

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Interactive Presentations - IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (IP)

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ESTABLISHMENT OF NATIONAL CENTER OF GIS & SPACE APPLICATIONS: THE FIRST STEP
TOWARDS ACHIEVING THE UN SDGS THROUGH SPACE

Abstract

This research contribution is drafted to share a success story of establishing the National Center of GIS Space Applications (NCGSA) at Pakistan to achieve the UN SDGs through space science, technology and its applications. A state-of-the-art research center of Pakistan targeted towards identification and mitigation of the most profound challenges in the domain of GIS and Space Applications through research and capacity building initiatives at national level. It is one of the five major initiatives of Higher Education Commission (HEC) of Pakistan towards developing capabilities in the emerging technologies. The center comprises of seven state-of-the-art research labs in seven partner higher education institutes of Pakistan. NCGSA encompasses endeavors that strive to achieve and sustain human, technological, research and entrepreneurial capacity in the areas of space science, technology and its applications. NCGSA Research Labs are dedicated to innovative research in the domains varying from Geo Information Science, Remote Sensing, Astronomy Astrophysics to Space Education, Global Navigation Satellite Systems and Small Satellite Technology. Leading researchers and scientists of Pakistan have come together to ensure significant contribution required towards capacity building at national level in GIS and Space Application Sector. The paper starts with the concept of academic alliance for space collaboration that leads to academia-industry collaboration and finally the Project Management Success Story of center along with the lessons learned way forward especially in developing countries with limited human, technical and financial resources for the socio-economic development. This research provides a framework for developing countries to pool the academic and industrial resources for developing an ecosystem of innovation, creativity and commercialization.