Potential for Telemedicine & Telemetry in the Maldives

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maldives

- 90,000 km^2 of Indian Ocean
- 300 km^2 island mass
- 1,190 very small, flat, low-lying coral islands
- Population 315,885

  (4 islands > 5,000; 131 < 1,000 and 72 < 500)
- 1.2 million km^2 of EEZ
- Tourism & Fishing are the main industries

Space Technology & Maldives

tourism

monitor remotely, in real time, environmental parameters affecting resorts, to assess the impact and determine appropriate adaptation and mitigation measures

fishing

better navigation and fish finding, saving travel time, burn less fossil fuel and positively impact environment and economy

agriculture

improve gathering of vital hydro-meteorological data in real time to improve crop variety and productivity

fresh water

collecting rainfall and other metrological and hydrological data in real time to support sustainable fresh water resource management

environment

- life in Maldives is intimately linked with the environment and climate change is a real threat

- integrated approach to application of space technology to understand and manage the environment by adaptation and mitigation is crucial for the sustainable development of Maldives

health

- Population dispersed and living in remote islands (4 islands > 5,000; 131 < 1,000 and 72 < 500)

- access to specialist medical consultation & resources through telemedicine technology in remote islands, efficient but reduced patient care improve human development

- 40 out of the 198 inhabited islands have been connected to the Maldives Telemedicine Network, offering diagnostic and outpatient services

Maldives Telemedicine Network

- 3 referral hospitals – 55 health facilities on remote islands
- Funded by Abu Dhabi Red Crescent Society
- Total Cost of US$ 15 million
- Began in 2009

Key Lessons…..

- Cost of health service reduce by 50 – 70%
- Quality & Efficient service – approx. 15 min per patient
- Basic Kiosk cost US$ 100,000
- Capacity building is costly

  (training doctors, nurses, technicians and support staff)

Specific areas of potential cooperation

Remote Sensing, GIS and Satellite-based Positioning

- Exchange information on national policies, programmes and planning in remote sensing, GIS and satellite-based positioning system development among member countries;
- Formulate and implement collaborative remote sensing, GIS technology, and satellite-based positioning and application projects relevant to natural resources management, environment and sustainable development in the region;
- Promote development and utilization of a database and a data network on natural resources and environmental information at the national and regional levels;
- Identify and implement specific programmes for human resources development in remote sensing, GIS and satellite positioning;
- Participate in the regional cooperation network in remote sensing, GIS and satellite-based positioning

Satellite Communication Applications

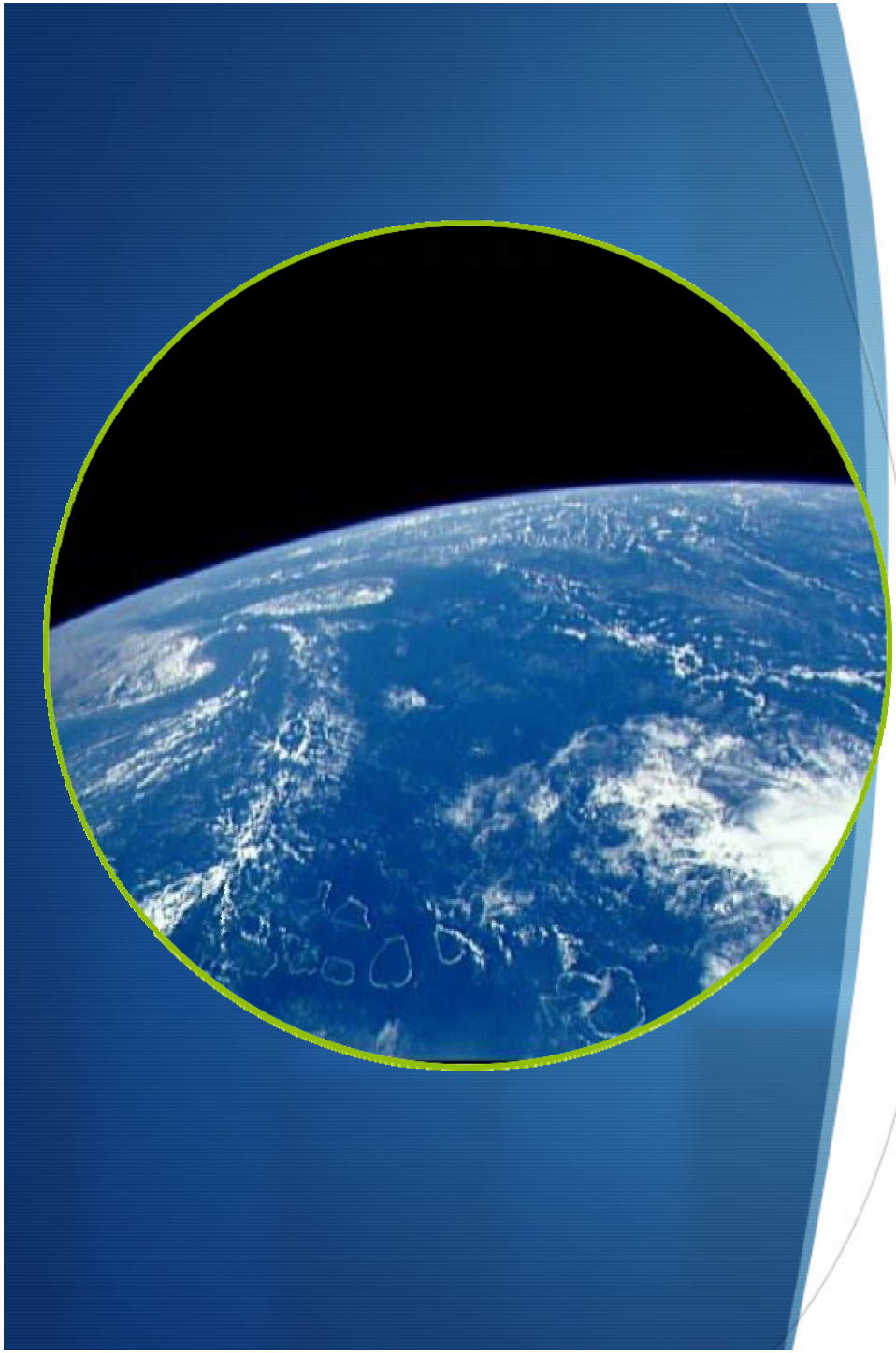
- In cooperation with regional countries, enhance the national capacity in the area of satellite communication applications with special emphasis on satellite based rural communication, health care, environmental awareness promotion, distance education and information highway infrastructure;
- Facilitate exchange of information on national policy, programmes and planning on satellite communication applications;
- Promote and encourage the participation of government agencies, industries and NGOs in promoting satellite communication applications;
- Establish appropriate linkages with other regional working groups for effective use of satellite-based communications in other sectors;
- Promote development of disaster warning systems, emergency communication systems and networking of information to enable member countries to deal with disasters rapidly and effectively;

Meteorological Satellite Applications and Natural Hazard Monitoring

- In cooperation with regional countries, promote meteorological satellite applications for sustainable development, including the improvement of meteorological and natural hazards monitoring services;
- Promote development and utilization of data collection systems and inexpensive ground receiving stations;
- Promote dissemination of data and sharing of such data through regional information network infrastructure, including the use of the Internet.
- Develop links with other appropriate international organizations, particularly with the World Meteorological Organization (WMO);
- Muster support for the programme by national government, international bodies and national meteorological services.

Space Science and Technology Applications

- Facilitate the exchange of information on national policy, programmes and planning of space sciences and technology development as well as their applications;
- Cooperate with regional countries to promote development of inexpensive user-friendly technology, data collection platforms, Earth observation systems, and inexpensive ground stations;
- Involve government agencies, industries, universities and the private sector in promoting space sciences and technology development as well as their applications;



conclusion

- satellite image data products and services are essential tools in increasingly diversified business applications such as in tourism, agriculture and fisheries, urban planning, geological exploration and disaster risk management

- space technology offers a wide range of innovative and cost effective solutions for the sustainable development of small island states like the Maldives, such as Telemedicine & Telemetry

- Cooperation in capacity building essential for sustainable development and meet the MDGs

Thank you!

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