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MYANMAR SPATIAL DATA PLATFORM CONFERENCE

# The Role of Geospatial Technology in Education Sector

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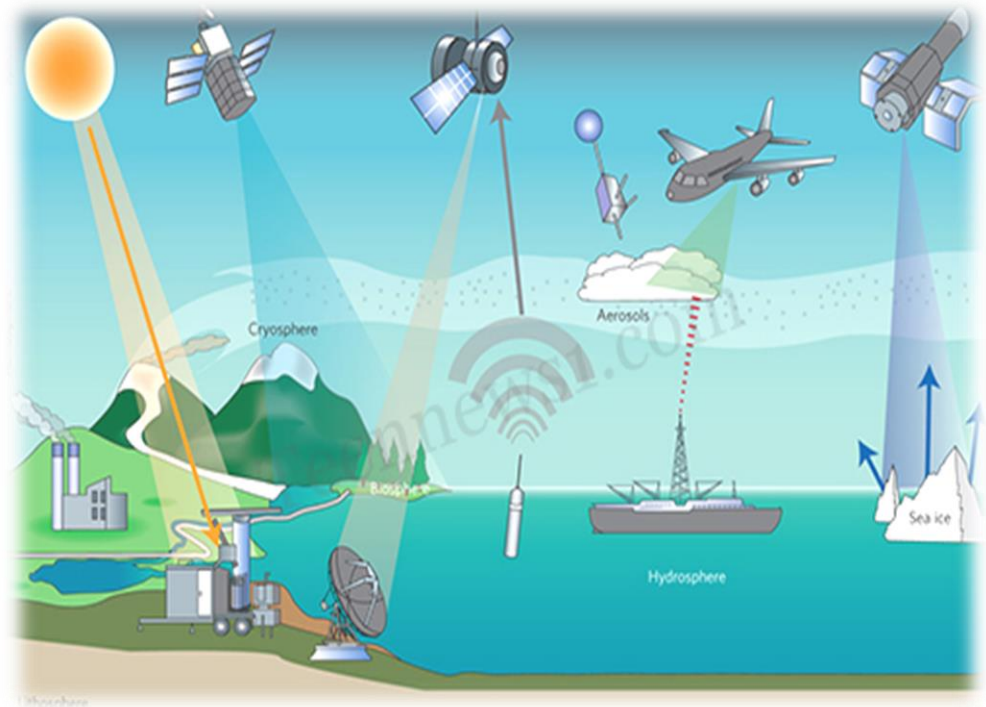
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- Geospatial technologies is an umbrella phrase associated with a suite of technologies including remote sensing(RS), Global Positioning System (GPS), Geographic Information System (GIS), information technologies (IT), and field sensors that help in capturing/storing/processing / displaying/disseminating information tied to a particular location.



- The geographers are always and mainly interested in location.
- Relationships that apply when location is excluded, such as a principle of chemical behavior, are secondary for the geographer.



- Those relationships that do include location are of primary concern to geographers, but from a different perspective than emphasized by non-geographers.

## What is Background of GIS and RS Diploma Course in Geography Department, Yangon University ?

- The **Department of Geography, YU** has introduced the GIS and RS since 1996 with some supporting from relational departments, Forest Department.
  - The first batch of Diploma in GIS and RS from Department of Geography, YU proudly has been launched in 1998.
  - This is still standing as one of the graduate diploma course related with geospatial technology in education sector of Myanmar.
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- At the present, this diploma program has been reached to batch (15) and also Geography Department totally issued **about 500 graduates of** Diploma in GIS and RS.
  - Most of the GIS and RS graduated students from YU are now reaching and providing in many government and private sectors related by using the geospatial data in their main implementations.

# GIS Activities in Yangon University



# What is history of GIS and RS Diploma Course in Geography Department, Dagon University ?

- In 2012, Department of Geography, Dagon University started to teach the **batch (1)** of Diploma in GIS and RS. Already finished 4<sup>th</sup> Batch of Diploma Course in Dagon University. At the present, there are about 150 graduate diploma student in DU.



## What is history of GIS and RS Diploma Course in Geography Department, Other Universities ?

- In 2015-2016 academic year, Department of Geography, **Mandalay University** can launch the first batch of diploma in GIS and RS
- Geography Departments from other Universities **such as Patheingyi University, Bago University, Taunggyi University and Magway University** provided the certificate courses of GIS and RS occasionally.
- Refresher course for all geography staffs are also often delivered for academic and research developing capacity building.

## For the whole education sector?

- The main tasks of teaching departments branch into **two: teaching and research** to support the national development.
- Steering Committee of Geography Education in Myanmar included the geospatial technology related subjects in curriculum of **B.A Geography Program but also M.A and PhD Programs.**
- The geography researches are always and mainly in locational analysis and emphasized on spatial identity and regional developments.
- Therefore, Geography Department is already well known the effectiveness and significance of Geospatial Data in Myanmar Research Programme which are tends to the regional and sectoral development.



# Geospatial Technology Module for Department of Geography

<b>Module No</b>	<b>Module Name</b>
<b>Geog 2104</b>	<b>Fundamentals of Remote Sensing</b>
<b>Geog 2108</b>	<b>Fundamentals of GIS</b>
<b>Geog 3104</b>	<b>Descriptive Statistics in Geography</b>
<b>Geog 3110</b>	<b>Inferential Statistics in Geography</b>
<b>Geog 4105</b>	<b>Application of Geospatial Technology in Geographical Analysis</b>
<b>Geog 4110</b>	<b>Research Methodology in Geography and Field Training</b>
<b>Geog 5205</b>	<b>Geospatial Technology: Remote Sensing</b>
<b>Geog 5210</b>	<b>Spatial Analysis</b>
<b>Geog 5211</b>	<b>Geospatial Technology: GIS</b>
<b>Geog 633</b>	<b>Research Techniques in Geography</b>
<b>Geog 634</b>	<b>Regional Analysis</b>

# Who uses GIS and RS from Myanmar Geography Department?

- **Undergraduate students in Geography Dept.**
  - For Mapping and basis analysis for their field survey report
- **Master students and PhD students**
  - For their new finding in thesis ( Spatial analysis and Hydrologic analysis)
- **Distinguished Researches**
  - Environmental geography, climatology
  - Geomorphology, hydrology and hazards analysis
  - Urban Geography and rural development
  - Land use/ land cover and agriculture geography
  - Economic geography and Human geography
  - Transportation geography
- **Department**
  - For developing geodatabase ( facts about Myanmar)

## Who uses GIS from other Department?

- Other disciplines which always use the geospatial data and technologies are Geology, Botany and Zoology in education sector.
- To provide the best findings and solutions of education researches from all disciplines including geography, validity of spatial data, spatial data accuracy, data synchronizing and data sharing are urgently need for all regional development and social welfare schemes.

# Collaboration Universities with MOU

- ❖ Geography Departments of Cologne University (Germany) and University of Yangon
- ❖ Geography Departments of Pukyong National University and Dagon University

## Area of Collaboration:

### (1) Staff Exchange and Training

- Department of Geography, UY and Cologne University (Germany)
- Department of Geography, UY and University of Maryland ( USA)
- Dagon University and PKNUN University (Korea)

### (2) Student Training

1<sup>st</sup> Step: in HRD (GIS & RS) Courses

2<sup>nd</sup> Step: in M.A. and Ph. D. Degrees (GIS & RS)

### (3) Joint Research Programs

- Department of Geography, Bago University and some Japanese Universities
- Heritage Inventory mapping ( Cologne Uni. And YU, YCDC and DUHD)

## (4) International Regional Science Meeting



THANK YOU