

Does Urbanisation Driven by Migration Lead to Deforestation and Biodiversity Loss in Developing Countries?

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Introduction

Urbanisation and migration are interconnected phenomena that cause serious environmental impacts. In developing countries, the mass growth of urbanisation happens because people migrate to cities. While urbanisation has created economic growth opportunities, the benefits are unevenly distributed, with wealthier residents having access to secure housing, healthcare and education, while marginalised communities remain trapped in poverty². This change is helpful for the economy to grow and develop but also brings major environmental problems such as deforestation and loss of species. These problems do not affect only local areas; they have worldwide effects and influence climate change and the balance of nature.

São Paulo, Brazil, exemplifies these challenges. The city faces a shortage of approximately 400,000 housing units, forcing many residents into informal settlements known as favelas. These areas often lack basic infrastructure and services, exacerbating social inequalities. Government initiatives like "Minha Casa, Minha Vida" aim to address the housing deficit, but issues such as bureaucratic inefficiencies and insufficient funding have limited their impact.³

This essay begins with looking at what exactly the global context of urbanisation and migration is. Then proceeds to look at a case study of how urbanisation affects the country of Indonesia and how it loses its biodiversity with its impacts. Following this, a second case study will be looked at on how the loss of the land of the Amazon Rainforest impacts not only the residents of Brazil but also the rest of the world. Moving on from this, the essay will look at both the causes and impacts of the loss in biodiversity and deforestation. Moving towards the end of the essay, two possible solutions will be reviewed and after review, the solution with a greater impact will be recommended. Finally a personal reflection of how this essay has impacted me will be seen, concluding this write up.

The Global Context of Urbanisation and Migration

In developing countries, rapid urbanisation is happening because people are moving from the countryside to cities for better job opportunities. According to the United Nations, by 2050, more than 68% of the world's population will be

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² Shunsuke Sato. [The Impact of Rapid Urbanization on Housing Inequality and Informal Settlements in South Asia](#). October 29, 2024. - accessed on 28/12/2024

³ Elizabeth Johnson. [São Paulo Reclaims Its Center](#). December 2024 - accessed on 29/12/2024

living in cities, up from 55% in 2020, with most city growth happening in Africa, Asia, and Latin America.⁴ This fast growth often leads to forests being changed into places for homes, factories, and businesses.

Urbanisation increases the demand on cities, thus the need to construct such things as roads, buildings, and services. In a nutshell, rapid urbanisation hurts natural environments. Expansion of cities means cutting down trees, because forests are cleared for farming purposes and for construction. For example, in Indonesia, a fast rate at which cities grow and the need for crops have significantly caused deforestation, especially for palm oil farms.

National Issue

Indonesia has some of the biggest tropical forests in the world, but they are being cut down quickly. This is to make land available for other uses, such as agriculture, mining, and urban development.⁵ The main reason is the need for palm oil, which causes many forests to be cleared for farms. Illegal logging and mining for things like coal and gold also lead to less forest.

The environmental impacts of tree cutting are severe. Soil erosion becomes a huge issue, which lowers soil quality and hurts farming. The loss of biodiversity is another major issue, as animals such as orangutans and tigers lose their homes. Local communities that depend on forests for resources are also affected.

Combating efforts against deforestation include a government moratorium on logging and palm oil permits in primary forests, and community-based programs like Social Forestry. However, illegal activities still prevail. Important steps include strengthening law enforcement, promotion of sustainable land use, and alternative livelihoods. International cooperation is required in order to solve the global demand for commodities related to deforestation.

Global Issue

According to the World Wildlife Fund, The Amazon covers a huge area of 6.7 million sq km in South America. Nearly 60% of the rainforest is in Brazil, while the rest is shared among eight other countries—Bolivia, Colombia, Ecuador, Guyana, Peru, Suriname, Venezuela and French Guiana, an overseas territory of France.⁶ Cutting down trees in the Amazon rainforest is a serious environmental problem. It is mainly caused by farming, raising cattle, growing soy, logging, and mining. The Amazon is very important for keeping the global climate and biodiversity stable, but it is being destroyed as forests are removed for business. This not only causes animals and plants to disappear but also speeds up climate change by releasing carbon dioxide into the air.

The indigenous communities survive on the forest and are hence compelled to evacuate as their territories are seized. Efforts towards combating deforestation, such as the protection of indigenous lands and reform of environmental law, have yielded mixed results since enforcement is generally weak and political problems hinder the speed of progress. It is crucial to work together globally to reduce the demand for products that contribute to deforestation and to fund conservation efforts. While there have been efforts to protect the Amazon, more must be done to prevent further destruction and to allow the rainforest to live.

Deforestation in the Amazon rainforest has a significant global impact primarily because it releases vast amounts of stored carbon dioxide into the atmosphere, contributing significantly to climate change, altering weather patterns, and

⁴Population Division of the United Nations Department of Economic and Social Affairs (UN DESA) [68% of the world population projected to live in urban areas by 2050, says UN | UN DESA | United Nations Department of Economic and Social Affairs](#). 16 May 2018 - accessed on 03/01/2025

⁵ [Deforestation in Indonesia and its impact on the environment](#). 13 March 2023 - accessed on 07/01/2025

⁶ [The Amazon Rainforest | WWF](#) - accessed on 09/01/2025

impacting biodiversity worldwide, essentially, the Amazon acts as a massive carbon sink, so its destruction disrupts the global carbon balance.⁷

Causes of Deforestation and Loss of Animal and Plant Life

Cities are expanding and require space for houses, factories, and businesses. In developing nations, this typically involves clearing forests.⁸ For example, roads and highways are developed to link cities thereby fragmenting ecosystems and decreasing the wildlife habitat. With more cities, food demands would increase.⁹ This pushes the expansion of agricultural activities such as palm oil plantations in Indonesia and soybean farming in Brazil. The two activities require large tracts of cleared land, thus leading to deforestation.

Deforestation is also driven by the extraction of natural resources, including timber, minerals, and oil.¹⁰ These activities often occur in ecologically sensitive areas, leading to habitat destruction and biodiversity loss. Urbanisation often results in land being repurposed for infrastructure development, agriculture, and industry without considering environmental impacts. This shortsighted planning exacerbates deforestation and disrupts ecosystems.

Consequences of Deforestation and Biodiversity Loss

The Amazon rainforest is home to an estimated 10 percent of the known fauna, as well as a large number of the unknown, hidden among its lush vegetation and 20 percent of the flora, more than 10,000 of its plants contain ingredients for medical or cosmetic use. The destruction of their habitat brings them to the brink of extinction, driving biodiversity loss.¹¹ When biodiversity decreases, genetic diversity decreases, and ecosystems become more susceptible to environmental changes as well as diseases. The effects of reduced genetic diversity trickle down to regional and global systems.

One of the major sources of carbon emissions is deforestation, accelerating global warming.¹² It disrupts the global carbon cycle because forests act as a carbon sink. In this regard, the damage to the Amazon rainforest impacts climate patterns globally. Deforestation dismantles control over water and soil, leading to soil erosion¹³, and low agricultural productivity.

Possible Solutions

Sustainable urban planning aims to build cities that keep the green spaces and stop forests from being cut down. The government can support this by adding zoning laws to support green areas and building upwards instead of sideways. NGOs which work in renewable energy can be subsidised by the government so they have more funding and can improve efficiency and reduce harm to the environment. Although it is hard to balance the growth of cities and protect the environment, the government needs to look at the long term effect by implementing these procedures so urgent development needs can be met.

Reforestation and protection of forests is a big project to fix forest and stop illegal tree cutting. This is important to protect wildlife and reduce climate change. Governments, NGOs, and private companies can work together to restore forests and protect natural habitats. Although it isn't easy as it can take very long and has high expenses so long term efforts require constant financial inputs. Economic interests in industries such as palm oil and timber cause

⁷ [Deforestation in the Amazon Rainforest: causes, effects, solutions](#). 12 May 2023 - accessed on 09/01/2025

⁸ [Top 10 causes of deforestation](#) 17 May 2023 - accessed on 13/02/2025

⁹ [Top 10 causes of deforestation](#) 17 May 2023 - accessed on 13/01/2025

¹⁰ [Top 10 causes of deforestation](#) 17 May 2023 - accessed on 13/01/2025

¹¹ [Deforestation in the Amazon and its impact on biodiversity - Iberdrola](#) - accessed on 15/01/2025

¹² [Causes and consequences of deforestation | Klorane Botanical Foundation](#) - accessed on 15/01/2025

¹³ [Causes and consequences of deforestation | Klorane Botanical Foundation](#) - accessed on 15/01/2025

deforestation. This often conflicts with long-term environmental goals. It makes it hard to balance economic growth with keeping forests safe.

After understanding this research, I believe that reforestation and forest preservation are the most effective solutions, as they directly address the primary causes of biodiversity loss and environmental degradation. It also restores critical ecosystems that support many species by ensuring deforestation is more restricted. Forests are important for biodiversity, climate regulation, carbon sequestration, and other resources such as clean air and water. Tighter laws on deforestation would also help to prevent further habitat loss, and ecosystems would be given a chance to regenerate. With time, it has environmental advantages that ensure biodiversity, better carbon absorption, and more robust ecosystems, thereby giving a healthier planet.

Source Evaluation

WWF is a trusted global organization that provides accurate research on deforestation and biodiversity loss. It works with scientists to share reliable data and solutions for conservation. WWF also collaborates with governments and communities, influencing policies to protect nature while promoting sustainable development in developing and urbanizing areas.

Another source used in this essay is the United Nations, it is a good source for statistics as it collects data from around the world. Experts are employed to make sure it is accurate. They also frequently update their data so information stays relevant. As it is a worldwide organisation, it considers all viewpoints and is not biased, making it highly reliable. To me, it helps as the statistics provided by it helps us realise how many forests will be cut down to support the growth and expansion of cities for urbanisation.

Reflection

Before researching this topic, my understanding of the global significance of the Amazon rainforest—and forests in general—was quite limited. I was aware that they serve as habitats for a vast majority of the world's animal species, but I had not fully grasped their critical role in regulating the climate, maintaining biodiversity and supporting global ecosystems. Through my research, I came to appreciate the far-reaching impact of deforestation and the urgent need for conservation efforts. Through my research, I gained a deeper understanding of the crucial role forests play in maintaining ecological balance. I also recognised the challenges they face due to the pressures of a growing human population. As urbanisation and agricultural expansion continue to encroach upon forested areas, there is an urgent need for more strategic planning and sustainable land management. Balancing environmental conservation with human development requires thoughtful policies and innovative solutions to ensure that forests are preserved while also meeting the needs of communities. My research has helped me understand the vital role forests play in climate regulation and biodiversity. It highlighted the need to balance environmental conservation with human expansion and underscored the crucial role of governments and NGOs in this effort.

Conclusion

Undeniably, one of the causes of deforestation and biodiversity loss in developing countries is urbanisation brought about by migration. Economic opportunities brought about by urban growth are costly to the environment. Case studies in Indonesia and Brazil reveal how far-reaching the effects of deforestation can be, from habitat destruction to climate change.

The need is to approach it from multiple directions. Sustainable urban planning, reforestation, international cooperation, and community engagement could all combine to reduce the impact of urbanisation. It is only when

economic growth goes hand in hand with environmental protection that developing countries can follow a sustainable development course, leaving future generations a wealth of biodiversity.