affecting humans and living organisms worldwide. These include air, water, and soil pollution, as well as waste proliferation, global warming, and desertification, among others. This significant deterioration, affecting environmental balance, prompted efforts to find solutions to preserve natural resources and ensure environmental protection through environmental communication mechanisms. Environmental communication works to convey information related to the environment to citizens and influence them, shaping their opinions and behaviors, thereby instilling an environmental culture and raising awareness about the importance of caring for the environment and preserving its resources, especially by nurturing a generation imbued with environmental values and promoting environmental education at various educational levels.

5.Importance of Green Industry :

The importance of green industry can be summarized as follows :

5.1 .Environmental Aspect :

Helps mitigate worsening environmental problems, including :

Reducing greenhouse gas emissions.

Combating desertification and preventing sand encroachment by utilizing desert lands, especially in agriculture.

Limiting the spread of solid and liquid waste.

Providing a healthy environment for current and future generations.



5.2 .Economic Aspect :

Relies on green capital by using clean natural materials and renewable energy sources, unlike fossil fuel economies.

Opens up new opportunities in environmentally friendly green economy investments and achieves sustainable development.

Creates a balance between natural resources and industrial and technological development.

Repurposes waste and industrial residues in various sectors.

Aligns production and technology with global environmental standards.

Establishes businesses that provide services in cleaner production and adhere to environmental standards.

5.3 .Social Aspect :

Combats the spread of poverty.

Creates job opportunities, thereby reducing social disparities.

6.Benefits of Transitioning to Green Industries :

Transitioning to green industries yields numerous benefits, as elucidated by UNIDO and the United Nations Environment Programme, including :

Increased productivity, reduced operating costs, and improved investments.

Efficient industrial processes with minimal material and energy consumption and reduced pollution emissions.

Opening up new competitive markets, known as green markets.

Securing long-term production supplies by minimizing the impact of price fluctuations in raw material supply chains through material efficiency strategies.

Elevating production technology by keeping pace with global advancements in modern production methods.

Lowering operational costs by reducing raw material, water, and energy consumption.

Addressing pollution problems, leading to improved internal and external work environments, avoiding legal accountability, and enhancing project image.

7. The sectors concerned with green manufacturing :

Among the sectors that attract the establishment of green industries, we mention :

Waste : Valorizing various wastes including household waste, industrial waste, and construction site residues, etc.

Water sector, where wastewater recycling and purification can be employed for agricultural irrigation and industrial production, as well as, to a lesser extent, desalination of seawater.

The role of environmental communication in the promotion green industry as an model for moving towards the green economy



Agricultural sector in all its branches such as vegetable, fruit, and grain production, along with related processing industries like fruit paste, canned grains, various vegetable oils, and olive oil production, etc.

Forestry sector with its various fruit-bearing and non-fruit-bearing trees, for example, the manufacture of household furniture, construction tools, etc.

Investment in livestock farming such as beekeeping for honey production, as well as milk and its derivatives.

Renewable energy sector such as solar energy and wind energy, for example, using solar energy for public lighting, supplying rural and desert areas with electricity, agriculture, etc.

Lastly, the tourism sector, which is one of the wealth-generating sectors by attracting visitors to enchanting natural areas such as caves, waterfalls, forests, highlands especially during snowfall, etc., as well as historical sites that recount the history of peoples. »

8- Principles of Green Economy :

The principles of the green economy can be summarized as follows (Mohamed, 2017, pp 38-39) :

-The green economy is fair, comprehensive, and a means to achieve sustainable development, not an alternative to it. It addresses :

-The principle of sustainability encompassing all three dimensions (environmental, social, and economic).

-The principle of work : The green economy is fair and comprehensive, supporting equality among countries and within them, respecting human rights, cultural diversity, promoting gender equality, and providing knowledge, skills, and experience to all individuals.

-The principle of dignity : The green economy is fair and comprehensive, creating real prosperity and welfare for all by reducing poverty, achieving a fair level of human development in all countries, ensuring food security, providing basic health care, education, water, energy, and other essential services, respecting workers' rights, and developing new jobs and professions related to green sectors.

-The principle of Earth's health : The green economy is fair and comprehensive, seeking to invest in natural systems, repairing degraded ones, reducing pollution, protecting ecosystems, biodiversity, and other natural resources including air, water, and soil, ensuring efficient and wise use of natural resources, including water, natural gas, oil, and minerals without compromising the rights of future generations, and encouraging the restoration of balance between environmental and social relationships.

-The principle of integration : The green economy is fair and comprehensive, participatory in decision-making, based on transparency, sound learning, and clear participation of relevant stakeholders, supporting good governance at all levels from local to global, promoting full and effective voluntary participation at all levels. It is an economy that respects cultural values, building community awareness through education and skills development, providing equal



opportunities for all, and advocating for the rights of children, adults, women, men, the poor, low-skilled workers, indigenous peoples, racial minorities, and local communities.

-The principle of accountability and good governance : The green economy requires accountability, providing a framework for regulating markets and production in consultation with all stakeholders.

-The principle of resilience : The green economy contributes to economic, social, and environmental resilience, supporting the development of social and environmental protection systems, adapting to extreme climate events and disasters, creating a comprehensive social protection floor, promoting the exchange of diverse knowledge systems, relying on local skills and capacities.

-The principle of efficiency and sufficiency : The green economy prioritizes renewable energy and resources, concerns itself with real cost pricing, integrating external, social, and environmental factors, supporting lifecycle management, seeking efficient use of resources and optimal water use, encouraging social, economic, and environmental innovation, and providing fair access rights to intellectual property within a global legal framework.

-The principle of protecting the rights of future generations : The green economy continues to achieve prosperity for individuals in the present and future generations, preserving resources and improving the quality of life in the long term, prioritizing scientific and sound decision-making, promoting equitable education at all levels. »

9-The importance of green industry as a mechanism for transitioning towards a green economy :

Given the importance of the green industry mentioned in the above points, and its intersection with the principles of the green economy in many aspects, in addition to the fact that green industry achieves environmental dimensions and is considered environmentally friendly, without disrupting the ecosystem by producing clean and non-polluting materials, using clean raw materials such as natural resources and clean energy, renewable energy to mention a few, as well as using clean technology, such as manufacturing in various waste recycling sectors, from household waste to industrial waste, construction site residues, etc.

Furthermore, green industry achieves economic dynamism and creates wealth outside the fossil fuel sector, provides job opportunities, and reduces poverty, thus achieving the other economic and environmental dimensions of the green economy.

Therefore, due to the importance mentioned above, the transition to green industry requires the establishment of policies (short and long-term programs) for green manufacturing, according to a priority system based on the severity of the environmental problem, led by pollution in its various forms and its impact on humans and the environment. Also, in these political programs for

The role of environmental communication in the promotion green industry as an model for moving towards the green economy



transitioning to green industry, the role of green technology and the applications of artificial intelligence in this transition should not be overlooked.

The United Nations Industrial Development Organization (UNIDO) identified in its report after the COVID-19 pandemic a set of priorities to promote the transition to green industry, as shown in the following table :

Table.1:Policy Priorities for Promoting the Transition to Green Industry

Policy Priorities for Promoting the Transition to Green Industry		
Domains	Short-term	Long-term
Carbon Removal	Embed decarbonisation goals at the heart of recovery programmes	Approval of goals for manufacturing products/ Technologies with low carbon emissions and export
Structural change	Redirecting existing production capabilities To integrate green industrial value chains (following comparative advantage)	Promote new productive and innovative capabilities (challenge current comparative advantage)
Integration into the global economy	Promoting foreign direct industries investment in green	Supplier development and knowledge enhancement programmes Technology transfer to stimulate innovation And indirect effects
Standards and innovation	Raising awareness of sustainability standards to increase demand for green goods	Expanding support for research and development to reduce carbon emissions
Green skills	Establishing efficient national /frameworks for retraining ”Repurposing skills from “dirty” manufacturing to “clean manufacturing	Expanding educational certificate programs And training related to sustainable manufacturing

Source : United Nations Industrial Development Organization,2022,P.36



Given that the green economy is also an environmentally friendly economy and a way to promote sustainable development, especially with increasing pressures on the environment from various activities leading to environmental degradation worldwide and depletion of natural resources, the green economy has become a necessity. The concept of the green economy emerged globally in 2012 during the United Nations Conference on Sustainable Development in Rio de Janeiro, Brazil, with its main theme being « Green Economy in the Context of Sustainable Development and Poverty Eradication. » Its numerous benefits include environmental preservation through the adoption of clean projects like organic farming, waste recycling to reduce toxic gas emissions, among others. It also contributes to creating wealth, diverse job opportunities, poverty alleviation, and long-term economic prosperity by leveraging a country's natural assets, thereby enabling the development of new sectors (green jobs) and assisting developing countries in their growth journey, ensuring food security, basic services like water supply, resource protection, thus fostering economic growth, reducing poverty, and narrowing social inequalities, while also protecting the rights of future generations to live in a safe environment free from risks.

10. Research Findings :

After presenting all the information about environmental communication, green industry, and the green economy, the following conclusions can be drawn :

Environmental communication plays a crucial role in disseminating information that helps achieve interaction between humans and their environment by promoting environmental education to sensitize individuals to the continuous and deliberate encroachment on the environment, enhancing environmental awareness by engaging various entities such as associations and decision-makers, and utilizing various modern means and technologies to deter negative behaviors towards the environment and preserve it, relying on training and environmental education.

Investing in green industries includes various sectors such as renewable energy, waste recycling, valorizing industrial residues, organic farming, eco-friendly manufacturing, and adopting clean technologies, green transportation, and green building. Green industries utilize natural resources sustainably and contribute to environmental care in general, such as reducing carbon emissions and greenhouse gas emissions. They also contribute to unemployment reduction and promote sustainable development. Therefore, qualified workforce should be provided to deal with them, and financing should be provided for projects based on these green technologies.

Green manufacturing is a fundamental means to transition to the green economy, which relies on natural capital (green financing). It embodies green ideas and innovation using green technologies and less-polluting renewable energies to produce clean products, explaining why green industry is environmentally friendly, preserves natural resources, and achieves environmental sustainability.



11.CONCLUSION :

Environmental communication is an important mechanism for conveying information that helps achieve interaction between humans and their environment by embedding environmental education that contributes to rationalizing individual behavior and directing it towards achieving set environmental goals effectively. It represents a fundamental means capable of serving the environment but requires involving a group of key actors from environmental institutions, associations, businesses, experts, doctors, officials, and media in all its forms, including written press, radio, television, to disseminate environmental awareness through various targeted segments and programs and through advertisements, as well as modern means starting from the internet that has opened the door for direct communication between the public and decision-makers relying on social media networks like Facebook, YouTube, among others. These platforms have transferred individual interests and imparted environmental culture distinguishing it with its characteristics of immediacy, widespread reach, and interactivity, without neglecting cultural activities and exchange through festivals, seminars, lectures, and workshops.

All of this has allowed for the gathering of green ideas, providing alternative proposals outside the fossil fuel economy, such as the model of green industry or eco-friendly industry, which relies on renewable natural resources, i.e., investment with natural capital, without disrupting the ecosystem, using less polluting technologies and green financing that produces clean products, as well as non-harmful residues and helps transition to the green economy that preserves the natural resources for current and future generations, achieving all dimensions of sustainable development, environmental, social, and economic, especially creating comprehensive and clean economic development outside the scope of fossil fuels and in various sectors.

12.Bibliography List :

- Ahmed Melha (2000) , Environmental Challenges in Algeria, Al-Najah Printing House, Algeria .
- Hussam Mohammed Abu Alian, Green Economy and Sustainable Development in Palestine, Proposed Strategies , Faculty of Economics and Administrative Sciences, Al-Azhar University, Gaza, Palestine, 2017.
- Mohammed, Medhat Fakhry Mahmoud (2017), A Proposed Concept for the Role of Egyptian Universities in Achieving the Green Economy, Educational Vision, Educational Magazine , Faculty of Education, Egypt, vol, 49