ANALYZING POLICY ASSESSMENT FRAMEWORK FOR DIRECT CAUSES OF BIODIVERSITY LOSS

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ABSTRACT

The term "biodiversity" is used to describe the wide range of variation seen in biological entities such as gene pools, species lists, organism lists, and even the size of biological communities (also known as "biomes"). The loss of biodiversity may be understood as the widespread extinction of species or the dramatic fall of species in any given location. Many ecosystem services rely on biodiversity, including those that regulate atmospheric chemistry, provide food and raw materials, provide water, recycle nutrients, manage plant and animal populations, provide genetic resources, and provide opportunities for recreation. Human growth and expansion continue to result in the fragmentation and loss of habitat for flora and animals, which is driving the rapid decline in biodiversity. Most scenario studies predict that the rate of biodiversity loss will accelerate in the coming decades, with projections estimating a decrease from roughly 70% in 2000 to roughly 63% by 2050, because key underlying causes, such as economic and market failures, are unlikely to be eliminated in the short run. The loss of ecosystems, the introduction of foreign species, excessive exploitation of biodiversity resources, and agricultural homogeneity are all major biological reasons of the decline in biological variety. Each of these factors is based on the actions of humans. In this work, we investigate the monetary and social underpinnings of biodiversity decline. Both theoretical factors and actual world examples were included in the study.

KEYWORDS *Biodiversity Loss, Policy, Framework, Climate and biological*

INTRODUCTION

The Earth's biosphere is extremely diverse on every conceivable scale of biological organisation. Biodiversity refers to the variation seen in the amount and variety of genes, species, organisms, and huge biological groups, sometimes called biomes. Loss of biodiversity refers to the decline or disappearance of biological diversity for any reason. The current loss of biodiversity is caused by human activities even in the smallest of biological communities in a particular region. If enough species in a region become extinct due to a decline in biodiversity, the ecosystem collapses and nothing lives there anymore.

Species richness, the number of different species, is typically how the concept of biodiversity is thought of. Thus, biodiversity loss is typically understood to mean the disappearance of species from a given area, ecosystem, or biome; however, the loss of even a single species can have far-reaching negative effects on the health of the entire ecosystem or biome. This is due to the fact that when biodiversity decreases, the stability of the food chain and the reliance on certain species for sustenance deteriorates.

Depletion of biodiversity may be defined as the widespread extinction or drastic decline of species in any specific area. Diverse factors across Earth's historical timeline have contributed to this decline in biodiversity. However, these occurrences have all been a part of the mass extinction system that is inherent to the natural order. Mass extinctions, including the loss of species and ecosystems, are occurring at a rate of 100 to 1,000 times faster than they would occur in a natural environment. Human actions have greatly exacerbated factors already known to contribute to mass extinctions.

Plant production can decrease, resilience can be compromised, and ecosystem processes like plant productivity, water use, and disease cycles can become more variable as a result of biodiversity loss in a given region. There is an immediate threat to human food security in a particular habitat, and the loss of biodiversity has been linked to the coextinction of species due to disruptions in the food chain and food web.

LITERATURE REVIEW

Guy F. Midgley et.al (2022) Climate warming and biodiversity loss are the two most pressing environmental problems that mankind confronts today. With the strengthening of ambitious goals and objectives by the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change, we are approaching a key decade for both the worldwide biodiversity and climate change agendas. The concerns of biodiversity and climate change are intertwined, yet they have been mostly handled independently within the respective Conventions. Evidence suggests that conservation efforts that prevent, moderate, or reverse biodiversity loss may also considerably mitigate climate change brought on by human activities. This analysis focuses on conservation measures that may help slow global warming the most.

PEDRO JAUREGUIBERRY et.al (2022) To implement policies that effectively counteract biodiversity loss, it is necessary to identify the primary anthropogenic drivers responsible for this phenomenon. Here, we statistically synthesize empirical comparisons of recent driver impacts found through a broad review, wherein prior knowledge was limited in scope and rigor. We demonstrate that the alteration of land and sea use has been the principal direct cause of recent biodiversity loss around the globe. When compared to these primary drivers, climate change and invasive alien species have played much smaller roles. The oceans have a unique driver hierarchy than land and fresh water due to the prevalence of direct exploitation and climate change. This varies depending on the type of biodiversity indicator being used. As an illustration, climate change plays a larger role in altering community composition than in altering the numbers of individual species.

Stephanie D. Maier et.al (2019) The usage of land and changes in how land is used are major contributors to the worldwide decline of animal and plant species. Despite the existence of Life Cycle Impact Assessment (LCIA) techniques for quantifying this effect, they are rarely incorporated into the evaluation of products and processes by businesses and governments. Therefore, this paper emphasizes four main requirements for a biodiversity methodological framework within LCIA to facilitate biodiversity assessments: first, to account for the global

uneven distribution of biodiversity and its risks with respect to vulnerability and irreplaceability; second, to account for the need to regionalize the impacts of land use; third, to account for the specific impacts that different land use types have on biodiversity; and fourth, to analyses the relationships between these four factors.

Harry C. Wilting et.al (2017) Constant evidence points to the fact that biodiversity declines as a direct result of human consumption. This research presents consumption-based biodiversity losses, or biodiversity footprint, for 45 countries and world regions worldwide, and is the first to systematically quantify these losses in relation to land use and greenhouse gas (GHG) emissions associated with the production and consumption of (inter)nationally traded goods and services. We found that (i) there are large differences in biodiversity loss per citizen across countries, with higher values as per-capita income rises, (ii) the proportion of biodiversity losses attributable to greenhouse gas emissions in the biodiversity footprint rises as per-capita income rises, (iii) food consumption is the primary factor in biodiversity loss in the majority of countries and regions, accounting for an average of 40 percent worldwide.

René w. Ver burg et.al (2019) effects, they are still frequently unaccounted for in environmental reporting by corporations. As a byproduct of generating electricity, power plants release nitrogen oxides, which may have an environmental impact. We developed an analytical framework and applied it to four separate power plants in the Netherlands in order to assess the impact of power plants on the biodiversity of Natura 2000 areas and to estimate compensation costs. Production levels and fuel types were two ways in which these plants varied (natural gas and biomass). The plants impacted a range of natural regions, from 77 to 537 km2. The costs of restoration, the 'insetting' costs of creating new nature areas within the existing Natura 2000 network, and the offsetting costs, including the purchase of formerly agricultural land, were used to estimate the cost of biodiversity loss and compensation.

INDIAN BIODIVERSITY

India is one of the eight major "Vavilorian" sites of origin and crop diversity because of the wide range of plant life it supports. There are an estimated 49,000 plant species in India, 4900 of which are indigenous, making about 8% of the world's total biodiversity. Nearly 90 percent of the country's higher plant species are found in the ecosystems of the Himalayas, the Khasi and Mizo hills of north eastern India, the Vindhya and Satpura ranges of northern peninsular India, and the Western Ghats; this makes these regions particularly important to traditional medicine. The variety of animals includes, among many others, 2,500 fish, 150 amphibians, 450 reptiles, 1,200 birds, 850 mammals, and 68,000 insects.

The Eastern Himalayan region and the Western Ghats are two of the world's most vulnerable 'hot spots,' although India is recognized as a mega-biodiversity area. "Both are paradises of precious genes but are inching towards the position of Paradise lost," said Professor M.S. Swaminathan. The percentage of endangered species in India's natural flora and wildlife is at least 10%, and it may be more. Eighty mammal species, forty-seven bird species, fifteen reptile species, three amphibian species, and countless invertebrate species, such as moths, butterflies, and beetles, are

all under danger in the wild. There are 19 different kinds of primates, and 12 of them are critically endangered. More than 6,000 species of higher plants have been discovered in the ecosystems of southern peninsular India, including the southern Western Ghats. Of these, it is believed that 2,000 are indigenous to this region. The Indian medical traditions of Ayurveda, Unani, Siddha, and Tibetan Medicine make use of about 2,500 plant species, comprising over 1,000 plant genera and 250 plant families. India has a coastline of roughly 8,000 kilometers, an Exclusive Economic Zone of 2.02 million square kilometers, and several coastal habitats, including estuaries, lagoons, mangroves, backwaters, salt marshes, rocky shores, sandy shores, and coral reefs.

LOSS OF BIODIVERSITY

Both regional biodiversity and global biodiversity are in decline. However, local biodiversity may increase in certain areas owing to the introduction of invasive species. As Sax and Gaines (2003) point out, this trend is not unique to islands; rather, local biodiversity is on the rise in many continental regions are just a few authors who have documented declines in various aspects of biodiversity. The relevant fact is that extinction rates in the past 300 years are at least several hundred times higher than what would be predicted from the geological record. A major contributor to the demise of many big animal species is widely regarded to have been human hunting. It is well acknowledged in India that hunting has had a significant role in the long-term reduction of animal populations. Our focus in this study will be on biodiversity loss in India. Direct perturbation, such as widespread tropical forest clearance for agriculture (Sodhi et al., 2006) or the extirpation of island populations by introduced predators is the primary cause of biodiversity loss in the modern context. Synergies between extinction drivers such as habitat loss, over-exploitation, climate change, invasive species, and pollution were studied who coined the term "extinction dynamics." Causes are shown in a global sense in Figure 1.

LOSS OF BIODIVERSITY IN INDIA

Twenty-five global "hot spots" of increased biological endemism have been identified. The Eastern Himalayas and the Western Ghats are the two that can be found on the Indian subcontinent. Causes of extinction

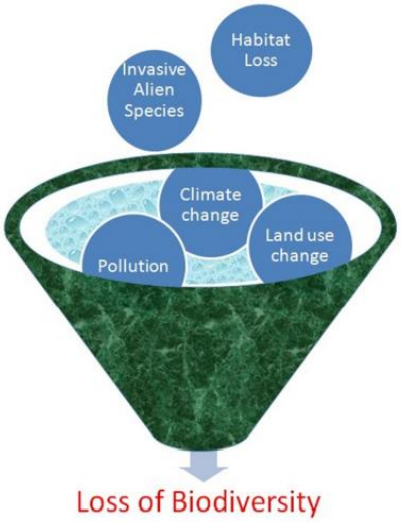

Figure1. Causes for loss of Biodiversity.

are not spread out evenly; the Hilton-Taylor report from the 2000 IUCN provides evidence that distinct patterns can be identified, including those related to geography and ecological affinity. For this reason, the bulk of the world's critically endangered animal species are found in tropical regions. The number one spot goes to Indonesia, which is home to 135 unique species, followed by India, Brazil, China, and Mexico. When looking at the number of mammal species per country, the top countries shift slightly, but eight of the top ten are still located in tropical regions. Nearly a quarter of the endemic species, including 366 endemic vascular plant taxa and 35 endemic vertebrate taxa, could be wiped out if deforestation continues at its current rate and only about 10% of the land area of the Indian Himalaya is covered by dense forest by the year 2100. Species like the tiger and others in the cat family will be extremely threatened with extinction in the Himalaya, especially in the sub-tropical and temperate forests (broad-leaf, coniferous, and mixed). About 40 percent of the country's mangroves and other vital wetlands have been destroyed.

Floral Species

Numerous hotspots for biodiversity can be found across India, each teeming with unique plant species. Around 2000 tons of herbs are used every year in India's estimated 7800 drug factories. More and more buildings being built means more and more flower species are in danger of going extinct.

The reported list of endangered flora is shown in Table.1 along with locations where it was once abundant due to the observed loss of biodiversity.

Table 1. Endangered flora, causes for loss of biodiversity and places last found.

Species Endangered	Place of interest	Causes
Rauvolfia serpentine, Terminalia chebula, Sapindus laurifolius and Jatropha curcas	Western Ghats (Kamalappa, 2003).	Destructive harvesting followed by unscientific handling.
Catuneregam spinnosa, Garcinia cambogea, Acacia pinnata, Ficus benghalensis, Zanthoxzyllum rhesta, Hemidesmus indicus, Terminalia chebula, Wrightia zeylanica, Cinnamomum verum, Bombax ceiba, Sapindus laurifolius, Alangium salvifolium and Calophyllum inophyllum	Maradavally, Shimoga district (Kamalappa, 2003).	Medicinal use and Deforestation.
Abrus precatorius, Adenanthera paronina, Aegle marmelos, Caesalpinia bonducella, Cardiospermum halicacabum, Corallocarpus epigaeus, Gloriosa superba, Andrographis paniculata	Devrayanadurga forests, Tumkur, Deccan Plateau (Kamalappa, 2003).	Destructive harvesting and Medicinal use.
Lichen genera Parmotrema, Everniastrum, and Rimelia	Ramnagar and other places in India (Upreti *et al*., 2005)	Commercial use
Arunchal Hopea Tree (*Hopea shingkeng*)	Arunachal Pradesh (CITES species database, 2011)	Construction of House Posts
Hubbardia heptaneuron	Karnataka (IUCN (SSC) E Bulletin)	Construction of the Linganamakki reservoir
Sapria himalayana	Himalayas (Myers *et al*., 2000)	Human Influx

ANALYSIS

The growth rates of the most commonly harvested foliose and fruticose lichens in India range from about 5 mm per year to about 2 cm per year. As a result, lichens will drive species to extinction if they are harvested at an alarming rate. Commercial trade of flower species must be regulated, and a sustainable strategy for lichen development must be implemented. A lichen should be added to the CITES list, which Upreti supported.

Figure 2. Lichen materials sorted, graded, and baled at Ramnagar. Adapted from "Commercial and ethnic use of lichens in India"

- Loss of habitat from encroachments in the park area threatens the extinction of the Sapria himalayana, which is native to the Indian eastern Himalayas, a region rich in biodiversity. Due to

its host-specificity and restricted phytogeographic range, any attempts to reintroduce or translocate the species would be fruitless.

- If we investigate the various factors that lead to plant extinction, we can divide them into two broad classes: commercial use and development activities. Tribal people in rural India can make a decent living by exploiting plants for commercial gain, despite the fact that they are likely to have less knowledge than the average Indian about how to properly handle species for commercial use. Loss of biodiversity and even a source of income for people is a direct result of the unscientific handling of flora for such commercial activities. The destruction of the ecosystem to which flora have adapted over millennia is a direct result of human development activities like the building of reservoirs and amusement parks.

- To a large extent, biodiversity hotspots and the areas immediately surrounding them are home to the majority of the threatened species that have been documented. As a result, it is urgent that policies be drafted to keep an eye on the factors leading to the decline of floral diversity in key areas and to motivate people to take part in training programmes that will enable them to responsibly manage species for commercial purposes. Estimation of biodiversity loss in such areas after proposed activity is necessary before employing development activities there.

Wild Life

Numerous biodiversity hotspots across India make the country's wild life rich in diversity. However, extinction and endangerment of species are the results of human population growth, the absence of scientific methods for dealing with enemies, and the effects of development activities. Numerous extinct species have gone unrecorded, possibly because they weren't all that remarkable or because nobody knew they even existed. The threatened species are shown in Table 2 below.

Table 2. Endangered wild life, causes for loss of biodiversity and places last found

Species Endangered	Causes
Indian/ Asiatic Cheetah, Javan Rhinoceros and Swnatran Rhi-noceros (Vivek Menon, 2003).	Exploitation of land and forest resources
The cheetah (Acinonnlubatus) and the pink-headed duck (Rhodonessa caryoph•llacea) (Nayyar and Sastry, 1990)	Annihilated. unre-corded
The Asiatic lion, the Bengal Ti-0 Er, and the Indian white-nmiped vulture (Groombridge, 1993).	Feeding on the carrion of dt-clotenac-treated cattle
Asian Elephant (Elephas maxi-mus) (Sukumar et at,1998)	Ivory poaching
The Indian tiger (Antony Bar-nett, Jaipur (India) 2003).	Making of beauty products
Muntiacus putaoensis (leaf deer) (Arunachalam et at, 2004).	Hunting

Bird populations are often used as a barometer of environmental health. Many indigenous communities in the Indian state of Rajasthan, for example, include imagery of birds in their folk art and clothing. The tribal people tie a customary knot on their foreheads using the bird's beak as a piece of headwear. The birds that have been reported as being in danger are shown in Table 3. Some of the world's most imperiled avian species are the monal pheasant western tragopan Himalayan snow cock golden eagle, steppe Fifteen Indian bird species are among the 100 evolutionarily divergent and globally endangered species identified in recent research by the Zoological Society of London (ZSL) and Yale University. The Bengal Florican, Forest Owlet, Red-headed Vulture, Egyptian Vulture, Jerdon's Courser, Lesser Florican, Spoon-billed Sandpiper, Sociable Lapwing, Siberian Crane, Great Indian Bustard, Greater Adjutant, White-bellied Heron, Wood Snipe, Masked Finfoot, and Christmas Island Frigatebird are among the 15 Indian species on the EDGE list. Spoon-billed Sandpipers, Siberian Cranes, and White-bellied Herons rely heavily on wetland habitat for survival, while Bengal Floricans, Lesser Floricans, Great Indian Bustards, Sociable Lapwings, and Jerdon's Coursers are threatened by the destruction of their grassland and scrub forest home. Destroying the deciduous woods of central India will also make it difficult for the survival of the Forest Owlet, the research found.

Most of the decline in bird species has not been recorded. For instance, in 1991, WWF India conducted the only census of the country's peacock population. It showed that after Partition in 1947, India had just 50% of the world's peacock population. Although the green peacock is thought to be gone, the peacock as a whole may soon be classified as severely endangered. The Siberian crane, which was hunted to extinction while migrating south to spend the winter in India and Iran, is another example of an endangered species that has met an untimely end. The western population has dwindled almost to extinction. Its eastern population, which breeds in East Siberia and spends the winters in China, is in peril because its Chinese wintering grounds are under attack. • Raptor road transect surveys in Northern and Central India between 1991-1993 and 2000 provided evidence of a vulture decline.

Table 3. Endangered birds, causes for loss of biodiversity and places last found.

Species Endangered	Place of interest	Causes
Seychelles Parakeet (*Psittacula wardi*)	Indian Ocean islands (Kundu *et al*., 2012).	Intense persecution by farmers and coconut plant owners.
Pink-headed Duck (*Rhodonessa caryophyllacea*) and the Himalayan Quail (*Ophrysia superciliosa*) (Adams *et al*., 2003)	Not reported	Annihilated, unrecorded
Great Indian Bustard (*Ardeotis nigriceps*), Bengal Florican (*Houbaropsis bengalensis*), Jerdon's Courser (*Rhinoptilus bitorquatus*), Forest Owlet (*Heteroglaux blewitti*), White bellied (*Heron Ardea insignis*) (IUCN endangered red list)	Not reported	Not reported
Narcondam Hornbill (*Aceros narcondami*) (IUCN vulnerable species list)	Not reported	Not reported
Sarus crane	Himalayas (Meine *et al*., 1993).	Hunting
Great Indian hornbill *(Buceros bicornis)*	Arunachal Pradesh (Arunachalam *et al*., 2004).	Human traditions
Long-billed vulture (LBV: *Gyps indicus*), Slender-billed vulture (*Gyps tenuirostris*), and Oriental white-backed vulture, (OWBV: *Gyps bengalensis*)	Northern and Central India (Prakash *et al*., 2003).	Pesticides

The results showed that both the Oriental White-backed Vulture (OWBV) and the Long-billed Vulture (LBV) are declining at alarming rates (33% and 27% annually, respectively). From 1992 to 2007, the estimated decrease ranges from -96.8 (LBV) to -99.9 (OWBV). Vulture populations have plummeted in India as a direct result of the widespread use of the NSAID diclofenac to treat livestock. Vultures and dogs both depend on livestock carcasses for food. Rabies in humans is on the rise in India, where dog populations have exploded in tandem with the decline of vultures.

Biological causes of biodiversity loss

Despite its focus on genes, species, and ecosystems, biodiversity is tied to nonbiological concerns. Insights from the social, economic, and practical sciences are required to comprehend the dangers to biodiversity and provide viable countermeasures.

Recent concerns about the loss of biodiversity have sparked widespread interest in the topic. Species extinctions occur naturally in the course of evolution. But extinction rates in the modern era are a factor of ten to a hundred greater than they were before the advent of humans. These major factors for biodiversity loss are:

We're losing important habitats because of human activity. Global data on human-caused habitat degradation is shown in Table 1. Human activity has had a substantial effect on global ecosystems, as shown by the facts. Even among the world's continents, Europe has the lowest proportion of "undisturbed" land at 15%. The disappearance of tropical forests is the best-

documented element of this. We also see the impounding of rivers, the dynamiting of coral reefs, and the plowing of natural grasslands in other parts of the world.

Table 1: Habitat and human disturbance by continent.

	Total area(km^2)	% undisturbed[1]	% Partially disturbed[2]	% Human dominated[3]
Europe	5 759 321	15.6	19.6	64.9
Asia	53 311 557	43.5	27.0	29.5
Africa	33 985 316	48.9	35.8	15.4
North America	26 179 907	56.3	18.8	24.9
South America	20 120 346	62.5	22.5	15.1
Australia	9 487 262	62.3	25.8	12.0
Antarctica	13 208 983	100.0	0.0	0.0
World	162 052 691			

Untouched: a relic of primal vegetation; very low human population.

Moderately disturbed: indications of widespread or seasonal farming, secondary but naturally renewing vegetation, livestock densities that exceed carrying capacities, and other signs of human disturbance (e.g., logging concessions).

Evidence of human dominance includes documentation of long-term agricultural or urban settlement; the elimination of original plant life; the presence of new plant life that is distinct from the original; and documentation of desertification or other long-term deterioration.

Bringing in new, non-native species. Some, like invasive species of plants and insects, are introduced by mistake. While others are purposeful. European settlers introduced foxes, rabbits, and cats to Australia, causing the extinction of many native species. At least 18 fish species in North American rivers have gone extinct due to the stocking of foreign fish for sport or (rarely) for sustenance. The introduction of Nile perch to Lake Victoria (East Africa) has had a devastating effect on the lake's fish population. Although native to Australia, eucalyptus trees have been widely imported to other parts of the globe, where they have proven to be little more than a nuisance.

There are several causes of biodiversity loss, including over-harvesting via (illegal) hunting and the systematic chopping of wood for heating purposes or charcoal manufacturing. As an example, we may look at the usage of plants as medicine. Out of 132 indigenous plants used for traditional medicine in the semi-arid rural region of Southern Cochabamba (Bolivia), 10 were found to be in danger due to excessive collecting.

This is because of knock-on effects, which have secondary impacts that are less well-known. Plants that rely on certain insect pollinators, for example, will become extinct if those pollinators go extinct as well. In the early 1990s, when the last passenger pigeon died, two species of lice that were obligatory parasites of this bird also became extinct. Trees of the moabi species were formerly widespread in that region of Africa. All parts of the tree are useful: the fruits are eaten, the seeds (karite) are used to make cooking oil, and the bark is a popular remedy. The plant relies on the elephants for its progeny. Animals are the only known vector for spreading moabi seeds. Ivory Coast, Ghana, and Benin have all had significant declines in their elephant populations, which has had a major effect on the spread of the tree.

Reducing the number of species used in farming and forestry to facilitate industrial production. Europe uses fewer than 20 of the hundreds of edible potato species found in South America. About 7,000 plant species have been grown for human use, yet just 30 provide more than 90% of the world's population's energy requirements. The banana (Musa spp.) is a good example. In the tropics, bananas rank behind only rice, wheat, and maize as a major dietary staple. Nearly 120 nations actively engage in their cultivation. About 25 types of sterile edible bananas are used by farmers. Pests and illnesses, as well as resource depletion and pollution/climate change, are reducing the number of available species and threatening the world's biodiversity. Species' ranges shift as a result of climatic changes. To the north, at the foot of the Pyrenees, are appearing plants that were previously exclusively found in the south of Spain twenty years ago.

Each of these reasons has a similar thread: it is human action that has brought about the problem. Thus, the present loss of biodiversity may be traced back to human activities more than any other factor. Therefore, it is essential to identify the different facets of human effects on biodiversity and the underlying driving factors in order to establish priorities and prevent the present bad trends.

A human ecological framework of root causes of biodiversity loss

The key human ecological factors contributing to biodiversity loss will be discussed in this study, including the origins, some of the economic and social consequences, and the ethical implications.

Stedman Edwards's work serves as the basis for the investigation of underlying causes. She bases her argument largely on the fact that declining habitat quality and size are major contributors to the worldwide decline in biodiversity. However, human resource usage and pollution impact these factors as well. She goes on to name five societal causes that are crucial to comprehending biodiversity loss: population growth and inequality; public policy, markets, and politics; macroeconomic policies and structures; and social transformation and development biases. Figure 1 displays the foundation on which this explanation rests. On the left side of the diagram, we see the causes.

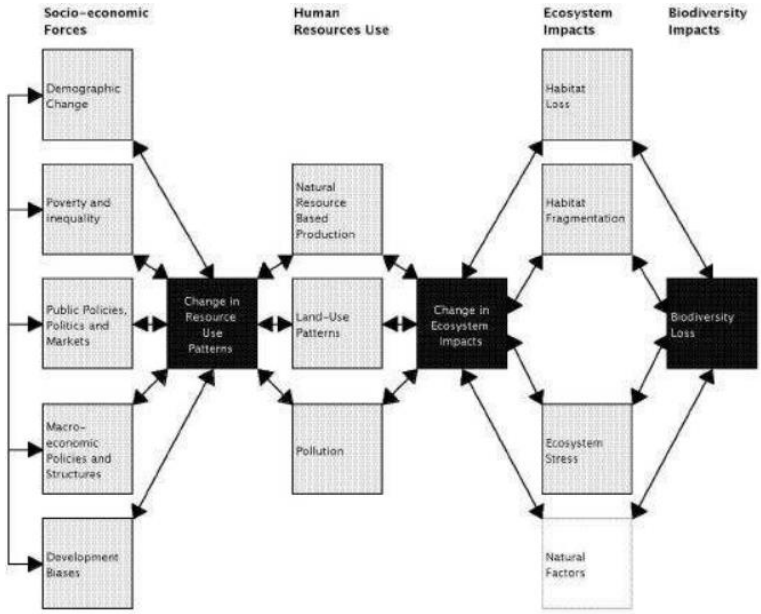

Figure 1: A root-cause framework for biodiversity loss

The world's population has officially hit 6 billion since December 1999. Since 1960, the global population has more than doubled, and it continues to increase at a rate of 1.6% annually. It is projected that by 2025, the world's population will have surpassed 8 billion, and that by the end of the current century, it will have stabilized at around 12 billion. For example, Africa's population is growing at a rate of 2.9% per year, and the continent is expected to reach 3 billion people by the end of the next century. This is roughly five times the current global population. The annual rate of population growth in South America is 1.7%.

Table 2: Human population growth by continent

	1960	**1990**	**2025**	**2100**	**2150**
World population (billions)	3.0	5.4	8.1	12.0	12.2
Asia/Oceania	57.0	59.4	58.6	57.0	56.8
North and South America	13.3	13.7	12.8	11.0	10.8
Africa	9.2	11.9	20.9	23.9	24.5
Europe	20.5	15.0	7.7	8.1	7.9

Cities along coastlines and inland waterways also have a disproportionately large population. Approximately 45% of the global population now resides in cities, though this is not distributed evenly between the industrialized (over 70%) and developing (just under 40%) worlds. Urbanization is predicted to double in the latter from 1980 to 2000, and its current rate is four times that of industrialized nations.

CONCLUSION

The term "biodiversity" is often associated with the number of species present. The factors that are previously known to lead to significant extinctions have been considerably worsened by human activity. Several causes are highlighted in this overview as contributors to the decline of biodiversity. The survival of many species is crucial to human and economic life, as well as to the health and stability of ecosystems. In view of growing awareness of its importance and alarming rates of loss, urgent evaluation and protection of biodiversity on a global and regional scale is necessary. Plans to engage people in the effort to preserve biodiversity are insufficient. The issue of whether or not conservation measures can make up for the existing basic core causes of biodiversity loss is at the heart of this debate. Rio's Biodiversity Convention, the CITES Convention to prohibit commerce in endangered species, and a broad range of national policies on nature protection are all examples of current policy in this field. Policymakers on a global and national scale often respond reflexively to the factors that contribute to biodiversity loss.

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