

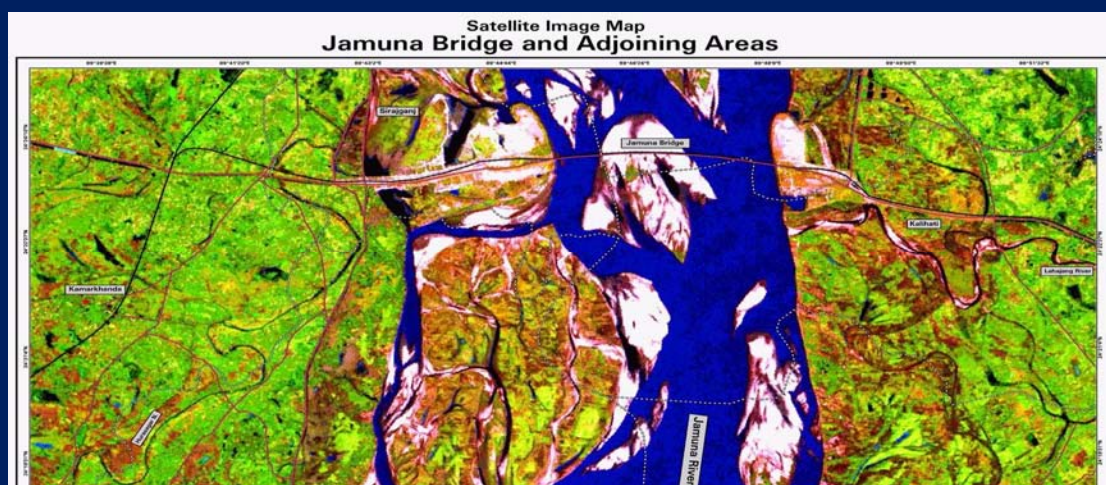
Drafting Committee for the '*Asia-Pacific Plan of Action for Space Applications for Sustainable Development (2018-2030)*'

'Bangladesh'

Bangkok, Thailand
31 May - 1 June 2018

Site Selection for Bridge Construction

Prepared from Landsat TM image of 11 November, 2000



SPARRSO Assisted in site selection for Bangabandhu Bridge using Satellite image

Boro Coverage/ Area Estimation - 2016

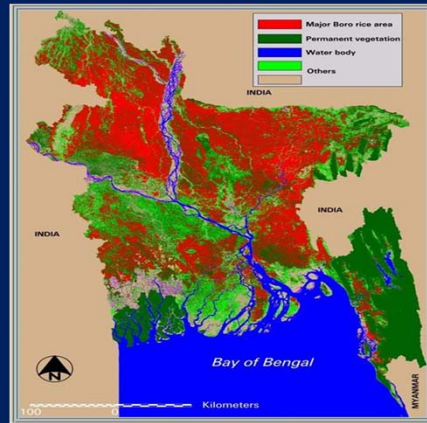
(Routine activity for food security)

Example of Production

Year	Boro (lac ha)	%
2005-06	44.13	30.02
2006-07	42.60	28.98
2007-08	46.30	31.49
2008-09	47.10	32.04
2009-10	47.80	32.52

Information is provided to the relevant ministries (Agriculture, Food, Relief & Rehabilitation) and SPARRSO website

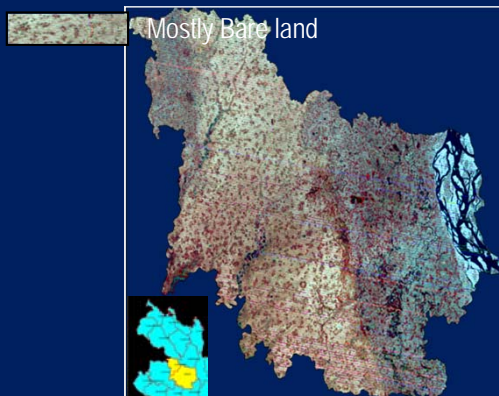
Boro Coverage Map 2016



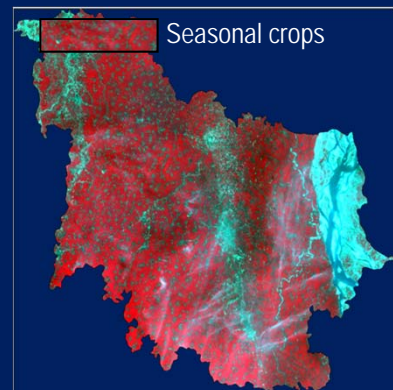
Boro 2016

Satellite Based Observation of Crop Coverage

March 28, 1975



March 28, 2015

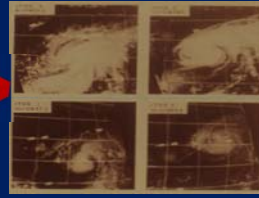


Bogra district

Advantage of Early Warning System: Satellite Monitoring and Tracking of Cyclones

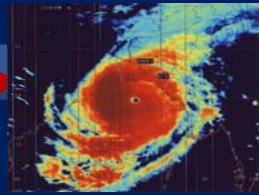
Devastating cyclone of 1970

12 Nov, 1970
Maximum wind speed: 223 km
Height of storm surge: 20-30 feet
Death: 5,00,000



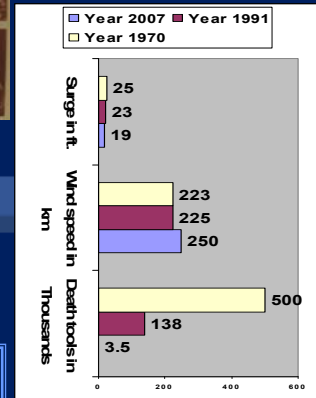
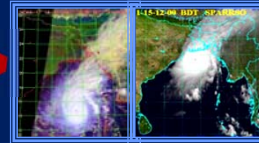
Devastating cyclone of 1991

29 April, 1991
Maximum wind speed: 225 km
Height of storm surge: 20-25 feet
Death: 1,38,000

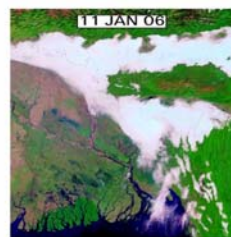
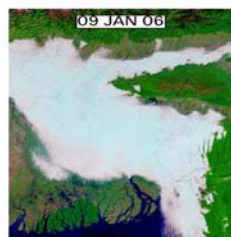
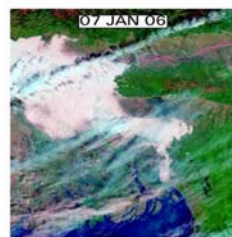
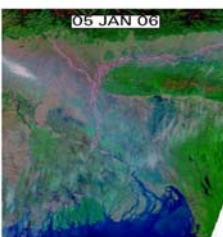
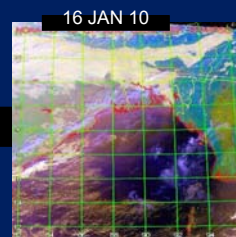
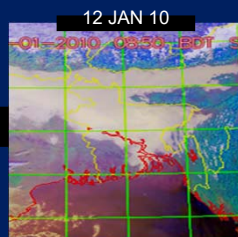
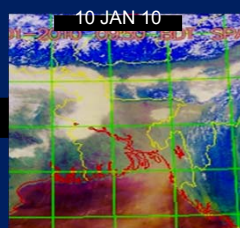
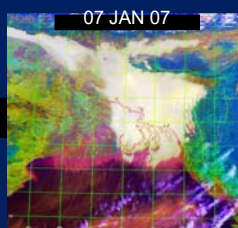


Devastating cyclone of 2007

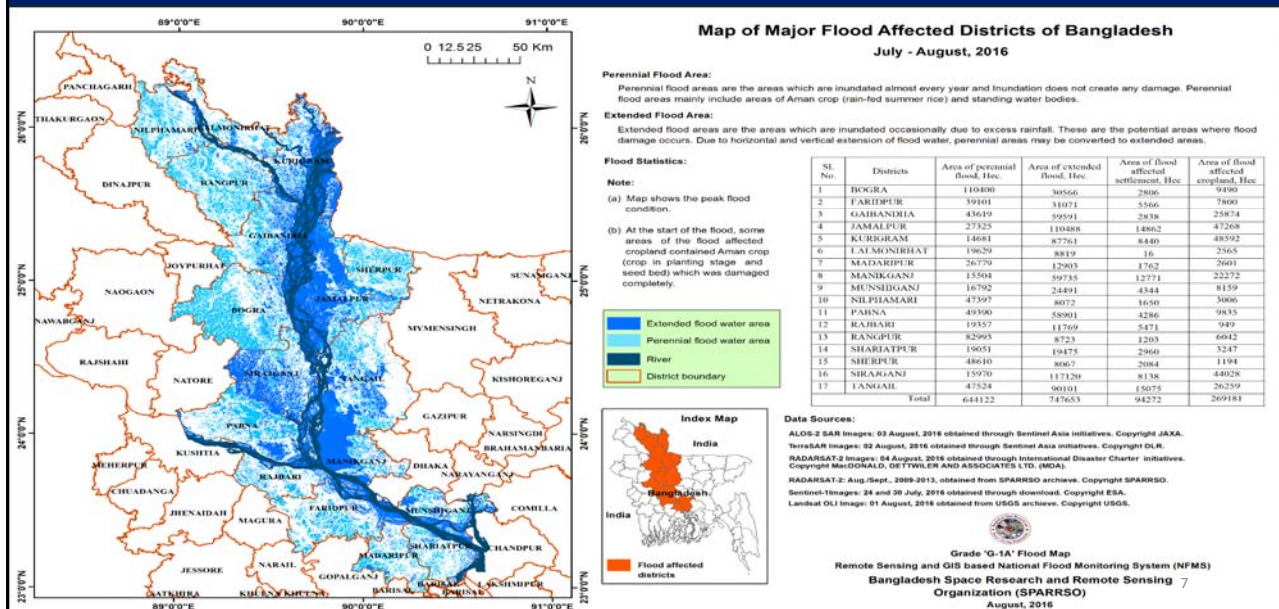
15 Nov, 2007
Maximum wind speed: 250 km
Height of storm surge: 15-20 feet
Death: 3,500



Cold Wave & Persistent Fog Monitoring



Map of major Flood affected area (July-August, 2016)

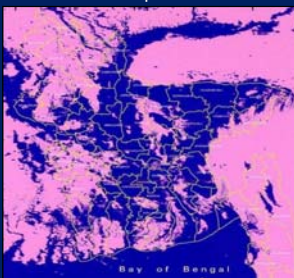


Flood Monitoring

NOAA- Sept. 1988



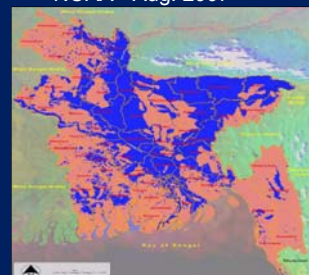
RADARSAT- Sept 1998



NOAA- July 2004



NOAA- Aug. 2007



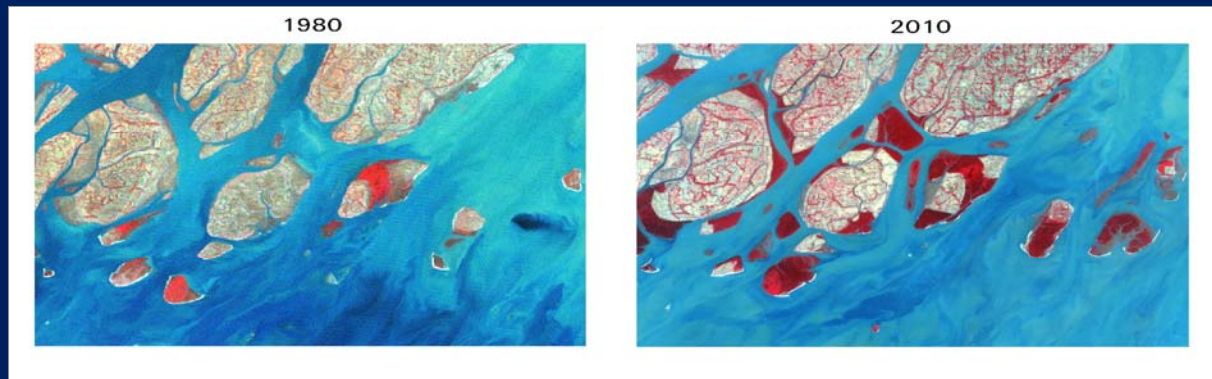
Flood affected area= 39.58% (2004)

Flood affected area= 42.21% (2007)

- Reports Supplied to the Prime Minister Office, Ministry of Disaster Management & Relief and different Government offices
- Publish on the website for the public

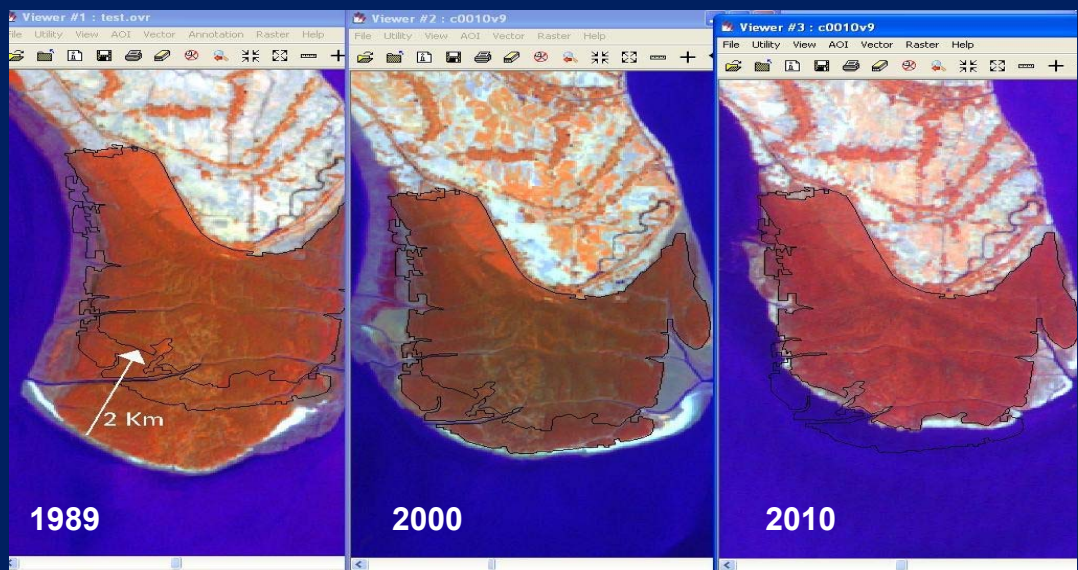
Monitoring of Coastal Afforestation

- Mangrove afforestation along the coast of Bangladesh was started in 1960-61
- There was a comprehensive coastal mangrove afforestation program of the First (1980-85) and second (1985-90) Forestry Project
- The coverage of coastal plantation is 0.042 million ha in 2010 estimated from Landsat image interpretation



Changes in coastal plantation (1989 - 2010)

Patharghata



Coastal Erosion and Forest Loss (1973-2010)

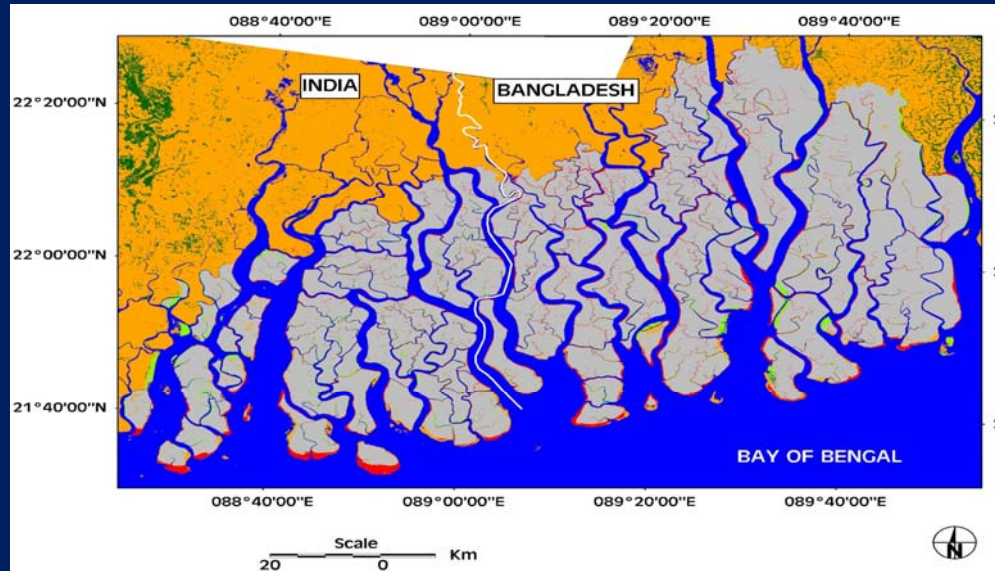
Sundarbans covering both Bangladesh and India

Red: Forest loss

Light green: Forest expansion

Ash: Stable forest

Orange: Stable other land



Country Needs based on Priority Themes and Targeted Actions

• Research and knowledge sharing:

- E.g. [What type of information, data and platform do you require to promote the use of space applications for the implementation of the SDGs?]

-Exchange information from regional countries

• Capacity building and technical support:

- E.g.[What type of training and technical support do you require? i.e. topic, frequency, level of training, tools, software, skills, etc.]

- Short and medium term training

Country Needs based on Priority Themes and Targeted Actions

- Regional Norms and Standards:

- E.g.

[What agreements do you think we need at the regional level to support the use of space applications for SDG implementation?]

[What policies need to be strengthened?]

[Which procedures or norms need to be defined further?]

[What are the areas that can benefit from standardization?]

-Policy on the better use of space technology in different sectors

Thanks for your kind attention and patience