



# BLOCKCHAIN: A TECHNOLOGY THAT CAN SAVE THE AMAZON (FOREST)

## INTRODUCTION

The Supreme Court of Colombia last year declared that the Amazon forest has the same rights as a human being. However, this did not seem to have protected it. Amidst the differences between the decision of the judiciary and the politics of government, the Amazon was getting destroyed with little or no coverage of the same. Ironically, technology (social media such as Instagram and Twitter) brought the attention of the world's media platforms to the fires in the Amazon forest.

Taking the irony further, blockchain, the technology behind Bitcoin, can be used efficiently to help save the Amazon in several ways. Blockchain was introduced as a technology behind Bitcoins by the anonymous Satoshi Nakamoto. ([Read more about Bitcoins and blockchain here](#))

## BIOPIRACY

A [video uploaded by the Economist](#) explains how the environment is getting affected by biopiracy. As the video reported, Sir Henry Wickham had taken rubber tree samples from the Amazon and created a rubber industry in Southeast Asia. This wiped out the rubber industry in Brazil with the guardians of the forest getting little or no compensation.

Biopiracy cannot be easily known because the samples are often extracted from remote places. Blockchain can help overcome this. Blockchain is being currently utilized by three organisations, mainly, the Amazon Bank of Codes, the Earth Biogenome Project and the Global Economic Forum to create a database of genetic resources along with the DNA of each of those resources. The idea is to give each species in the Amazon, a unique set of digital fingerprint. This acquired data would be stored inside the blockchain and will be available for benefit sharing. Amazon has vast ecological data with high commercial value. However, the project should not be aimed just within the Amazon. If the relevant government from each corner of the world assists, a worldwide database can be created. Therefore, if anyone is seen using any resource similar to the ones recorded on the blockchain, it can be easily reported and fair compensation may be given to the people preserving it.

The Nagoya Protocol (“**Protocol**”) was adopted on October 29, 2010, to share benefits arising out of genetic resources. Under the Protocol the provision is to take consent of the local community before contracting to accumulate benefits. However, the implementation of the same is close to none. The United States is one of the major extractor of resources out of the Amazon but is not part of the protocol.

The challenges that may be faced, however, is getting all the countries to collect the genetic data along with DNA sequencing.

## LAND RECORDS

It is being claimed that the fire in the Amazon is initiated by men as the Amazon forest is wet and the rainfalls this year have been dense so the possibility of natural fire in forest is close

to none. The reason farmers or the huge corporates or the governments, to say, would burn a forest only to gain access to more land area for certain purposes. In Brazil, there is not a single platform where all the land titling data is consolidated. The lands are registered by private agents called Cartorios. People would register more area of land than what they actually own. Double allocation and corruption obviously cannot be ruled out. The poor cannot even afford the charges of registration. Therefore, a state-run company Serpro, has taken an initiative to store the data related to land titles.

The challenge faced, however, is that there is no legitimacy to it. The legal value of recording that title on the blockchain is close to nothing. The government should take a step and legitimize the same.

### **Donations**

At times like these where urgent attention and resources are required, to put out the fire, in this instance, the money in the form of bitcoins is easily transferred with no territorial bounds and within a few seconds. All of these donations in the form of bitcoins would be recorded in the blockchain as a chain of transactions which cannot be altered.

### **Number of fires v. Area affected**

When the news of the fire broke out, the reports were out stating the number of fires in the current year versus the previous years. Essentially the question, however, should have been how much area is getting affected by each fire. The proposal is to curate a consolidated data of the number of trees in blockchain and each time there is a fire, there should be a data of how much area is getting affected and the reason of fire occurring in the first place. If this could be updated on the blockchain and it would ensure transparency. Measures, of course, can thereafter be taken to control the damage occurred. This data may also be used by officials around the globe to analyse the aspects that caused the fire and prevent the same happening in their respective areas.

The challenge would be to give legitimacy to such technology to curate the data and getting officials to do it.

The question should not be of sustenance of technology and environment together. It should be whether we are willing to make the effort and maintain a balance between the two. With data being more expensive than oil in this world, the potential of blockchain must be tapped and utilised as much as possible.