



Issue description

Committee: United Nations Environmental Programme
Issue of: Protection of the Amazon basin
Submitted by: Bernadett Borbála Kis, Chair of the UNEP
Edited by: Márton Levente Sipos, President of the General Assembly
Csanád Végh, Deputy President of the General Assembly

Introduction:

„The Amazon Basin is the largest basin on the planet and also one of the least understood. Its drainage area covers more than one third of the South American continent, and its discharge contributes almost one fifth of the total discharge of all rivers of the world.”¹

The Amazon Basin is the most diverse place on Earth biologically. It took millions of years for this special place to evolve into such an important ecosystem for thousands of species. Especially after the first and second industrial revolutions, human acts (such as installations, polluting effects of different factories) have caused such harmful effects that humanity has to take into consideration.

The forests of the Amazon Basin are perished apace. Almost 6,000 square kilometres of forest was lost in 2015 in the Brazilian Amazon alone. If this process continues, humanity faces the inevitable loss of one of the greatest provider territory of fresh water, biodiversity, and climate resilience. Unsustainable agricultural expansion, road development and for the biodiversity harmful industries are destroying the forests of the Amazon Basin and its anti-polluting effects (such as control of floods or carbon storage).

In 2002 Brazil launched the ARPA (Amazon Region Protected Areas). The goal was to take 150 million acres of the Brazilian Amazon rainforest and turn it into a combination of sustainable-use and strict protected areas. In a little over a decade ARPA has protected a territory of about 424,000 square kilometres.

Besides human intervention, there are several other dangers threatening the Amazon Basin such as flooding, droughts and erosion, which cause such damage that hundreds of square kilometres are affected by them.

Definition of key terms:

Biodiversity: variety of life on Earth (especially animals and plants in this case).

Species: basic unit of biological taxonomy (unit of biodiversity).

Deforestation: destroying a large amount of forest territory in a specific area.

¹ source: <http://apps.unep.org/repository/free-keywords/amazon-basin>



General overview:

The Amazon Basin contains about a third of our tropical rainforests. It is also home to 10% of the wildlife species we know. On average, every 3 days a new species (plant or animal) is discovered in the Amazon. As the destroying effects of deforestation occur, the scientists have less and less chance to discover species that may be found only in the Amazon Basin.

Not only the locals, but the whole human population is dependent on the Amazonas. It provides food, water, wood, medicines (and with the discovery of new species, more and more medicines can be produced), huge amount of oxygen and general climate stabilization. The Amazon Basin plays a critical role in global and regional carbon and water cycles. This is why the Amazonas became one of the major causes mentioned in environmental movements.

The wildlife is in danger from large-scale farming, industrialization, urban development, unsustainable logging and mining. The climate change increases the dangers of this scale of deforestation.

The mountainous portions of the Amazon River Basin, consisting of the eastern slope of the Andes in Bolivia, Peru, Ecuador, and Colombia, - given the abundant rainfall and steep topography, - the Andean slopes are exposed to vast erosion, causing more than 1,000 tons/km²/year of sediment flowing toward the Atlantic Ocean. The measurements taken indicate that nearly 60% of the sediment does not reach further than the Andean foothills, resulting in internal sediment deposition in the Amazon Basin.

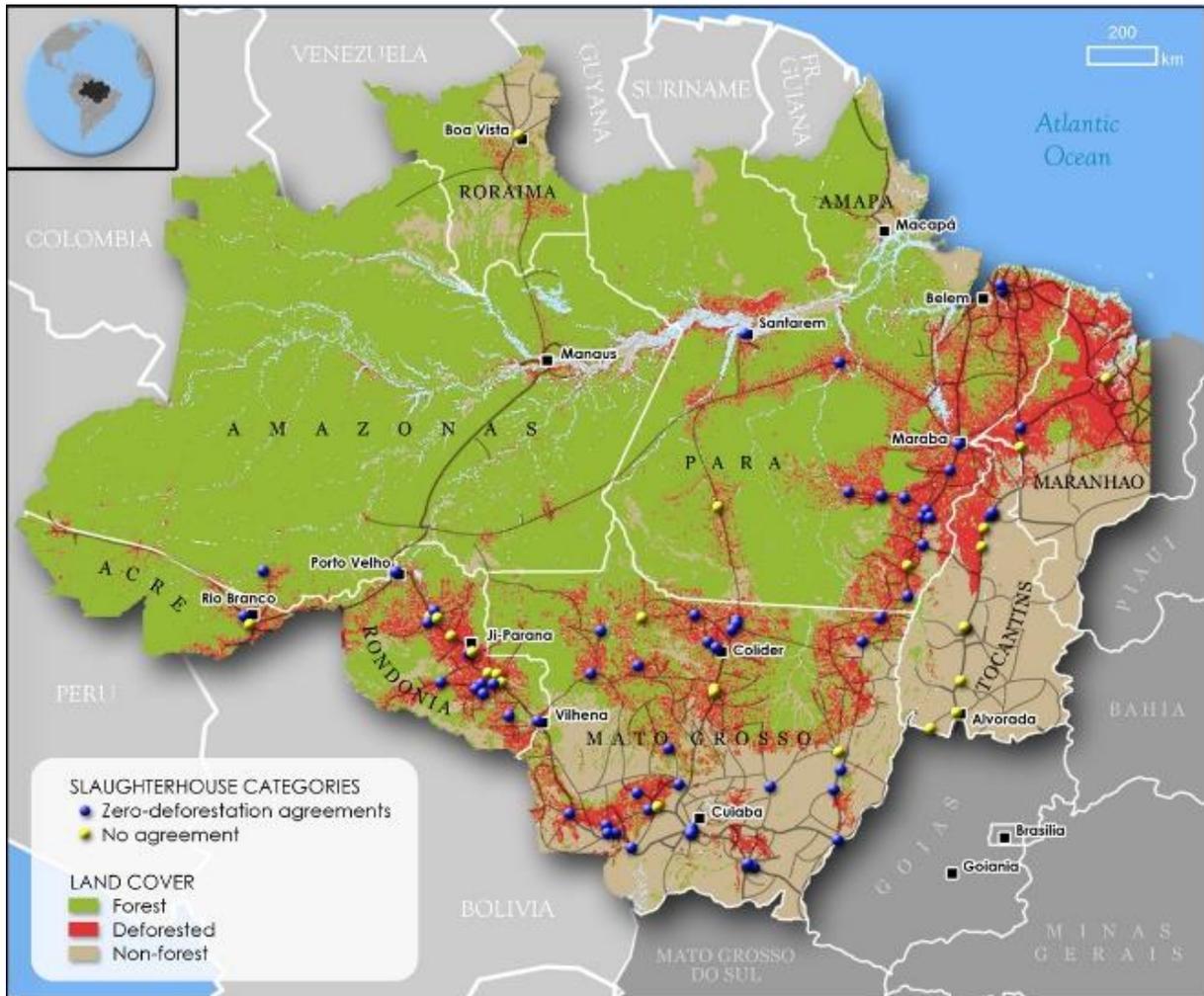
The Amazon River transports on average 600 to 800 million tons of sediment annually, with the majority of the sediment coming from the Solimoes and Madeira river sub basins and originating in the Andes. This can result in even the biggest rivers losing almost half of their water level, sometimes for months. For the wildlife, this loss and time period means terrible threat.

The last “El Niño” event of 1997 caused the worst drought in 25 years in the Amazon Basin. The drop in the water levels in the Amazon River and its tributaries was substantial (Rio Negro alone registered a level that was 8.6 metres lower than normal), drying-up areas usually flooded and altering ecological conditions that indicated fire hazards throughout the Basin.

The forest fires caused respiratory problems among humans and animals as well (people lost a huge quantity of domesticated animals), and the reduced visibility forced several airports to close down, sometimes for weeks. The reduced river flow also reduced transport, trade and irrigation possibilities. The drought caused many lagoons and ecosystems to become isolated, gathering predators into smaller areas, which caused them not to find enough food and prey species to die in large numbers.

The changes in soil moisture and evaporation can lead to persistent drought, as studies has shown. This process is mostly caused by deforestation, which had increased significantly. Pressures on the Amazon Basin (deforestation, agriculture, mining, urbanization, etc.) are altering the condition of the plant cover and soil, which, in turn, modifies and increases the area’s vulnerability to climatic cycles.

The magnitude of deforestation differs from one part of the Basin to the next. In the upper basin, where anthropogenic pressures on resources are greater, the rate of deforestation is high, while in the middle and lower basins, forest extraction activities are limited. This may be caused by the fact that the middle and lower basins exist in relative isolation and there is a lack of infrastructure.



Major Parties Involved:

The government of Brazil works hard for the conservation of the biodiversity in the Amazon Basin and protection of the environment. The Association for the Conservation of the Amazon Basin (ACCA) is a non-profit organization that is active in Peru and Bolivia.

The Colombian government has been ordered to take urgent action to protect the Amazon rainforest by its own supreme court. **Ecuador** protects the environment through national parks and protected areas. **France, Suriname and Guiana** have launched a program which aims to better protect the natural areas of the Guiana Shield.

Guyana prevents deforestation by putting efforts on conservation and management. Most part of the Venezuelan rainforest is still untouched therefore they stay in a sort of isolation.

The WWF (World Wide Fund for Nature) collaborates with different governments across the Amazon to create and manage protected forest areas. In Brazil, through the Amazon Region Protected Areas Program (ARPA), WWF works to create a network of parks covering 150 million acres of forest.²

² source: <https://www.worldwildlife.org/places/amazon>



Timeline of events:

1978: Amazon Cooperation Treaty (TCA) signed.

1980: Major influx of people into the Region.

1998: The Organization of the Amazon Cooperation Treaty (OTCA) was created.

2002: Eleventh Regular Meeting of the Amazon Cooperation Council (CCH) and the Eleventh Meeting of the Foreign Affairs Ministers of the TCA was held.

2002: The Government of Brazil launched the ARPA (Amazon Region Protected Areas).

2003: OTCA held a follow-up technical meeting in Brasilia in conjunction with a meeting of the GEF-financed DELTAmerica Project (UNEPGS/OAS) steering committee.

Previous attempts to solve the issue:

Policies for Reducing Emissions from Deforestation and Forest Degradation (REDD+) provide possible economic solutions for forest conservation by taking into account the amount of carbon trees store and put emphasis on living forests and their ecosystems. A critical component of making REDD+ policies effective is employing indigenous peoples who both rely on the rainforests and have widespread knowledge of the forests. In order to make REDD+ policies successful, indigenous peoples must play a central role in REDD+ negotiations. In the past, many indigenous peoples have been cut out of political decision-making processes and have been allowed little to no say in the use of their homelands.

Possible solutions and approaches:

1. Make progress toward modes of production and transportation, the integrated management of land and water resources, and opportunities for economic and social (community) development.
2. Encourage the shared strategic vision of the Basin's countries as the basis for land and water resource planning and management, adaptation to climate change, and sustainable development.
3. Spread knowledge about the types and sources of water pollution in the Basin, the means to monitor them, and the mechanisms to attack their root causes.
4. Assess the vulnerability of ecosystems to climatic variations, particularly those that may result in droughts and floods, by analysing adaptation options to altered flows in the glacial headwater areas and other vulnerable regions that have the potential to significantly alter the hydrology and ecology of the downslope portions of the River system or alter the dynamic equilibrium upon which many indigenous communities (among others) depend.
5. Make progress toward the harmonization of the legal framework for the sustainable development and management of the Basin and the development of economic instruments.



Bibliography:

<https://www.conservation.org/where/Pages/amazonia.aspx>

<https://www.wwf.org.uk/where-we-work/places/amazon>

<http://apps.unep.org/repository/free-keywords/amazon-basin>

https://www.oas.org/DSD/Events/english/PastEvents/Salvador_Bahia/Documents/AmazonProject.pdf

<https://www.worldwildlife.org/stories/protecting-the-amazon-for-life>

<https://www.worldwildlife.org/places/amazon>

Annex:

<http://web.unep.org/ourplanet/october-2017/articles/rescuing-rainforests>

https://www.oas.org/DSD/Events/english/PastEvents/Salvador_Bahia/Documents/AmazonProject.pdf

http://wwf.panda.org/knowledge_hub/where_we_work/amazon/vision_amazon/models/amazon_protected_areas/financing/arpa/

<https://www.worldwildlife.org/places/amazon>