34th IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3) International cooperation in using space for sustainable development: Towards a 'Space2030' agenda (1)

> Author: Ms. Mariam Naseem Arizona State University, United States, xmariamnaseemx@gmail.com

Dr. Timiebi Aganaba-Jeanty Arizona State University, United States, taganabajeanty@asu.edu

UNLOCKING THE POTENTIAL OF SPACE DATA - 'TRANSLATOR' INSTITUTIONS EMPOWERING AFRICAN FARMING COMMUNITIES TO ADDRESS CLIMATE CHANGE ENABLING A SPACE2030 AGENDA

Abstract

Global climate change is one of the most prominent issues of our time. We are living in an unprecedented 'Anthropocene' era defined by human activities having a dominant influence on the environment and climate. According to most-cited indicators, global average temperature has increased by approximately 1.4F since the early 20th century. Taking urgent action to combat climate change and its devastating impacts is listed as a United Nations Sustainable Development Goal towards a Space2030 agenda. Global temperature and other key indicators of climate change like weather patterns, sea level, terrain and atmospheric pollution are monitored through different space-based solutions including satellites. While satellite-based Earth Observation data to mitigate climate change is abundant, a major hurdle to achieving widespread use from this data is the difficulty of information from useful integrated datasets reaching non-traditional customers in underserved markets. This session will explore the impact of climate change to the specific user group of African farmers highlighted through activities of necessary 'translator' institutions, providing concrete examples which underscore the need for open, transparent satellite data and the importance of local capacity building and regional partnerships to adequately serve local communities through satellite-based applications. However, the notion of transparency and emphasis on capacity building in developing countries is also challenged, where it takes the place of focusing on these efforts rather than on increasing climate action and ambition, from those who most contribute to the problem, particularly in western countries. Special attention will be given to the programs and applications utilizing space data leveraged by international stakeholders, in cooperation with local communities, to advance the agenda on sustainability and development in the African region.