

IAF BUSINESSES AND INNOVATION SYMPOSIUM (E6)
Interactive Presentations - IAF BUSINESS INNOVATION SYMPOSIUM (IP)

Author: Mrs. LEILA MORAIS
Brazilian Federal Government - General Attorney Office, Brazil

Prof. Michele Cristina Silva Melo
Brazilian Federal Government - General Attorney Office, Brazil

Prof. Andrea Fellipe Cabello
University of Brasilia, Brazil
Prof. Carlos Alberto Gurgel Veras
Universidade de Brasília, Brazil

ENTREPRENEURSHIP IN THE SPACE SECTOR AND DEFORESTATION MONITORING
ACTIVITIES IN THE BRAZILIAN LEGAL AMAZON

Abstract

Historically, the space sector has been characterized by state leadership in the development of space activities. State leadership was necessary due to the characteristics of space projects: high costs, long-term technological development, and high project risks. Therefore, there was little interest from the private sector, as the chances of economic return were low. However, technological changes introduced from the 1980s onwards completely transformed the sector. Entry into the era of New Space brought a drastic reduction in costs and development time. Furthermore, it also brought a change in mindset in the role of the public sector, which started to act more strategically, defining only the macro requirements of projects and leaving the execution (including the how-to) to private companies. This led to the creation of a private market for the space sector, which has been expanding at increasing rates since the early 2000s. The primary segment that benefited from this change was the downstream, meaning the applications segment. In Brazil, the official monitoring of deforestation is an activity conducted by the State, notably the federal government, through the National Institute for Space Research (INPE). As the main cause of greenhouse gas emissions in Brazil, deforestation in our forests is a focus of international attention. For instance, the Amazon is monitored by various governmental and non-governmental organizations. Monitoring activities use different technologies from both the public and private domains. The disruptive changes brought about by the New Space era have expanded the range of possible solutions for monitoring, which was previously concentrated in the hands of the State. The number of companies providing deforestation monitoring services has been growing exponentially. These companies not only serve private enterprises but also governments, which no longer solely rely on public agencies for implementing anti-deforestation policies but also for prevention and sustainable development. The objective of this article is, therefore, to demonstrate the historical development of the deforestation monitoring segment in Brazil, with a focus on the Amazon, and its recent technological changes and potential impacts resulting from the creation of a private market.