

## **BALANCING ECONOMIC AND ENVIRONMENTAL BENEFITS: THE GOAL OF SUSTAINABLE DEVELOPMENT**

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**ABSTRACT:** *As society grows, its increasing social demand is also when large resources are being lost, as well as the price for growing. The balance between the two economic and environmental benefits recently has been constantly mentioned as a difficult problem for any country. This research points to the growing conflict between economic development and environmental protection, how to balance economic benefits with environmental protection, and propose solutions to both economic development and environmental protection.*

**KEYWORDS:** economic growth, environmental protection and improvement, sustainable development, Vietnam,

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### **INTRODUCTION**

Economic growth with environmental protection and improvement has a binding, complementary relationship, to protect and improve the environment, which requires economic growth, creating opportunities to invest resources for environmental Protection; conversely, if the protection and improvement of the environment are good, it will ensure stable and sustainable economic growth. The idea of the close association between economic growth and environmental protection and improvement, linking two categories for the goal of rapid and sustainable development, has been directed by the Communist Party of Vietnam since Vietnam began to conduct industrialization and modernization of the country.

“Conflicts between economic development and resource use are increasing,” said Dr. Heinz Schandl (2019) - an expert of the Australian Federal Scientific and Industrial Research Organization (CSIRO) warns.

This expert explains that, for poor, developing countries, or transitioning countries like Vietnam, resources are one of the main drivers of growth. However, in the context of increasingly exhausting resources, the price of energy also increases, making resource use more difficult and becoming a burden, increasing economic pressure for these countries.

The Central Institute for Economic Management (CIEM) in recent years has repeatedly issued warnings about the cost to the environment in economic development. CIEM report cited, from calculations by foreign experts: If GDP doubled, the risk of waste increased 3-5 times.

According to CIEM (2018, 2019), the rapid pace of urbanization has become a positive factor for socio-economic development. But rapid urbanization has also created pressures in many aspects, leading to deteriorating environmental quality, affecting the sustainable development that Vietnam is aiming for.

Le Minh Duc - Institute of Industrial Strategy and Policy Research (2019) cited Vietnam's environmental pollution through a series of data. Percentage of ash and slag discharged in thermal power plants is 30-40% of coal, ie burning 10 tons of coal makes electricity produce 3-4 tons of ash and slag. Mining 1 ton of coal discharged from 5.9-10 m<sup>3</sup> of rock and soil and by 2025 there will be more than 4 million m<sup>3</sup> of waste rock from coal mining, not to mention the amount of waste present.

“Oil and gas extraction also creates hazardous solid waste” (Duc, 2019). Every year, about 60 tons of waste is collected from rigs, most of which are hazardous. Periodic cleaning of tankers also produces several thousand tons of oil sludge and waste. Currently, 90% of production and business establishments that exploit and process minerals violate the law on environmental protection.

The agricultural economy has maintained steady growth in recent years, but in parallel with this development, there have also been shortcomings affecting the environment. According to the survey results of the Institute of Water, Irrigation, and Environment (Ministry of Agriculture and Rural Development) (2019), 13 million tons of domestic waste and 1,300 million m<sup>3</sup> of domestic waste in rural areas each year. , 7,500 tons of pesticide covers, 80% of waste, this wastewater is not treated but discharged directly into the environment. “The situation of environmental pollution is getting worse and each year the loss due to pollution is up to 5.5% of GDP” (Anh, 2019).

## **LITERATURE REVIEW**

Sustainable development is the synchronous development between economy, society, and environment. In order to carry out all three above-mentioned contents, economic growth must be associated with environmental protection and well solving environmental protection issues, which is also a part of solving social problems. This awareness has become a guiding thought throughout the policies and guidelines of the Communist Party of Vietnam in recent years (Vietnam Communist Party, 2011, 2016).

From the awareness of the importance of economic growth associated with environmental protection and improvement, the Communist Party of Vietnam (2016) had basic guidelines with the following contents: Environmental protection and improvement must be integrated, integrated and reflected in national, sectoral and local socio-economic development strategies, plans and plans; attaching importance to prevention as the main task, in combination with renovating the environment in the process of renovation and economic development of the country, respecting

the objective law of nature; attaching importance to mobilizing investment resources for environmental protection and improvement, considering investment in environmental protection as investment for sustainable development; promoting the role of social responsibility of enterprises and socialization in environmental protection; to harmonize economic growth with environmental protection and improvement in the process of perfecting the socialist-oriented market economy institution.

The process of perfecting the socialist-oriented market economy requires the observance of market rules, and at the same time ensuring social justice - making human welfare a focus and Incorporate closely with environmental sustainability. This was affirmed in Resolution No. 11-NQ / TW of June 3, 2017, at the 5th Conference of the Central Executive Committee of the 12th term on “perfecting socialist-oriented market economy institutions” (Communist Party of Vietnam, 2017, p. 86).

To overcome pollution and improve the environment, according to Tran Minh Quang (Minister of Natural Resources and Environment, 2014) in 2013, the National Assembly of the Socialist Republic of Vietnam has earmarked VND 131 billion. However, this funding, according to the assessment of the National Assembly (2014): is too little compared to the current environmental pollution situation. Deputy Chairman of the National Assembly Uong Chu Luu (2019) emphasized, “alone to overcome the To Lich river basin, costing trillions of dong but not necessarily done”. At present, the To Lich river is still the most polluted river cone in Hanoi because the wastewater from domestic activities of households on both sides of the river flows directly into the river without any treatment.

## **THE CONSEQUENCE OF ECONOMIC DEVELOPMENT AFFECTS THE ENVIRONMENT**

### **Population development and urbanization**

According to the General Statistics Office (2019), our country's population has now surpassed 94 million people, making Vietnam the 13th most populous country in the world, and the 3rd in Southeast Asia. In the past 5 years, Vietnam's population has increased by more than 4.5 million people, an average annual increase of about 1 million people. The rapid population growth process has led to increasing demands for activities, education, training, health care, transportation, housing, employment, etc. with respect to the natural and social environments. Speaking only about the treatment of domestic wastewater has been a huge problem. It is estimated that an average of 80% of domestic water supply becomes domestic wastewater. The main pollutants in domestic wastewater are TSS, BOD5, COD, Nitrogen, and Phosphorus. There are also inorganic components, microorganisms, and pathogenic bacteria. Meanwhile, the proportion of domestic wastewater treated only reaches 10% - 11% of the total urban wastewater, up about 4% - 5% compared to 2010. Typically some water treatment plants Large-scale domestic waste has been put into operation such as Binh Hung wastewater treatment plant (Ho Chi Minh City) with a

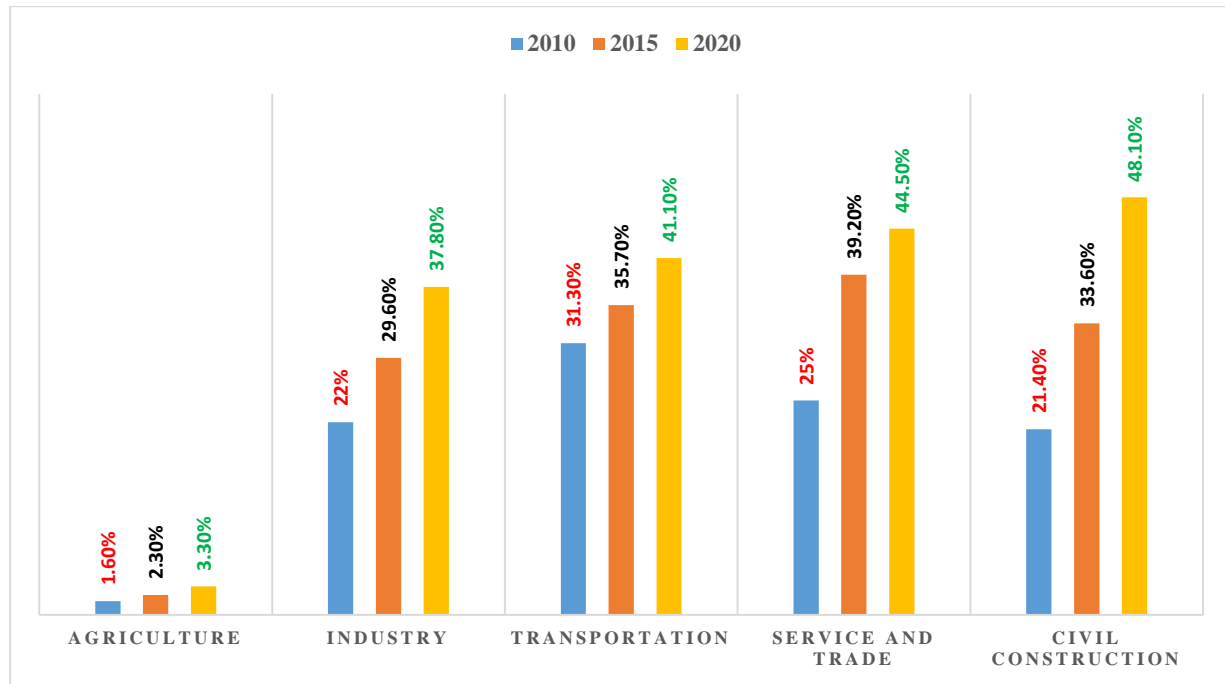
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capacity of 141,000 m<sup>3</sup>/day and night, Wastewater treatment plant in Yen So (Hanoi City) with a capacity of 200,000m<sup>3</sup>/day (Luan, 2019).

At the same time, the successful transformation of the economic model has brought our country from an underdeveloped economy to a middle-income country. This happened concurrently with the process of urbanization and the expansion of urban administrative boundaries, leading to an increase in the urban population. As of december 2016, the whole country had 787 urban centers, including 02 special cities, 15 urban centers of grade I, 25 urban centers of grade II, 42 urban centers of grade III, 75 urban areas of grade IV and 628 urban centers. V2 type. The urban population (including areas: inner city, inner-city and town) is about 31 million people with the urbanization rate of about 35.7%, an increase of 1.2% compared to 2015 (General Statistics Office and United Nations Population Fund, 2016). The rate of urbanization has increased rapidly, in recent years an average of 1% - 1.02% / year, corresponding to 1 - 1.2 million urban residents each year. In the process of urban expansion in our country, the speed of urbanization increases rapidly in the area in Hanoi and Ho Chi Minh City (3.8% and 4% annually), in fact these two cities dominate the urban landscape of the whole country. Many studies show that cities account for two-thirds of total energy demand and carbon emissions (derived from transportation, industry, construction activities and buildings). Rapid urbanization has caused significant impacts on the environment and natural resources, causing ecological imbalances. In many areas of rapid urbanization, green belts of environmental protection are not planned and protected. The norm of land for planting greenery in urban areas is too low, only about 2m<sup>2</sup>/person. In general, the greenery system has only been formed and concentrated in large and medium cities. In two major cities, Hanoi and Ho Chi Minh City. In Ho Chi Minh City, this figure is only about 2m<sup>2</sup>/person, not up to the standard and only 1/10 of the greenery index of advanced cities in the world (Luan, 2019). In addition, some urban areas, especially coastal cities, have been flooded during the rainy season and high tide. In addition to Hanoi, TP. Ho Chi Minh City Hue is also frequently flooded in the rainy season, and some other cities are flooded due to high tides, heavy rains, flash floods, such as Can Tho, Tuyen Quang, Ha Giang, Lang Son, Ca Mau, Ha Tinh, etc provinces.

### **Industry Development**

After a period of quietness due to the economic crisis, by 2016, the proportion of industry and construction accounted for 33.9% of the country's GDP, ranking second in the current economic structure (Government of Vietnam, 2017). In particular, the processing industry plays an important role. Currently, the rate of application of modern technology in the manufacturing and business sectors is still quite far away from other countries in the region, therefore, to produce goods that need more consumption than raw materials and energy, which releases more waste, is not treated or treated without guarantee, causing environmental pollution. The chart below shows that the share of the clean energy industry is expected to change over the coming years, especially in the industry (Figure 1) (Government of Vietnam, 2020).



**Figure 1:** Fields of using clean energy

For example, the cement manufacturing industry plays an important role in the process of industrialization and modernization of the country. However, this is considered to be the industry that influences air quality the largest and most characteristic. Cement factories are mainly located in the Red River Delta and the North Central Coast, accounting for 39% of total cement production nationwide (Luan, 2019). Currently, our country's cement production technology is mainly based on the dry method, rotary kiln. According to experts, cement production by rotary kiln technology has less environmental impact than a vertical kiln. Although there has been a policy of eliminating vertical kiln cement, in reality, there are still some vertical kiln cement plants and independent grinding stations with small capacity, old and outdated equipment. Emissions from cement kilns have very high dust content, NO<sub>2</sub>, CO<sub>2</sub>, F and are likely to cause pollution if not well controlled, among them the dust pollution (Luan, 2019). Cement dust is generated in almost every stage of the production process such as crushing, crushing, screening, separating, drying, firing, cooling, bagging, and transporting. Other construction materials manufacturing industries also affect the air quality in surrounding areas during operation.

### **Consequences of environmental pollution brought about by economic development**

Economic development is always accompanied by more or less environmental pollution. When the economy develops, plants will grow like mushrooms, accompanied by emissions, dust and also will produce more. With the current environmental pollution, if there are no necessary measures to limit and prevent environmental pollution, it will seriously affect the economic development and health of our people in Vietnam a long time later.

According to a World Bank report (2016), Vietnam with 59 points in the environmental performance index rankings, ranked 85/163 countries in the ranking. Vietnam is lower than regional countries such as the Philippines with 66 points, Thailand 62 points, and Laos 60 points. According to the World Economic Forum of Davos, Vietnam is among the 10 countries with low air quality and the most health effects. Some realities of environmental pollution must include:

**River pollution:** Rivers and not only in the city but also in the countryside are facing heavy pollution due to domestic waste, handicraft village waste, agricultural waste, and waste from the areas the industry is still down day by day, hour by hour, directly affecting the living environment and health of the community.

**Technology and waste landfill:** Many projects of refining, rolling large steel, titanium, aluminum bauxite in the Central Highlands, and nearly 5,500 containers and 1,323 packages mainly containing scrap are located in seaports ... are at risk turning Vietnam into a place of “technology” waste and waste.

**Pollution from agricultural production:** The source of waste discharged into the environment from cultivation and husbandry is tending to increase, while the control has not been effective, the total volume of waste in animal husbandry of our country is currently more than 73 million tons/year (General Statistics Office and United Nations Population Fund, 2016). The uncontrolled use of fertilizers and pesticides in cultivation has polluted the soil and water environment.

**Pollution from mining:** According to the General Department of Customs, from 2009 to 2011, Vietnam exports 2.1 to 2.6 million tons of minerals of all kinds (excluding coal and crude oil) every year with destinations mainly in China, but only worth 130 - 230 million USD. Particularly in 2012, the amount of exported minerals was still nearly 800,000 tons through the official quota.

Along with that, according to the World Bank's assessment (2019), environmental pollution and air pollution in Vietnam have caused losses of up to 5% of annual GDP. According to the predictable results of the National Center for Socio-Economic Information and Forecast, in the period of 2016-2020, the growth of total social and employment investment will decrease on average each year respectively about 1.2 and 0.08%, at the same time the average consumption growth will decrease by 0.1% as expected.

## **SOLUTIONS TO OVERCOME ENVIRONMENTAL POLLUTION**

Renewing the growth model, restructuring the economy, improving the efficiency and quality of economic growth along with improving the environment and quality of life of the people: According to the Resolution of the First National Party Congress XII on the 5-year socio-economic development plan (2016-2020) (Vietnam Communist Party, 2016), Vietnam will focus on “promoting economic restructuring in association with renewing the growth and upgrading models.” high productivity, efficiency, and competitiveness, “focusing more on depth development along with width development, especially investment in science and technology. In the context of environmental protection and improvement, people’s quality of life will be the focus.

Economic growth associated with the use of energy, raw materials, and input materials, by means of encouraging the use of renewable energy, new and environmentally friendly materials, and raw materials;

Strengthen State management, perfect the legal system, mechanisms, policies, and synchronously implement measures to actively respond to climate change, prevent and combat natural disasters, manage natural resources, and protect the environment. Paying attention to the inspection, examination, and strictly handling violations; at the same time, enhance communication information to raise people's awareness, awareness, and responsibility.

To socialize environmental protection and treatment; Strict control of sources of pollution. Effectively overcome environmental pollution left by the war. Planning and constructing concentrated waste treatment facilities by regions and commune clusters. To restrict and basically prevent environmental pollution in craft villages, river basins, industrial parks and clusters, urban areas, and concentrated population areas in rural areas.

To concentrate on thoroughly handling establishments which cause serious pollution. Controlling the air quality in high-density urban areas. Implement emission standards and standards according to the appropriate roadmap. Strengthen protection and sustainable development of forests, especially coastal protection forests, watershed forests, and special-use forests; nature conservation, biodiversity, protection, and regeneration of aquatic resources. Encourage the use of renewable energy and new, environmentally friendly materials and materials.

Party committees need to thoroughly grasp the content of the Resolution into practice so that the Resolution can really come to life; it is necessary to pay close attention to and issue proper policies and policies to promptly solve weak and inadequate issues in the field of the environment; continue to supplement and complete policies and guidelines on environmental protection.

State agencies should quickly apply environmental protection policies and policies to specific socio-economic goals; integrating environmental protection objectives into socio-economic development programs. The National Assembly needs to focus on perfecting the legal system on the environment and imposing strict sanctions. The Government should have policies to rationally exploit and use natural resources, avoiding loss, waste, and causing environmental pollution. Administrative agencies at all levels should monitor and strictly manage environmental protection activities; resolutely and promptly sanction acts of causing environmental pollution to deter and prevent recurring acts.

Every citizen needs to raise awareness and awareness in environmental protection, especially in the observance of guidelines and policies of the Party and laws of the State. Every organization, individual, or business needs to promote the spirit of self-awareness and high awareness in protecting the environment, not for immediate benefits but affecting the environment. Officials and party members need to be exemplary in observing and well implementing environmental protection in order for the people to follow. The Fatherland Front and socio-political organizations

should further promote propaganda and advocacy so that the masses understand and strictly abide by the Party's guidelines and the State's laws on environmental protection.

Implementation of sustainable development goals: Since 2004, Vietnam has developed the 21st Century Agenda for Sustainable Development, which emphasizes the role of environmental protection and improvement and effective use of environmental protection. Natural resource outcomes for economic growth. In December 2015, Vietnam signed a commitment to implement the “2030 Agenda for Sustainable Development” initiated by the United Nations, while implementing the Green Growth Strategy. To achieve the goal of green growth, the Party and the Government have requested all levels and branches to thoroughly grasp and strictly implement the association of economic growth with environmental protection and improvement. On the other hand, continue to improve the law to enhance the effectiveness and efficiency of supervision, inspection, examination, and handling of violations of the law on environmental protection.

Using economic tools to gradually replace control orders to protect and improve the environment: Implement the above measures in accordance with market economic institutions, because economic instruments will regulate. Because of the business principle, the people, ensure the market principle “the polluter pays for polluting jobs - PPP principle” and “the beneficiaries of the environment must pay for the benefits - BPP principle”.

Environmental losses and benefits must be fully accounted for in the economic growth target: For environmental components must be accounted for, including the functions of the environment contributing to economic growth. Damage due to pollution and environmental degradation must also be quantified by value. The accounting of the value of environmental components and functions, as well as the damage caused by pollution and environmental degradation, is considered the basis for building satellite accounts in the national account system SNA, gradually shifting the calculation and statistics of traditional GDP index into green GDP based on the new accounting system and statistics of the national account, linking the economy with the environment under the new accounting system - SEEA, internalizing environmental factors in the annual national economic growth targets. Currently, Vietnam is in the process of studying and approaching SEEA, towards resources; environmental components must take into account the national account for direction and management.

Enhancing exchange and learning of international experience, especially developed countries, in dealing with the harmonious relationship between economic growth associated with environmental protection and improvement: Learning international experience and countering in line with Vietnam's development practices, to devise appropriate measures to implement economic growth associated with environmental protection and improvement that has been conducted ever before.

### **SOME EXPERIENCE IS DRAWN FROM PRACTICE**

Over the past 30 years, Vietnam's economy has continuously grown; Environmental protection and improvement are increasingly concerned. From the development practices of Vietnam in



recent years, some lessons can be learned in dealing with the economic growth relationship associated with environmental protection and improvement:

Summarizing and evaluating fully and practically all issues of economic growth, environmental protection and improvement, this is the most important basis for detecting problems to be solved, finding causes and shortcomings from practice; grasping the general trend of the region and the world: The regional and world contexts must be considered, compared with domestic practices to gain experience lessons, thereby providing appropriate orientations and approaches. Vietnam has now signed many conventions, agreements, commitments, etc. related to the protection and improvement of the regional and global environment;

Associating economic growth with environmental protection and improvement is always a difficult and complicated issue: Although Vietnam has focused on environmental protection, its effectiveness has not been achieved as expected. Pollution and environmental degradation still tend to increase, forest area, and biodiversity decline, especially natural forest capital. The underlying reason is due to the greater emphasis on economic growth, with little regard for environmental protection. Therefore, in the coming time, it is necessary to harmonize economic growth and environmental protection to ensure a healthy life for people;

Initial successes can only be achieved by knowing the right relationship with economic growth associated with environmental protection and improvement: The reality in Vietnam has proved if the market principle is applied in the implementation. Economic growth associated with the protection and improvement of the environment is very effective. Specifically, based on the BPP principle in payment for forest environmental services, in recent years, Vietnam has collected trillions of dong to protect forests ...;

Need to solve synchronously from perceptions, policies and implementation measures: Although there is a viewpoint of direction, guidelines and specific task proposals, the actual implementation process is still a distance to effective implementation of economic growth associated with environmental protection and improvement is a matter of awareness, laws, implementation decentralization, inspection, inspection, supervision, etc. This is a series of tasks to be done. , at each stage and stage requires effective enforcement measures and close to reality;

It is necessary to further highlight the role of the people, businesses and economic sectors in the implementation: The practice of implementing guidelines and policies of the Party and State shows that the participation of people and businesses has not promoted all internal resources, failing to solve the obstacles required by economic institutions. Therefore, along with perfecting the socialist-oriented market economy institution, strong mechanisms and policies are needed to promote the role of people and businesses; at the same time, promoting the role of all economic sectors, improving the social responsibility of enterprises in environmental protection. Currently, Vietnam is implementing the policy of developing the private economy under Resolution No. 10-NQ/TW and Resolution No. 12-NQ/TW on continuing restructuring, innovating, and improving enterprises' efficiency state from the Fifth Conference of the 12th Central Committee of the Party.

Thereby, the economic sectors will be encouraged to improve the operational efficiency of enterprises and at the same time be responsible for environmental protection;

Doing and drawing experiences and completing gradually: Practices show that the implementation of economic growth associated with environmental protection and improvement in Vietnam has also been done while learning from experience. At the same time, proactively preventing and anticipating “incidents” and environmental issues must be an important principle for all plans and projects, big or small;

It is necessary to attach importance to the objectivity of natural laws and the association of natural components, especially in the implementation of socio-economic development plannings and plans on exploitation and use of natural resources: Vietnam. Nam has learned “expensive” lessons in mining and dam construction. Therefore, in economic development planning, it is necessary to look ahead to the problem, integrate environmental issues into implementation strategies, plans, and implementation plans. On the other hand, in the context of climate change, development activities must be based on ecosystems, especially with the awareness of managers and socio-economic development plans of the locality.

## **CONCLUSION**

Socio-economic development is the process of improving people's physical and spiritual living conditions through the production of material wealth, improvement of social relations, and improvement of cultural quality. Development is a common trend of each individual and the whole human being in the process of living. There is a very close relationship between environment and development: the environment is the locality and the object of development, and development is the cause of environmental changes.

In the socio-economic system, goods are moved from production, circulation, distribution, and consumption along with the flow of raw materials, energy, products, and waste. These components are always in a state of interaction with the natural and social components of the existing environmental system in that area. The area where the two systems are intersecting is the artificial environment.

The impact of development activities on the environment manifests itself in the beneficial aspect of improving the natural environment or generating the necessary funding for such improvements but can cause environmental pollution or natural pollution create. On the other hand, the natural environment also impacts on socio-economic development through the degradation of natural resources being the object of development activities or causing disasters, natural disasters for the activities. Socio-economic activities in the region.

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