Space Programme of Pakistan and possible contribution in Human Space Technology Initiative (HSTI)

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Sequence of Presentation

Introduction

- Pakistan's Space Programme
- Space Capabilities, Achievements and Facilities
- International Cooperation
- Future Programmes
- Human Space Technology Initiative (HSTI)
- Conclusion

Introduction

Introduction

- SUPARCO, the national space agency of Pakistan, established in 1961
- Develop indigenous capabilities in space science and space technology for the peaceful uses of outer space
- Utilize the applications of space technology for socio-economic uplift
- Conduct training and education programmes in space science and space technology

Pakistan's Space Programme

Pakistan's Space Programme

- Pursue R&D activities in space science, space technology and allied fields for achieving the objective of self-reliance
- Enhance indigenous capabilities in space technology and promote the peaceful applications of space sciences and space technologies for socio-economic development of the country
- Prepare and propose long-term as well as short-term space programmes and plans to support National
- 6 development

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Pakistan's Space Programme

- Develop Communication & Remote sensing satellites ancillary facilities
- Establish satellite ground stations
- Create awareness among the potentials of Space Science and Technology
- Liaise with national & international agencies

Space Capabilities, Achievements & Facilities

Space Capabilities, Achievements & Facilities

- Experimental satellites Badr-1 and Badr-2
- Prototypes of a Comm & RS satellite
- Capacity for scientific investigations in space and atmospheric sciences and satellite meteorology
- Launch of Communication Satellite PAKSAT-1R



Space Capabilities, Achievements & Facilities

- Infrastructure to process satellite images
- LUT and MCC of COSPAS-SARSAT
- Facilities to process and study ionospheric and geomagnetic data

International Cooperation

Member of several international institutions and UN bodies:

- United Nations Committee on Peaceful Uses of Outer Space (UN COPUOS)
- United Nation Economic and Social Commission for Asia and the Pacific (UN ESCAP)
- Committee on Space Research (COSPAR)
- International Astronautical Federation (IAF)
- American Institute of Aeronautics & Astronautics (AIAA)
- Asia-Pacific Space Cooperation Organization (APSCO)

Future Programmes

Future Programmes

Food security & agricultural productivity
Water resources management
Forestry
Minerals
Natural disasters
Environmental monitoring



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Future Programmes

- Develop better understanding of space specially our own solar system
- Fully harness communication and remote sensing technologies
- Develop tools to fully utilize space technology applications for socio-economic development
- Strong collaboration with academia
- RND in Microgravity and its effects in life sciences
- Development in RS for natural resource survey & management

Human Space Technology Initiative (HSTI)

- Pakistan appreciates the fact that HSTI aims at participation of non-partner countries for their capacity building in new avenues of S&T
- Cooperation in HSTI would support socio-economic development space programme of Pakistan

Conclusion

Thank You