THE GREEN PARADOX: THE ENVIRONMENTAL IMPLICATIONS OF FDI IN A GLOBALISING WORLD

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Abstract

The Foreign Direct Investment (FDI) is important for global economic growth, especially in developing nations. It provides important funding. This enables technology transfer and creates jobs. Resource-intensive sectors, such as mining, energy and infrastructure, experience many important ecological consequences from FDI; these consequences have ignited several concerns. This paper examines the conflicting effects of FDI and finds that FDI increases economic growth, but it can also harm the environment and jeopardise sustainability. This paper provides a detailed analysis of how FDI considerably contributes to ecological damage, including pollution, biodiversity loss, resource depletion and deforestation. Therefore, a worsening of ecological conditions leads several host governments, especially in the Global South, to lessen ecological regulations to attract foreign investment. This paper investigates the meaningful effectiveness of analytically important international laws, such as the Convention on Biological Diversity and the Paris Agreement, in substantially reducing the large ecological effects of FDI. This evaluation examines how many national regulations, including Ecological Effect Assessments, permitting and compliance, balance investment and sustainability, and it reveals the complexities of this interaction. The article uses detailed case studies of Costa Rican eco-tourism and Moroccan renewable energy to compare and contrast successful examples of ecologically responsible FDI. It also presents examples of ecological mismanagement, such as oil exploration in Nigeria and deforestation in Indonesia's palm oil industry. As these instances show, investment agreements must incorporate sustainability standards, and stricter laws and incentives for green investments should be developed. Although FDI is crucial for economic development, the paper contends

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that its long-term viability relies on investment policies aligned with environmental sustainability goals. It necessitates a shift in perspective on green foreign direct investment, more enforcement of environmental rules, and increased global cooperation to ensure that economic progress does not compromise ecological integrity.

***Keywords**: FDI, Deforestation, Palm Oil, Arbitration, Environmental Sustainability Goals.*

INTRODUCTION

FDI has been regarded as a strong engine for economic growth, especially in developing countries, inasmuch as it provides capital inflows, employment opportunities, and transfer of technology and skills[1]. FDI propels industrialisation and is thus seen to be contributing to an improvement in the living standards of people. With the advance toward intensification of competitiveness in a globalising economy, FDI has come to be regarded as the mainstay of national development strategies.

However, the emergence of economic growth through FDI has also been mostly accompanied by severe environmental challenges. The unwarranted high pace of industrialisation and infrastructural development opens ways to deforestation, pollution, depletion of natural resources, and ecological imbalances. In many cases, the developing countries compromise on either having stern environmental laws or failing to implement the existing ones in order to attract foreign investment, and hence further aggravate the impact on natural ecosystems. The tension between economic development and environmental sustainability is central to a range of ongoing global debates, particularly in light of the Sustainable Development Goals adopted by the United Nations.

Interrelated with all these challenges are the Sustainable Development Goals adopted by the United Nations in 2015. Of particular relevance, Goal 8 calls for promoting sustained, inclusive, and sustainable economic growth and decent work for all[2], while Goal 13 urges taking urgent action to combat climate change and its impacts[3]. These intentions underline

[1] Xinxin Wang, *et al.* "Foreign direct investment and economic growth: a dynamic study of measurement approaches and results", 35 (1) *Economic Research-Ekonomska Istraživanja* 1011-1034 (2021) *available at*: https://doi.org/10.1080/1331677X.2021.1952090 (last visited on: 14.07.2025)

[2] *Goal 8*, Department of Economic and Social Affairs.

[3] *Goal 13*, Department of Economic and Social Affairs.

the priority of balancing economic development with environmental concerns, which is increasingly becoming complicated by resource depletions, environmental degradations, and climate risks associated with FDI-intensive sectors in energy, mining, and infrastructure[4].

This paper promotes a balance between the growing tension between economic development and environmental sustainability with respect to FDI. It critically analyses the legal and regulatory regimes governing FDI, evaluates the environmental risks associated with different industries, and builds on policy measures that can foster environmentally responsible investment. In so doing, the paper joins the growing body of literature directed at aligning FDI with wider goals of sustainable development to ensure economic growth and environmental integrity for generations yet unborn.

FDI AND ECONOMIC DEVELOPMENT

FDI as a Catalyst for Growth

FDI possesses large financial inflows into the host country, which becomes particularly significant to the emerging economies whose economies depend much on domestic savings and finally on limited investment potential. The large-scale infrastructure projects requiring huge capital, the expansion of industry, and technological upgradation provide an avenue for bridging crucial funding gaps that local governments or businesses cannot fulfill.[5] These capital inflows are not only crucial for short-term economic boosts, but also in laying the foundations for more sustained growth through better infrastructure and improved services, and higher levels of productivity and competitiveness.

FDI is also one of the principal vectors of technology and know-how diffusion. MNCs often possess state-of-the-art technologies, new methods of production, and managerial capabilities that can considerably raise the efficiency and international competitiveness of local industries. For instance, MNCs investing in industries such as manufacturing or renewable energy are likely to introduce technologically advanced machinery and processes that local companies will imitate or adopt sooner or later and, therefore, would embark on a path of

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[4] Sofia Caycedo, "*Foreign direct investment in developing countries: A blessing or a curse?*", *Yale Environment Review* (Jan. 23, 2018).

[5] "The role of FDI in emerging market economies compared to other forms of financing: Past developments and implications for financial stability" - February 2003, (Feb. 28, 2003), *available at*: https://www.bis.org/publ/cgfs22buba1.pdf (last visited on: 11.07.2025).

productivity enhancement.[6] These technologies also further hasten the pace of industrialization in host countries, moving them upwards through the value chain by allowing them to develop new industries which otherwise may fall beyond their grasp.

Besides financial and technological benefits, FDI benefits human capital development immensely. In most cases, foreign investment and especially in labor-intensive industries provides considerable gainful employment to the local population. Most of such cases are invariably followed by training and skill development since every foreign company would need people who can work at global standards.[7] International business practices, advanced technologies, and more efficient managerial techniques raise the productivity and entrepreneurial spirit of local workers by enhancing their skill sets. With this human capital improvement over a period of time, the multiplier effect generates itself as more skilled workers join the domestic market, moving the economy to a better diversified and resilient state.

FDI also integrates host countries into the international market. While investing in developing countries, many multinational firms integrate local companies into their international system of suppliers. It is here that the local companies come in contact with the world market, which for these firms is considered the most valuable means to export goods, expand their customer network, and further improve foreign exchange earnings. Besides, foreign investors contribute to developing the quality and environmental standards of local firms[8] up to international levels, which enables them to become more competitive in the international market. In summation, FDI improves the quality and widens the reach of products, leading to higher economic integration and competitiveness.

Sectoral Analysis: FDI-Intensive Sectors

While FDI can cause growth to occur in many kinds of industries, some of them, by reason of their size, sophistication, and propensities linked to resource utilisation, are more foreign

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[6] Abdelhafidh Dhrifi, "Foreign direct investment, technological innovation and economic growth: empirical evidence using simultaneous equations model". 62 *Int Rev Econ* 381-400 (2015). *available at*: https://doi.org/10.1007/s12232-015-0230-3 (last visited on: 11.07.2025)

[7] Veasna Kheng, Sizhong Sun *et.al.* "Foreign direct investment and human capital in developing countries: A Panel Data Approach" 50 *Econ Change Restruct* 341-365 (2017). *available at*: https://doi.org/10.1007/s10644-016-9191-0 (last visited on: 11.07.2025)

[8] "This is how local suppliers can take to the global stage", World Economic Forum (Feb. 2, 2017). *Available at*: https://www.weforum.org/stories/2017/02/this-is-how-local-suppliers-can-take-to-the-global-stage/ (last visited on: 14.07.2025)

capital-intensive. Included within the latter category are mining, energy, and infrastructure, all of which have high intensities of FDI in recent decades.

FDI has the potential to transform the mining sector in ways that might otherwise not be possible, especially for the natural resource-rich countries of the South. In fact, foreign investors are often indispensable in unlocking the value of natural resources, especially large-scale mining projects requiring advanced technologies and substantial capital outlays. Thus, significant FDI flows have been attracted to the mineral extraction industries of Chile[9], Zambia, and Peru[10], among others, increasing their exports and leading to greater government revenues. However, mining activities also cause serious environmental risks-thermal destruction, destruction of habitats, and pollution of water bodies-and thus requires stringent regulatory mechanisms to tackle the wide impacts caused.

In the same way, the energy sector has been one of the biggest receivers in FDI, especially in oil, gas, and lately even in renewable energy projects. For a long period of time, countries like Nigeria[11], Brazil, and Indonesia[12] have depended on foreign investment for their development in fossil fuel industries, that essentially make up the bigger chunk of their export earnings. However, against the backdrop of rising concerns on climate change and energy security issues, FDI has structurally biased itself toward green FDI, with a gradually increasing influx of foreign investments in various renewable energy projects in countries such as Morocco[13], India, and South Africa[14]. Solar, wind, and hydropower investments, alongside contributing to energy source diversification, help combat climate change. At the

[9] Executive Summery, "2021 Investment Climate Statements – Chile" US Department of State, *available at*: https://www.state.gov/reports/2021-investment-climate-statements/chile (last visited on: 14.07.2025).

[10] KPMG International, Peru - Country mining guide, *available at*: https://assets.kpmg.com/content/dam/kpmg/pdf/2015/05/peru-mining-guide.pdf (last visited on: 14.07.2025)

[11] Aghogho Udi, "Divesting from fossil fuel could reduce Nigeria's GDP by $30 billion – Afrexim Bank (2024), *available at*: https://nairametrics.com/2024/07/04/divesting-from-fossil-fuel-could-reduce-nigerias-gdp-by-30-billion-afrexim-bank/ (last visited on: 14.07.2025).

[12] A. Anantha Lakshmi *et. al* "Indonesia tests global carbon credits market linked to energy projects", *Financial Times*, 28 January 2025, *available at*: https://www.ft.com/content/68c82f0a-4588-4d8a-9171-d31954620688 (last visited on: 11.07.2025).

[13] Oumaima Bouarfa & Mohammed Abdellaoui (eds.), *The Impact of Foreign Direct Investments on the Renewable Energy Sector in Morocco: An Empirical Analysis of Their Role as a Lever to Enhance Attractiveness* (Springer Nature, 2024) *available at*: https://doi.org/10.1007/978-3-031-68653-5_37 (last visited on: 11.07.2025).

[14] Bashir Muhammad, *et al.* "Impact of foreign direct investment, natural resources, renewable energy consumption, and economic growth on environmental degradation: evidence from BRICS, developing, developed and global countries", 28 (17) *Environmental Science and Pollution Research*, 21789-21798 (2021), *available at*: https://doi.org/10.1007/s11356-020-12084-1 (last visited on: 11.07.2025).

same time, the energy sector is often fraught with issues related to land use, social displacement, and resource management, whether it be in the realm of fossil fuels or renewable resources[15].

The second very important sector where FDI also plays an important role is infrastructure. In most developing countries, the absence of capital or technical wherewithal to build transport networks, telecommunications systems, and urban infrastructure is a precondition of modern economic activity. When FDI is attracted, large-scale infrastructure projects from highways and railways to airports and ports can be financed. Places like India and Vietnam, foreign investment has greatly modernized critical infrastructure and driven trade, reducing the cost of logistics and increasing their overall economic competitiveness[16]. Infrastructure development creates supports other development sectors such as manufacturing and tourism, but it also starts to have multiplier effects on creating further economic opportunities and improving the quality of life for the local population.

It has, therefore, been an effective catalyst for economic development through providing access to considerable capital, a boost for technology transfer, job creation, and linking local industry with broader international markets. Yet, as welcome as those benefits are, any environmental risk that accompanies FDI-heavy areas of mining, energy, and infrastructure has to be met with awareness. The challenge in this context is how to leverage the economic value of FDI without compromising the environmental goal of such development being cheated of its sustainability.

ENVIRONMENTAL RISKS OF FDI

While FDI is widely recognized as a driver of economic growth and development, it also involves significant environmental risks, particularly in resource-rich developing countries. Economic gains from foreign investments often come at an expensive environmental cost: degrading natural ecosystems and communities through unsustainable industrial practices. It will focus on two of the major environmental risks related to FDI-resource depletion and

[15] Dan Virah-Sawmy & Bjorn Sturmberg, "Socio-economic and environmental impacts of renewable energy deployments: A Review" 207 *Renewable and Sustainable Energy Reviews* (2025), *available at*: https://doi.org/10.1016/j.rser.2024.114956 (last visited on: 14.07.2021).

[16] Shishir Priyadarshi, "A Strategic Gambit: India's Investment in Vietnam", *Modern Diplomacy*, 15 Dec. 2024, *available at*: https://moderndiplomacy.eu/2024/12/15/a-strategic-gambit-indias-investment-in-vietnam/ (last visited on: 11.07.2025).

pollution, as well as ecological degradation generated by pressures of industrialization and urbanization.

Resource Depletion

The most visible environmental issue about FDI is observed as that of depletion of natural resources. This normally happens whenever foreign investors export raw materials to feed their growth in industries. [17]Mining, agriculture, and logging sectors are highly vulnerable to large-scale resource depletion since such industries entail heavy extraction of natural resources like minerals, timber, and water. Whereas these industries can bring vast revenues to the economies of host countries, they often do this at a sacrifice of environmental sustainability.

Among these, the impact of FDI on heavy resource sectors has emerged as one of the most severe consequences: deforestation. FDI-induced investments in large-scale agricultural production and logging have resulted in massive losses of forest cover in countries like Brazil, Indonesia, and the Democratic Republic of Congo, further leading to a loss of biodiversity and disruption within ecosystems. It has also been a significant cause of rainforest clearing, largely by foreign investors in such industries as palm oil and cattle ranching, which are incredibly destructive to wildlife habitats and contribute to climate change through the release of enormous amounts of carbon dioxide stored in trees. Often, the economic gains from FDI in those sectors are outweighed by long-term environmental devastation and the loss of essential natural resources.

Another critical factor is water pollution.[18] FDI activities, including mining, manufacturing, and extraction of fossil fuels, consistently destroy water sources and impair ecosystems and local communities. For example, in Zambia[19] and Peru[20], rivers and lakes were intentionally subjected to toxic chemicals such as mercury and arsenic from foreign mining companies. This does not only affect the aquatic life but places at risk the livelihood of those

[17] Farhan Ahmed, *et al.* "The environmental impact of industrialization and foreign direct investment: empirical evidence from Asia-Pacific region", 29 (20) *Environmental Science and Pollution Research* 29778-29792 (2022), *available at*: https://doi.org/10.1007/s11356-021-17560-w (last visited on: 11.07.2025).

[18] Priscila Martínez & OBELA, "Water pollution in Mining", *available at*: https://www.obela.org/en-analisis/water-pollution-in-mining (last visited on: 11.06.2025).

[19] R. Mutika, "Review of mining and sanitation waste water management and their contribution to water contamination in Zambia", 2 (3) *European Journal of Theoretical and Applied Sciences* 745-759 (2024).

[20] *Ibid.*

communities whose survival depends on the use of clean water for agriculture, fishing, and drinking. This reduction in fresh water sources widens social unrest and can further induce foreign corporations into conflicts with the locals.

Pressures from Industrialization & Urbanization

The development of other key environmental hazards associated with FDI occurs through pressures for industrial and urbanization processes hastened by foreign investments in infrastructure development, manufacturing plants, and urban centers. While these investments provide a means of modernizing economies, they often lead to pollution and ecological degeneration that may be quite challenging to redeem. Industrial FDI has typically been associated with air, water, and soil pollution brought about by the huge number of multinational corporations trying to maximize profits through the utilization of lenient environmental legislation in developing countries.

In most of the countries receiving considerable FDI in their industries, air pollution has also appeared as a severe problem in recent years. For instance, countries like China and India, whose industrialization processes took place or are taking place very fast with foreign investments both in manufacturing and energy production, suffered extreme declines in their air qualities. Burning in large amounts of fossil fuels by power plants, factories, and transport systems emit enormous amounts of greenhouse gases and other pollutants, creating health problems for the local population, while at the same time contributing to global climatic change. In most cases, cities in these countries have been transformed to become centers of industrial pollution; local residents suffer from diseases related to respiration and other health complications emanating from long exposure to poor air quality.

Ecological degradation could be another hazardous effect of large infrastructure projects besides air pollution, financed by FDI. Highways, dams, and urban developments can lead to the devastation of certain key ecosystems, whether wetlands and forests, coastlines, etc. For instance, foreign investment in constructing dams has brought many environmental impacts into existence, especially in countries with the most potential for such dams, such as China and Ethiopia. These include disruption in the ecosystem of the river, displacement, and loss of biodiversity in those areas. Such development projects, while necessary for economic progress and energy development, usually do not consider the cost to the environment; hence, really causing damage to natural habitats and pushing wild animals out of their homes for good.

Another important factor is that urbanization pressures driven by FDI serve as another key player in ecological degradation. The interest of foreign companies in urban infrastructure and real estate stimulates unprecedented population growth and urban sprawl in the cities of developing countries. Expansion then creates stress on the surrounding ecosystems, since more land is being converted for housing, commercial use, and networks of transportation. Most of the cases involve a lack of structure in cities for handling waste, increasing pollution in rivers, oceans, and countryside areas. Moreover, urban growth can lead to the destruction of agricultural lands, which lowers food security further and puts more burdens on local ecosystems.

The cumulative effect all these industrial and urbanization pressures have is to bring about increased environmental degradation often with long-lasting consequences for ecosystems and sometimes local populations. While FDI may spur economic prosperity, in fact, such investments can place an unsustainable burden on the environment-particularly so for countries lacking adequate regulatory frameworks to enforce environmental protections effectively.

Whereas FDI can give stimuli for economic growth and development, it also imposes serious environmental burdens that ought to be managed with care. Resource depletion, deforestation, water pollution and the pressures of industrialization and urbanization are all long-term results of an unregulated FDI. The balancing act for developing countries therefore lies in being attractive enough to foreign investors, yet ensuring that such investments are not made at the expense of their natural ecosystems. Strong environmental regulations combined with incentives for sustainable investments are significant in the course of mitigating the environmental risks of FDI and hence ensuring that economic development does not come at the cost of environmental sustainability.

LEGAL AND REGULATORY FRAMEWORKS

Legal and regulatory frameworks governing investment activities at the intersection of FDI and environmental sustainability are framed by international environmental agreements and national laws that respectively aim at reducing ecological damages emanating from FDI. This section reflects on the international environmental legal framework, outcomes of the Paris

Agreement and the CBD, among others, and how developing countries make use of domestic regulatory mechanisms such as EIAs, permitting systems, and penalties in an effort to balance economic growth with environmental protection.

International Environmental Law

International environmental law creates a starting point that can align FDI with international goals of sustainability. The setting of a common standard and commitment by international agreements sets out a framework within which foreign investors have to operate, especially in sensitive sectors of the environment. Two key agreements that help frame the global environmental regulatory landscape are the Paris Agreement and the Convention on Biological Diversity.

The Paris Agreement

The Paris Agreement, which was adopted in 2015, is a full commitment by the world community to limit temperature rise well below 2°C, with an aim to restrict it to 1.5°C.[21] Therefore, countries are obliged to present nationally determined contributions showing their plans concerning greenhouse gas emissions reduction and further transitioning toward more sustainable energy systems. Coupled with this, for many countries, such as the emerging economies, FDI has been considered one of the key drivers of the clean energy transition needed to meet these goals.

FDI has been instrumental in financing renewable energy projects, especially in developing countries, which depend on foreign investment to access the capital and technology that are ones for expansion. For example, the aggressive push by India toward solar and wind energy has been supported by an active courting of billions of dollars in foreign investment by multinational corporations wishing to take advantage of its great potential to produce green energy.[22] These countries incentivise foreign investment through policy measures that range from tax breaks for green FDI right up to subsidies in pursuit of renewable energy projects, thereby aligning it with their climate commitments under the Paris Agreement.

[21] UNFCC, "Paris Agreement", *available at*: https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_english_.pdf (last visited on: 11.07.2025).

[22] Press Information Bureau, GoI, "India's renewable energy sector has received FDI equity investment of $ 6.1 billion during April 2020 - September 2023: Union Minister for Power and New & Renewable Energy", *available at*: https://www.pib.gov.in/Pressreleaseshare.aspx?PRID=1988293 (last visited on: 11.07.2025).

This can also potentially contribute to the development of financial and physical resources that could help the process of climate adaptation, particularly in the developing world. FDI can be invested in a mix of climate-resilient infrastructure projects, clean energy, and modern and sustainable agriculture. The development is important for growth in an economy and contributes to reducing vulnerability to climate change. The Paris Agreement called for the orientation of global capital flows, especially FDI, towards sustainable development and low-carbon industries.

Convention on Biological Diversity, CBD

The CBD was signed in 1992, and its basic objectives are conserving biodiversity, ensuring the sustainable use of natural resources, and achieving equitable sharing of benefits that emanate from genetic resources. [23]As a matter of fact, this international treaty has thus far been instrumental in regulating FDI in industries with great potential for affecting ecosystems, especially in agriculture, mining, and forestry.

Countries that are parties to the CBD undertake obligations in respect of domestic policies for biodiversity conservation, especially in areas where their ecosystems are susceptible to enterprising foreign investors. Foreign investors in mining and agriculture, for instance, may be put to an obligation to carry out biodiversity management plans, undertakes proper environmental impact assessments, mitigating actions against perceived damage to any ecosystem. Foreign investments in agriculture alone have led to large-scale deforestation in Brazil[24], and its government has clamped down and enforced stronger environmental regulations aimed at the protection of the Amazon rainforest and its biodiversity-by the principle set out under CBD.

The CBD also encourages the establishment of protected areas and formulation of legislation that offers incentives towards the use of resources in a sustainable manner. In countries with abundant resources, foreign investors are sometimes compelled either to give a certain percentage to conservation concerns or invest in projects that enhance biodiversity, with the

[23] Secretariat of the Convention on Biological Diversity Montreal, "Convention on Biological Diversity", (2011), *available at*: https://www.cbd.int/doc/legal/cbd-en.pdf (last visited on: 11.07.2025).

[24] Cristina MÜLLER, *et. al."Brazil and the Amazon Rainforest - Deforestation, Biodiversity and Cooperation with the EU and International Forums"*, European Parliament's Committee on the Environment, Public Health and Food Safety (2020).

view of ensuring that economic benefits derived do not come at the expense of long-term environmental sustainability.

Environmental Impact Assessments

EIA is one of the most significant legal mechanisms for evaluating potential environmental impacts that may arise from large projects, including those financed by foreign investors. Indeed, many developing countries have enacted laws on EIAs as conditions for approval of infrastructure, energy, mining, or any other project relating to FDI. To identify, predict, and mitigate the potential environmental impacts of a project to be undertaken before approval, this is what EIAs are meant for.

For example, the Indian Environment Protection Act[25] demands that large industrial projects within which foreign investors are involved shall be submitted to strict environmental scrutiny through EIAs. These EIAs also involve public consultations, wherein interested members of the local community and stakeholders can raise their concerns over the potential impacts of the proposed project on the environment and on society. Within the precincts of African countries, like South Africa[26] and Kenya[27], EIAs are legally required for foreign-funded projects in sensitive areas like wildlife reserves, forests, and coastal zones. EIAs strengthen environmental aspects at large within the decision-making process, and projects that are not akin to environmental standardisation might be disallowed or delayed.

Permitting and Penalties

Indeed, permitting systems are another major determinant of domestic environmental regulations. They ensure compliance by foreign investors with the set environmental standards through the issuance of licenses and permits in land use, emission, waste management, and exploitative activities. The processes for permitting are normally sectoral, and high demands are put on industries that easily degrade the environment, for example, mining, energy, and manufacturing.

[25] The Environment (Protection) Act, 1986. \

[26] Nellie Peyton, "South Africa Passes its first Sweeping Climate Change Law", (Reuters, 2024), *available at:* https://www.reuters.com/world/africa/south-africa-passes-its-first-sweeping-climate-change-law-2024-07-23/ (last visited on: 11.07.2025)

[27] The Environmental (Impact Assessment and Audit) Regulations, Legal Notice 101 of 2003 (2022), *available at*: https://archive.gazettes.africa/archive/ke/2003/ke-government-gazette-dated-2003-06-27-no-66.pdf (last visited on: 11.07.2025).

For instance, South Africa[28] has a rigorous environmental permitting regime in regard to mining activities, thus compelling the foreign company to obtain permits concerning air emissions, water use, and proper waste management. These permits are pegged on certain conditions; the breach of which could lead to serious penalties such as fines, closure of operations, or even the revocation of the license to operate.

In countries such as Brazil[29] and Indonesia[30], there were also penalty systems introduced in the case of non-compliance with environmental laws. Foreign investors who commit violations through too much emission of gases, water pollution, or degradation of soil would be liable for heavy fines, legal prosecution, or even suspension of business activities. These measures have acted as deterrents to environmental violations and persuade foreign investors to shift toward sustainable practices.

BALANCING GROWTH AND SUSTAINABILITY: POLICY APPROACHES

With an increasing number of countries realizing the need for a trade-off between economic growth and environmental sustainability, especially at this time of FDI, a raft of policy approaches has recently been put forward to mitigate this challenge. Indeed, it is complex for striking a balance between the economic benefits weighing against potential environmental risks of FDI by using well-thought-out regulatory frameworks that provide incentives targeted at sustainable investment and stringent environmental standards. This section now explores three major ways in which this balance might be achieved: promotion of Green FDI, application of EIAs, and insertion of sustainable development provisions in IIAs.

Green FDI: Incentivising Sustainable Investments

Green FDI means foreign investment taking environmental sustainability into consideration as core elements of action, focusing on renewable energy, energy efficiency, and sustainable agriculture. Such investments would not only foster economic growth but also come closer to

[28] Generis Global Legal Services, "Navigating Environmental Regulations and Compliance Obligations In South Africa", *available at*: https://generisonline.com/navigating-environmental-regulations-and-compliance-obligations-in-south-africa/ (last visited on: 11.07.2025).

[29] *Ibid.*

[30] Makarim & Taira S, "Regulation Sets Fines of up to IDR3 Billion for Environmental Non-Compliance", *available at*: https://www.makarim.com/news/regulation-sets-fines-of-up-to-idr3-billion-for-environmental-non-compliance (last visited on: 11.07.2025).

meeting the environmental goals related to carbon emission reduction, protection of biodiversity, and resource efficiency in general[31].

It is regarding this influence that the role of government becomes crucial in promoting Green FDI through targeted incentives to foreign investors. These could include tax breaks, subsidies, and seamless regulatory processes for projects that go towards advancing the cause of environmental sustainability. The Government of India has instituted a raft of policies to attract foreign investment in renewable energy. By offering a financial incentive and streamlining bureaucratic processes, the Indian government has thus far successfully attracted substantial FDI into its renewable energy sector, with the wider ramifications of helping both lower India's dependence on fossil fuels and creating some economic value[32].

Similarly, countries can incentivize Green FDI by embedding sustainability in broader national development strategies. For instance, Morocco's[33] renewable energy strategy is enabled by foreign investment, thus enabling it to create large-scale solar and wind energy projects that enhance not only its energy security but also global climate goals.

FDI Screening and Environmental Standards

The other key actions in the balancing of FDI with sustainability include the introduction of strict mechanisms of environmental screening, accompanied by the application of Environmental Impact Assessments. EIA is an integral appliance that ensures governments are able to analyze and study the probable impact of a certain FDI venture on their environment before the actual granting of such a venture. This would ensure that the government had foreign investments with regard to environmental standards, implying that necessary mitigations had been taken to avert adverse impacts[34].

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[31] Dhairya Jain, "The Emanation of Green Bonds in India: An Instrument of Sustainable Financing", CBCL NLIU, *available at*: https://cbcl.nliu.ac.in/capital-markets-and-securities-law/the-emanation-of-green-bonds-in-india-an-instrument-of-sustainable-financing (last visited on: 11.07.2025).

[32] Melissa Cyrill, "The Scope for Foreign Investment in India's Green Economy", *available at*: https://www.india-briefing.com/news/the-scope-for-foreign-investment-in-indias-green-economy-30785.html/ (last visited on: 11.07.2025)

[33] Renewable Energy and Morocco's New Green Industries: How Morocco's green energy ecosystem can expand women and youth employment through sustainable development, *available* at: https://www.mei.edu/publications/renewable-energy-and-moroccos-new-green-industries-how-moroccos-green-energy-ecosystem (last visited on: 11.07.2025)

[34] Environmental Impact Assessment (EIA), *available at*: https://www.mygov.scot/eia (last visited on: 11.07.2025).

EIAs have been especially vital in areas that tend to cause maximum environmental damages, such as mining, infrastructure, and energy. Indonesia[35] has made the rules for EIA related to foreign investment more stringent in fields like palm oil and mining. This assessment would not only help to assess the potential environmental risks but can also provide avenues for public consultation and corrective measures thereupon. Large-scale foreign investments can be stopped or their adverse environmental impact can be mitigated or minimized by the government through the enforcement of EIAs.

Besides EIAs, countries may establish FDI screening mechanisms to ensure that only those projects with certain specific environmental criteria are approved. This approach allows governments to give priority to sustainable investments while discouraging projects that could result in environmental degradation. For example, the European Union[36] has devised guidelines that require member states to screen FDI for consistency with economic and environmental goals lest foreign investments fail to align with the sustainability objectives of countries.

Sustainable Development Clauses in Investment Agreements

Incorporating clauses on sustainable development within BITs and FTAs is another important strategy in endeavouring to strike a balance between FDI and environmental protection. Such provisions essentially address environmental sustainability and an assurance of the host country's right to regulate in the public interest, applicable to, among similar areas, environmental standards[37].

Sustainable development clauses may require that foreign investments are made in accordance with local environmental laws and in relation to international environmental agreements, such as the Paris Agreement on climate change. For instance, many EU[38] free

[35] InCorp Editorial Team, "Introduction to Environmental Permits with AMDAL Indonesia Indonesia", *available* at: https://www.cekindo.com/blog/environmental-permits-indonesia (last visited on: 111.07.2025).

[36] Trade and Economic Security, "Investment Screening", (2025), *available at*: https://policy.trade.ec.europa.eu/enforcement-and-protection/investment-screening_en. (last visited on: 11.07.2025)

[37] J Anthony VanDuzer, "Sustainable Development Provisions in International Trade Treaties: What Lessons for International Investment Agreements?", in Steffen Hindelang & Markus Krajewski (eds), *Shifting Paradigms in International Investment Law: More Balanced, Less Isolated, Increasingly Diversified* 142-176 (Oxford, 2016; online edn, Oxford Academic, 21 Apr. 2016), *available at*: https://doi.org/10.1093/acprof:oso/9780198738428.003.0008 (last visited on: 11.07.2025).

[38] Jana Titievskaia, "Sustainability Provisions in EU Free Trade Agreements - Review of the European Commission Action Plan" European Parliament, *available at*:

trade agreements with developing countries have included chapters on environmental protection, requiring that foreign investors respect local environmental laws and contribute to sustainable development. Such clauses would ensure that FDI does not undermine national environmental sustainability achievements.

In addition, these agreements could provide clauses that address environmental cooperation and technology transfer explicitly. Such provisions would encourage foreign investors to share their know-how on environmental sustainability practices, thus building local capacity in environmental management. One good example is the Comprehensive Economic and Trade Agreement between the European Union and Canada[39], which commits to policies aimed at promoting trade in and investment in environmentally beneficial goods and services while maintaining high environmental standards.

In this aspect, balancing economic growth with environmental sustainability in the context of FDI has to be multi-directional: rights-based integration of green FDI, strict environmental impact assessment, and inclusion of sustainability-related clauses in investment agreements will be the most desirable step in this direction. Changing this, developing countries attract foreign capital in a non-compromising way with their natural resources by applying high environmental standards and embedding sustainability into international trade and investment frameworks. These policy approaches contribute to attaining not only mitigation of environmental risks associated with FDI but also broader sustainable development goals.

CASE STUDIES

The challenge of balancing between FDI attraction and protecting environmental sustainability is a universal challenge, with many countries facing differing levels of success in the management of such a balance. While some nations have successfully used FDI in pursuit of sustainable growth, many other countries have encountered the negative environmental consequences of their poorly regulated foreign investments. This section highlights two sets of case studies in balancing FDI with environmental protection, while others reveal challenges and failures where FDI has resulted in environmental degradation.

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https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698799/EPRS_BRI(2021)698799_EN.pdf. (last visited on: 11.07.2025).

[39] Government of Canada, "Text of the Comprehensive Economic and Trade Agreement – Chapter twenty-four: Trade and environment", *available at*: https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/ceta-aecg/text-texte/24.aspx?lang=eng (last visited on: 11.07.2025).

Success stories: Countries that have successfully balanced FDI and environmental protection

Costa Rica: Ecotourism and Sustainable Development

FDI goes hand in hand with environmental sustainability in the case of eco-tourism in Costa Rica. On account of its rich biodiversity and increased conservation efforts, major investments in eco-tourism can be encouraged all over Costa Rica.[40] The government of Costa Rica has been fairly strict in following all kinds of environmental regulations and in encouraging ways of sustainable tourism. Hence, capitalizing on the country's natural resources has been achievable without degrading them.[41]

Over 25 percent of the country is incorporated into Costa Rica's national parks and protected areas that have become major attractions for overseas tourists[42]. The government has actively promoted FDI to develop eco-friendly resorts, wildlife sanctuaries, and adventure tourism activities that do not harm the environment. In this way, Costa Rica needs to balance the need to create substantial tourism revenue with the need to preserve its ecosystems. Its stable regulatory environment and commitment to sustainability have made it attractive to foreign investors, hence a model for responsible investment in eco-tourism.

Success in the ecotourism sector of Costa Rica proves how well-liked policies can actually attract foreign investment to drive economic growth while supporting environmental conservation. Their approach also sets the standards of high environmental parameters, which in turn ensure that foreign investors contribute towards the betterment of the local ecosystems rather than exploiting them.

Morocco: Renewable Energy Investments and FDI

Morocco is very well-positioned today in courtship and is at the frontline as far as the attraction of Green FDI is concerned. The ambitious renewable energy strategy was meant to

[40] "Costa Rica well placed to attract tourism investment as ESG pressure grows", *available* at: https://www.investmentmonitor.ai/sponsored/costa-rica-well-placed-to-attract-tourism-investment-as-esg-pressure-grows/ (last visited on: 11.07.2025).

[41] Katherine Simon, "Ecotourism in Costa Rica", *available at*: https://global-studies.shorthandstories.com/ecotourism-in-costa-rica/index.html (last visited on: 11.07.2025).

[42] Astha Garg, "Costa Rica National Parks: Understanding Their Importance", (Oct. 11, 2022), *available* at: https://ticotimes.net/2022/10/11/costa-rica-national-parks-understanding-their-importance (last visited on: 11.07.2025).

attain 52% of its electricity from renewable sources by the year 2030[43]. This has made the country a magnet for foreign investment in solar and wind power projects. Such investments have helped Morocco reduce dependence on fossil fuels and also become relevant in global efforts toward fighting climate change.

The most crucial work in Morocco is the Ouarzazate Solar Power Station, known more colloquially as Noor Complex, that ranks among the largest concentrated solar power plants in the world. This project has been largely funded by foreign investors and international finance institutions, among which are the World Bank and the European Investment Bank[44]. By doing so, Morocco sent a message to the world regarding how FDI can be utilized in major ways to achieve sustainable energy production, low carbon emissions, and employment opportunities within green industries.

Success here by Morocco in attracting FDI in renewable energy also testifies to what well-thought-out government policy can achieve in sustainability investment. It has been able to take front-line positions in the energy transition thanks to financial incentives, international funding of projects, and friendly regulatory frameworks[45].

Challenges of FDI: Environmental Degradation in Places Where FDI Has Taken Place

Oil Exploration and Environmental Damage in Nigeria

The Nigerian case, where FDI investments exist within its oil industry, depicts the potential environmental hazards when foreign investments are not well-regulated. The Niger Delta is one of the richest oil regions in the world and has received high levels of FDI from multinational oil firms such as Shell, Chevron, and ExxonMobil. While these investments

[43] "Morocco Country Commercial Guide", *available* at: https://www.trade.gov/country-commercial-guides/morocco-energy (last visited on: 11.07.2025).
[44] "Morocco: European Investment Bank funds one of the biggest solar power complexes in the world, EU Neighbours", *available at*: https://south.euneighbours.eu/news/morocco-european-investment-bank-funds-one-biggest-solar-power-complexes/ (last visited on: 11.07.2025).
[45] "Engie And Morocco's OCP Renewables Deal Worth Billions", (Reuters), *available at*: https://www.reuters.com/markets/deals/engie-moroccos-ocp-renewables-deal-worth-billions-says-source-2024-10-29. (last visited on: 11.07.2025).

have generated tremendous levels of revenue for the Nigerian government, they have also resulted in severe environmental degradation-e.g., oil spills, gas flaring, and deforestation.[46]

The resultant effect of oil exploration is the spoiling of water bodies, soil, and air in the region of the Niger-Delta. This leads to the destruction of the ecosystem and ways in which communities have survived through agriculture and fishing. Criticism has most times been directed at the Nigerian regulatory framework for failing to apply its environmental laws[47] and failure to monitor foreign oil companies or holding them responsible as they have tended to act with impunity. Despite international pressure and even public outcry for environmental remediation, efforts have been slow; thus, the region has suffered lasting ecological damage.

The case of Nigeria, therefore, reveals the importance of effective environmental governance in managing FDI, especially those resource-extractive ones. Without good regulation and enforcement, for example, FDI might cause unsustainable exploitation of natural resources and inflict long-term detrimental damage on the environment and local people.

Indonesia: Palm Oil and Deforestation

Indonesia's palm oil industry is yet another example of the environmental challenges associated with FDI. The country is the world's largest producer of palm oil, and this industry has been a target of vast foreign investment by companies desirous to make hay from the growing global demand for the commodity.[48] Its expansion has come hand in glove with widespread deforestation, adding significantly to the destruction of tropical rainforest and loss of biodiversity.

The deforestation of Indonesia, brought about by both internal and external investment in the palm oil industry, has meant a host of disastrous environmental consequences: the release of carbon dioxide,[49] which had hitherto been stored in the forest ecosystem, the loss of crucial

[46] Philip Agbonifo, "Risk management and regulatory failure in the oil and gas industry in Nigeria: Reflections on the impact of environmental degradation in the Niger Delta region,' 9 (4) *Journal of Sustainable Development*, 1 (2016), *available at*: https://doi.org/10.5539/jsd.v9n4p1 (last visited on: 11.07.2025).

[47] Kato Gogo Kingston, "The Dilemma of Minerals Dependent Economy: The case of Foreign Direct Investment and Pollution in Nigeria", 1 (1) *African Journal of Social Sciences*, 1-14 (2011), *available at*: https://mpra.ub.uni-muenchen.de/29046/2/K_Kingston_pollution_AJSS.pdf (last visited on: 11.07.2025).

[48] Jason Jon Benedict and Robert Heilmayr, "Trase: Indonesian Palm Oil Exports and Deforestation", *available at*: https://www.sei.org/features/indonesian-palm-oil-exports-and-deforestation/ (last visited on: 11.07.2025).

[49] "Deforestation and Deregulation - Indonesia's Policies and Implications for its Palm Oil sector", *available at*: https://eia-international.org/report/deforestation-and-deregulation-indonesias-policies-and-implications-for-its-palm-oil-sector/ (last visited on: 11.07.2025).

habitats for vital fauna, and increased vulnerability to forest fires. The government's regulatory framework has been considered too weak in terms of tussling with illegal logging and imposing sustainable practices on the palm oil industry.

Despite efforts to enhance the uptake of sustainable palm oil, for example, through the Roundtable on Sustainable Palm Oil, the environmental destruction based on FDI in Indonesia's palm oil sector remains a concern. This case confirms the need for more stringent environmental standards and better mechanisms of enforcement that will ensure FDI cannot result in irreparable ecological damage.