

22nd SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3)
International policy and economic aspects of space applications (4)

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SPACE ACTIVITIES IN DEVELOPING NATIONS: CONTRIBUTIONS TO CAPACITY BUILDING
AND INNOVATION

Abstract

The effect of space agencies in developing nations is not well understood. Some view space agencies as providers of practical solutions, and believe they can introduce the knowledge and innovation needed to spur economic growth. Others believe space agencies are a superfluous expense, inappropriate for developing nations facing issues of poverty and disease.

There have been many studies examining the possible applications of space assets to the issues of developing nations, such as remote sensing for disease prevention or satellite communications for e-medicine. This paper seeks to go a step further, and provide insight into how space agencies in developing nations affect capacity building and innovation.

Space agencies deal with advanced technological activities, and have the potential to have an impact on knowledge creation, capacity building, and innovation in developing nations. To better understand if and how these impacts are occurring, this paper seeks to provide a better understanding of the interactions between space agencies and other institutions.

This paper looks at three developing nations, Nigeria, Brazil, and China, to better understand how knowledge flows between the national space agency and other institutions, such as universities, industry, and government agencies. It also looks at international sharing of knowledge connected to these space agencies. This includes examining collaborations between people in these institutions, as well as the movement of people from one institution to another.

Better understanding of the strengths and weaknesses of the connections between space agencies and other institutions can also provide an understanding of methods for increasing the contribution of space agencies to capacity building and innovation. This has the potential to help improve the ability of space agencies in developing nations to contribute to capacity building, innovation, and economic growth.