



Centre for Space Science & Technology Education in Asia and the Pacific (CSSTEAP)

(Affiliated to the United Nations)



P. S. Roy

National Remote Sensing Agency,
Department of Space, Government of India,
Hyderabad India

UN Regional Centers for Space Science and Technology Education



Goals of the Centre

Increasing Knowledge and understanding in Space Science & Technology

developing skills and knowledge of university educators and research and application scientists through rigorous theory, applications, field exercises and pilot projects in those aspects of space science and technology

- Building/Enhancing national and regional capacity
- Socio-economic development, regional co-operation, support to international programmes

Concerns of Asia Pacific region

The following basic concerns in the Asia Pacific region makes it imperative to generate self sustained and qualified human capital

Environmental concerns (productivity, conservation and degradation).

Disasters (their nature, effects, human role in the process and options for mitigation).

Poverty, education and health care (empowerment, communication network and information distribution).

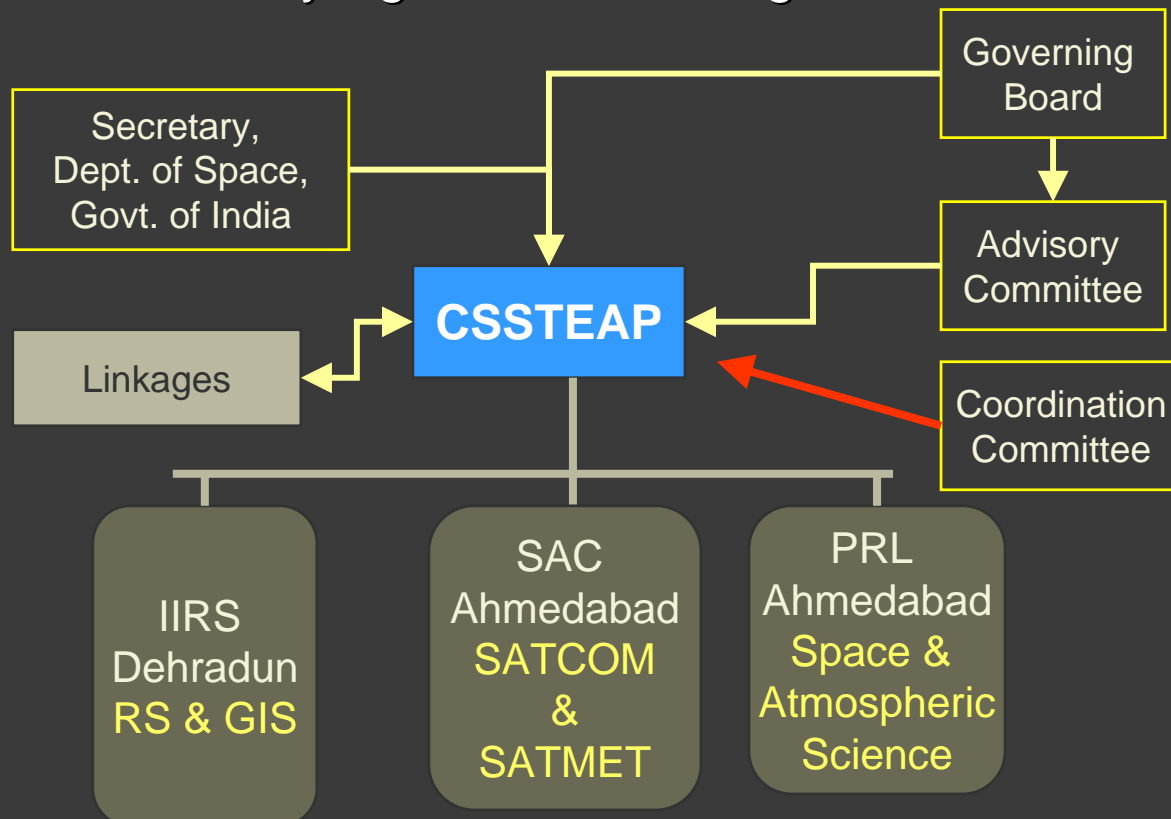
Sustainable production

CSSTEAP-Organization

Agreement to establish CSSTEAP was signed on 1st November 1995 by 10 countries at New Delhi.

Cooperation Agreement with United Nations was signed on 7 May 1996.

Host Country Agreement was signed on 10 March 1998 at Ahmedabad.



Governing Board

- Governing Board is the principal policy making organ.
- At present, 15 countries in the region are represented in the Governing Board & two observers.
- The Executive functions are exercised by the Director of the centre.
- An Advisory Committee provides technical guidance.



DPR Korea
India
Indonesia
Kazakhstan
Kyrgyzstan
Malaysia
Mongolia
Myanmar
Nauru
Nepal
Philippines
Republic of Korea
Sri Lanka
Thailand
Uzbekistan
UNITED NATIONS
ITC

Advisory Committee

Members of the Advisory Committee (AC) are composed of prominent individuals in the Government, private industry and the academic and scientific community in the field of space science and technology applications. The AC provides technical guidance to the centre's programmes.



Locations



CSSTEAP Hqs, Dehra Dun



IIRS, Dehradun



Bopal, SAC, Ahmedabad



PRL, Ahmedabad

CSSTEAP-Organization

Core funding, facilities, equipment, staffing are provided by the Government of India, through the Department of Space.

Additional funding is provided by UN-OOSA and few travel grants are provided by UN-ESCAP, UNESCO, GOI, and others.

CSSTEAP Hqrs

- Director
- Dy Director
- Secretariat
- Admin/Finance
- Liaison/Students*
- Public Relations*

Host Institution#1

- Course Director
- Course Coordinator
- Teaching Staff
- Student Affairs
- Support Staff

Host Institution#2

- Course Director
- Course Coordinator
- Teaching Staff
- Student Affairs
- Support Staff

Functionality & User Community

Principal functions of the Centre

- Education, application programmes and research.
- Data management.
- Pilot projects.
- Continuing education programmes through workshops, seminars etc.
- Awareness programmes for decision makers and public.

Potential user community and beneficiaries

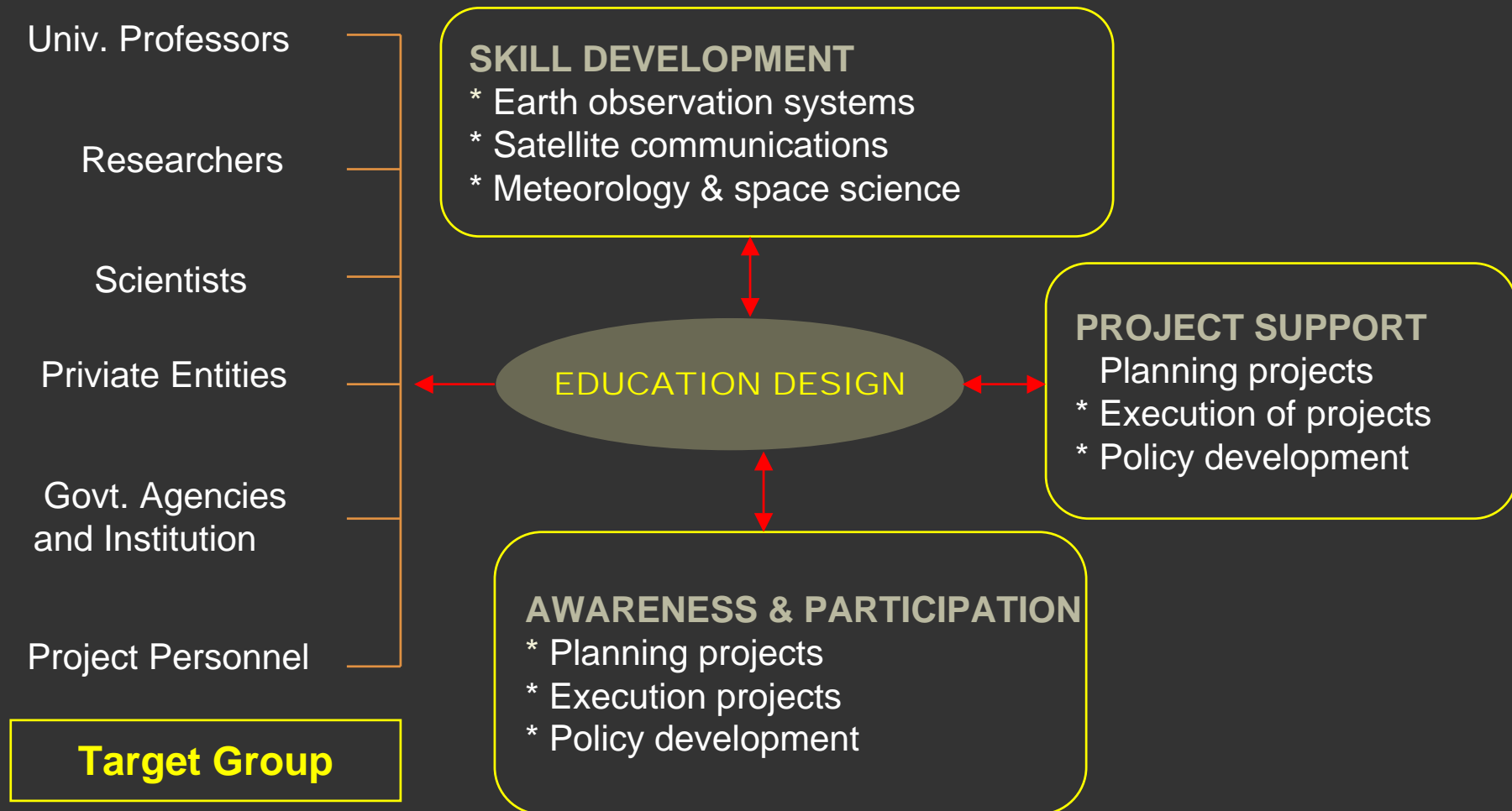
- National resource and environmental agencies.
- National and regional research institutions.
- Educational institutions.
- International bodies.

CSSTEAP Educational Programmes

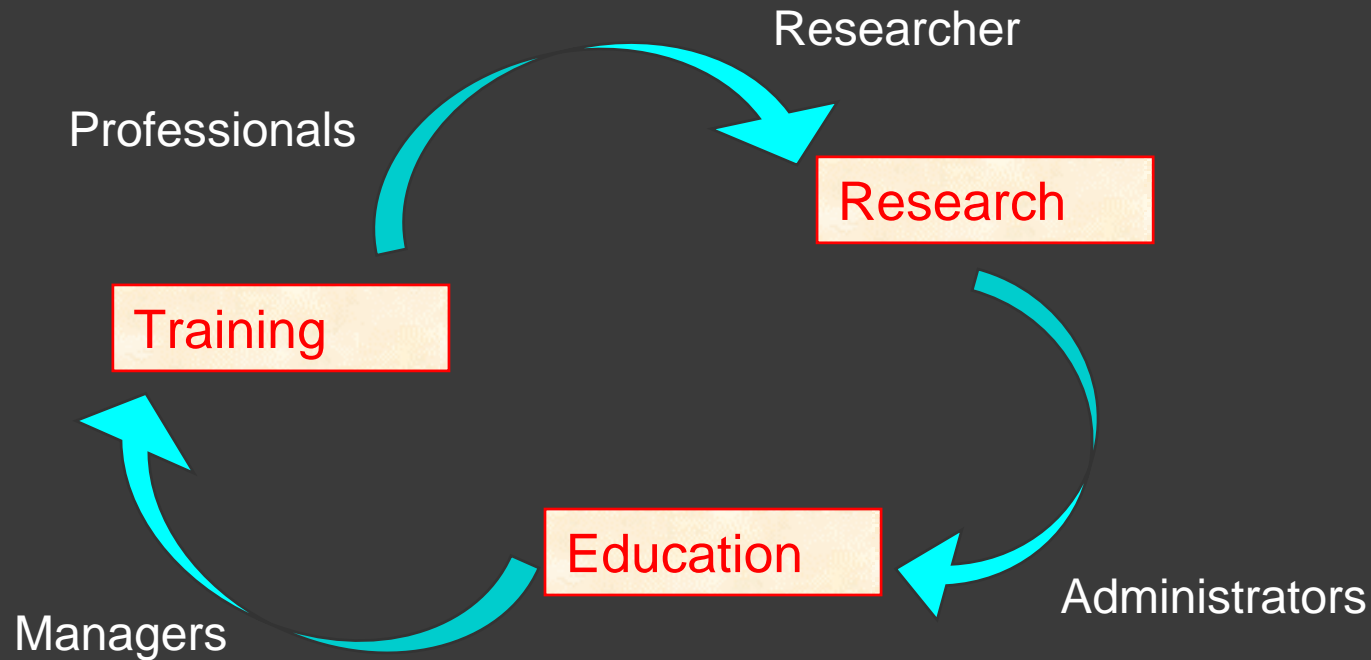
CSSTEAP provides education in 4 areas:

- Remote Sensing and Geographic Information Systems (RS & GIS)
- Satellite Meteorology & Global Climate (SATMET)
- Satellite Communications and Global Positioning Systems (SATCOM)
- Space and Atmospheric Sciences (Space Science)

Education Structure of the Centre



CSSTEAP Courses & Students



Goals Achieved through

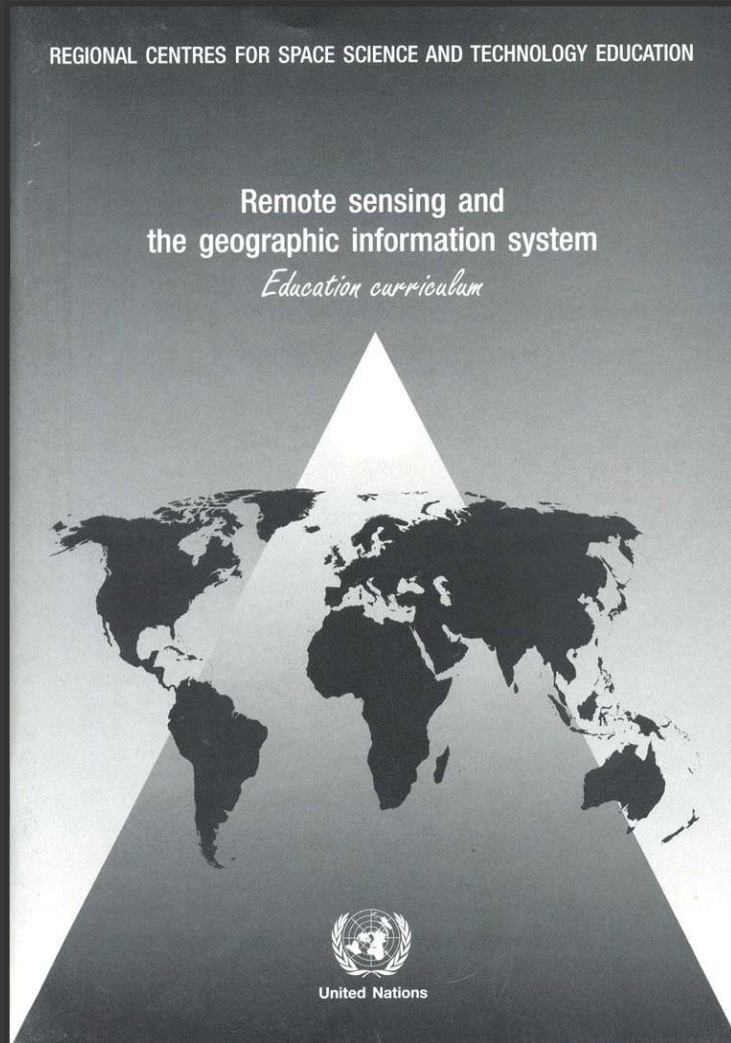
- ♠ Long Term courses
- ♠ Short Term courses
- ♠ Workshops

The education/training is useful because:

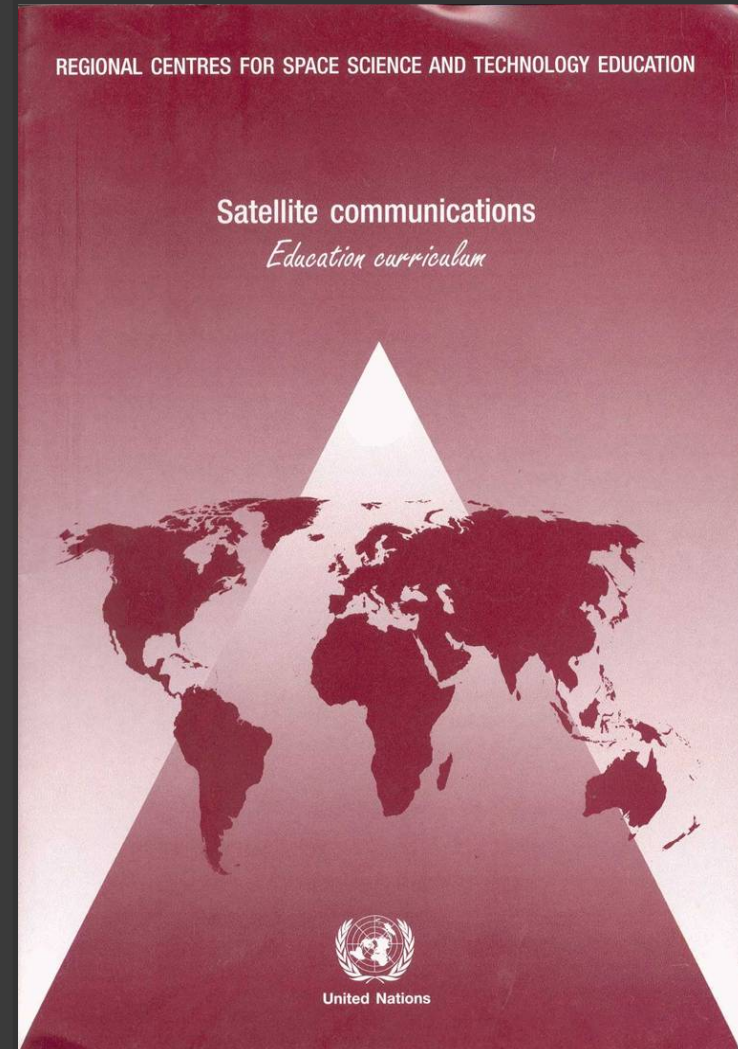
- ♠ Similar kind of environment in the Asia-Pacific region
- ♠ Cost effective



Remote Sensing and the Geographic Information System

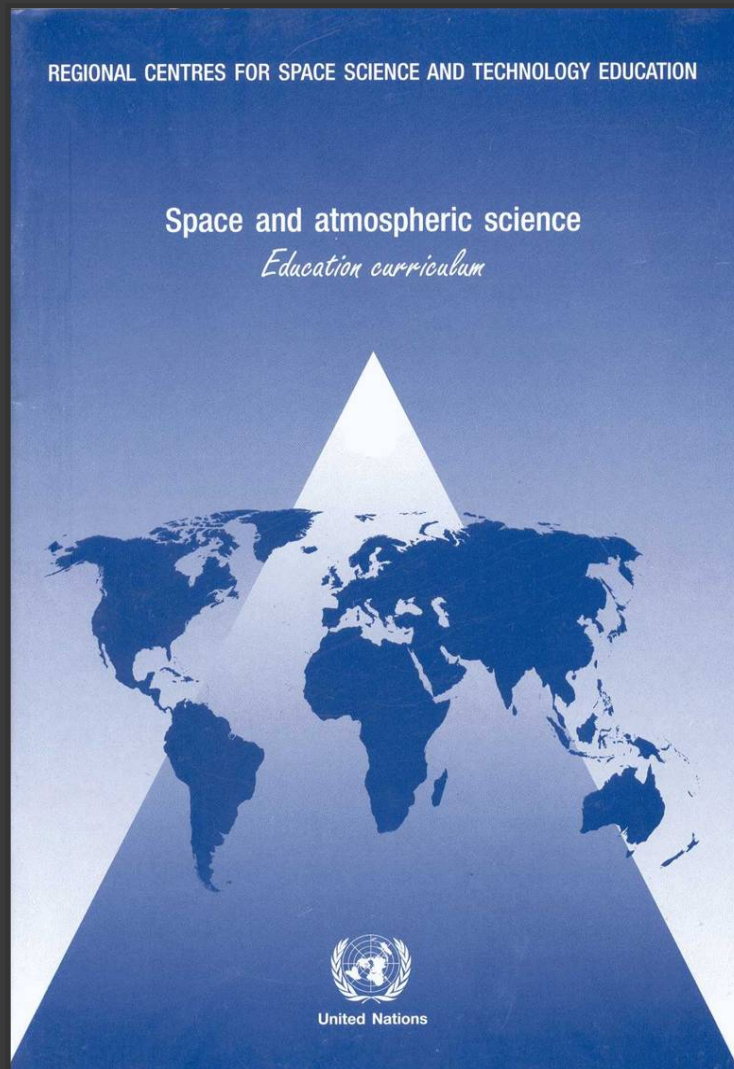


Satellite Communications

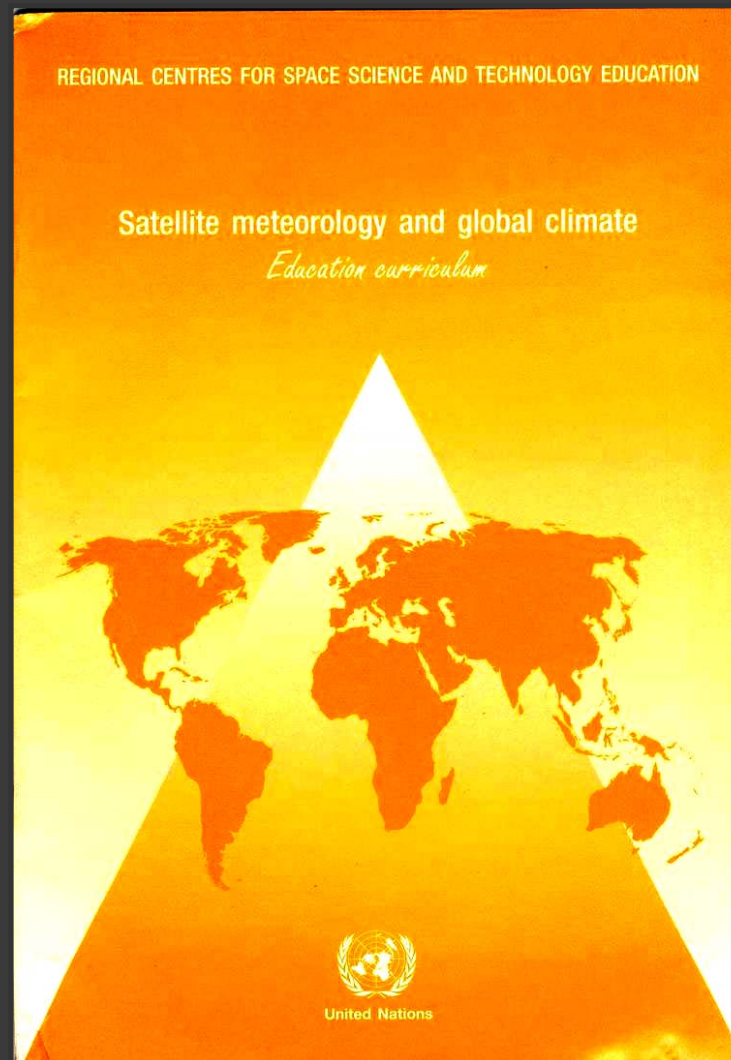




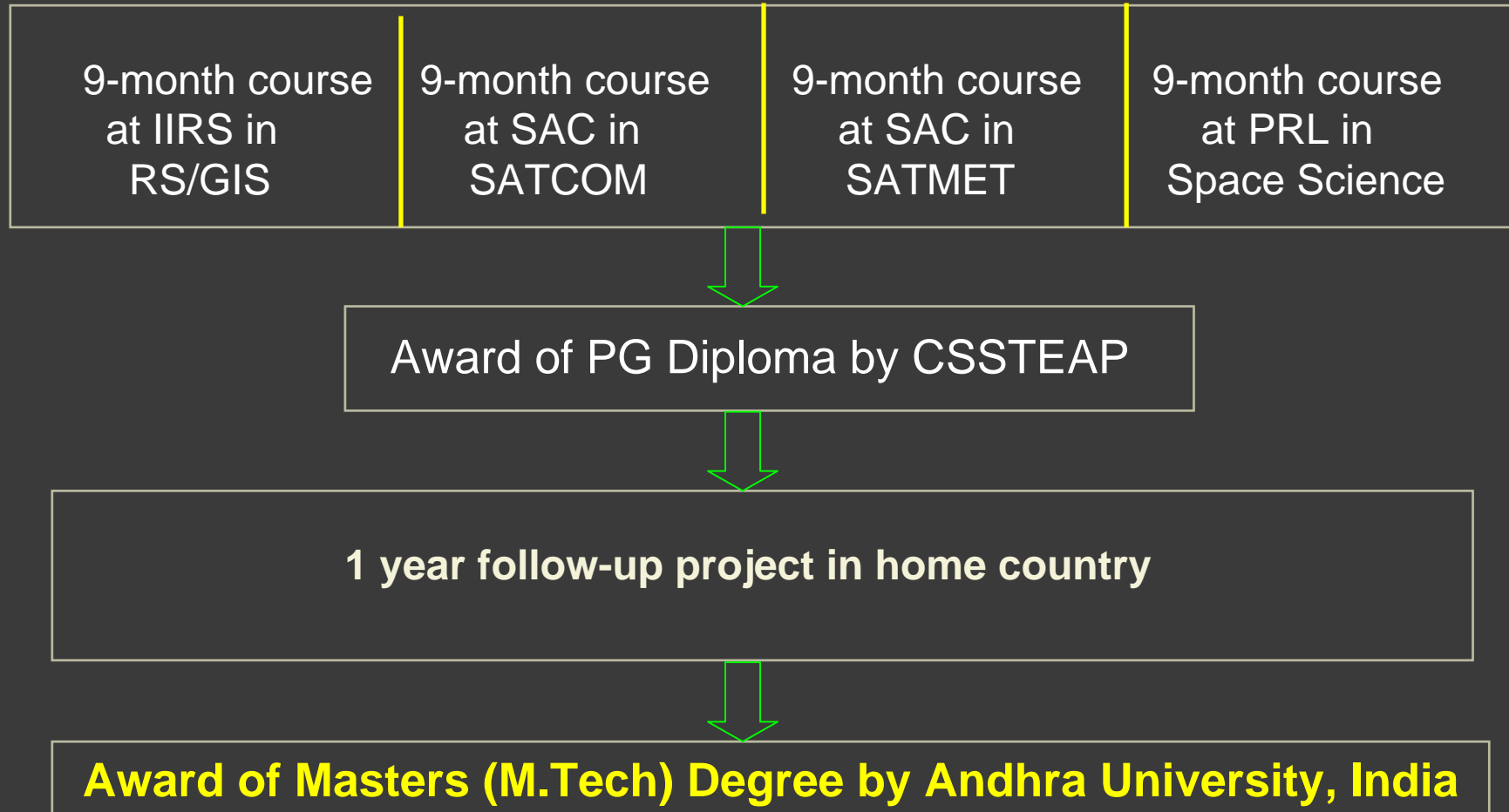
Space and Atmospheric Science



Satellite Meteorology and Global Climate



Educational Programmes



In addition to PG/MTech Courses, CSSTEAP also conducts short term courses and workshops in specific areas of RS & GIS, SATCOM, SATMET and Space Science.

Module 1

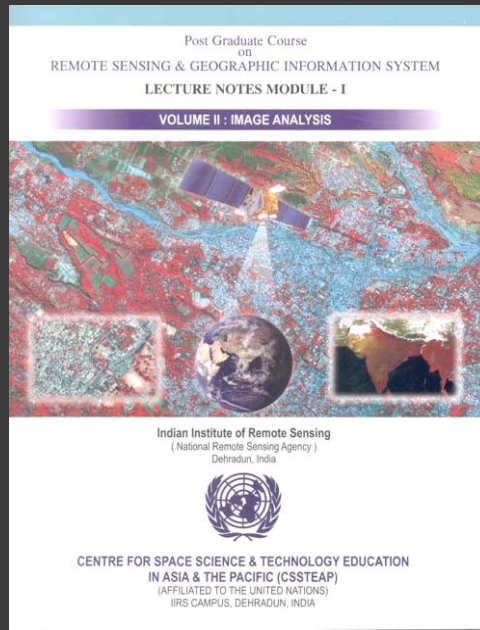
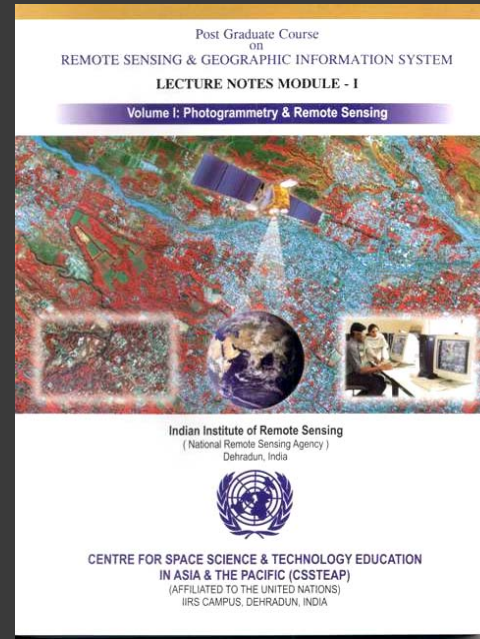
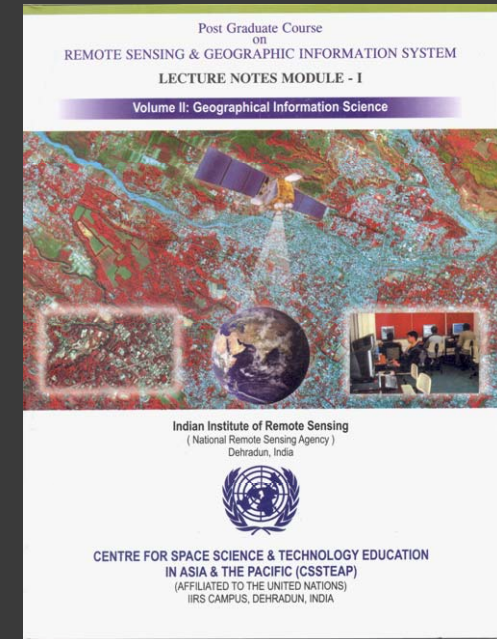


Image Analysis & Interpretation

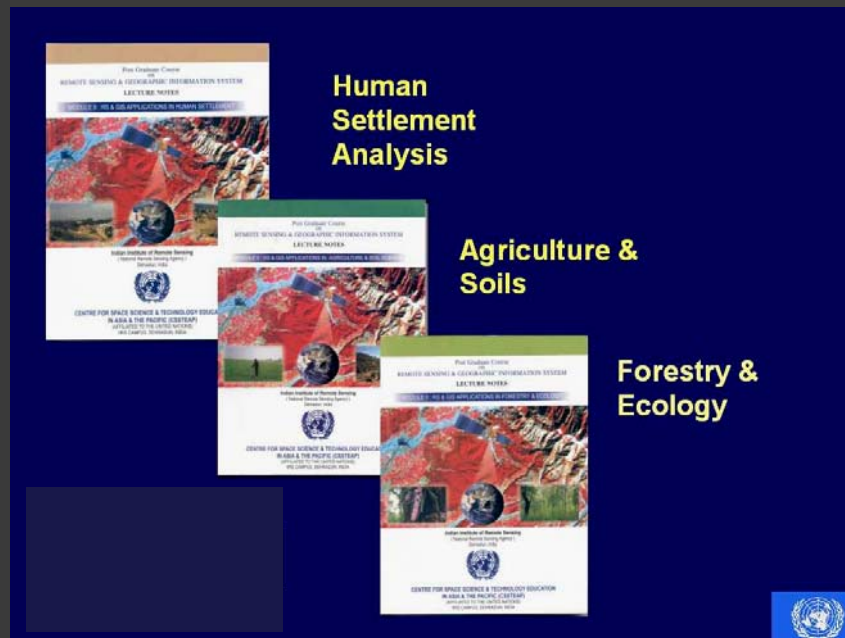


Photogrammetry & Remote Sensing



Geographical Information Science

Module 2



Human Settlement Analysis

Agriculture & Soils

Forestry & Ecology

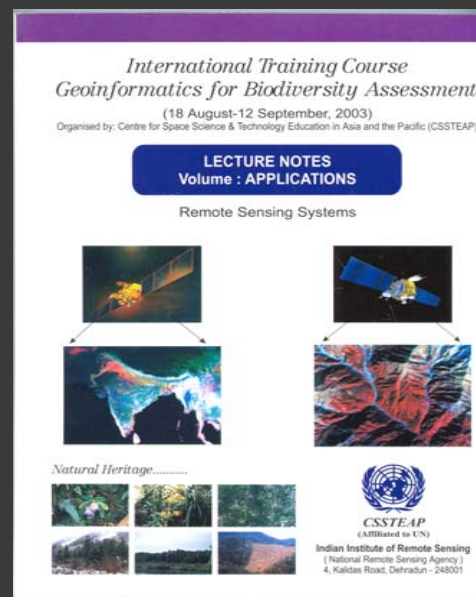
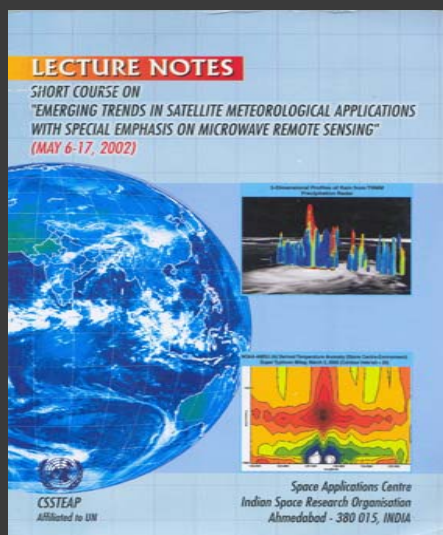
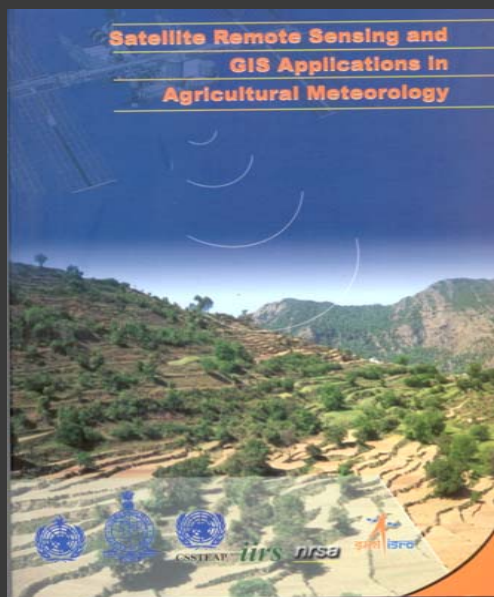
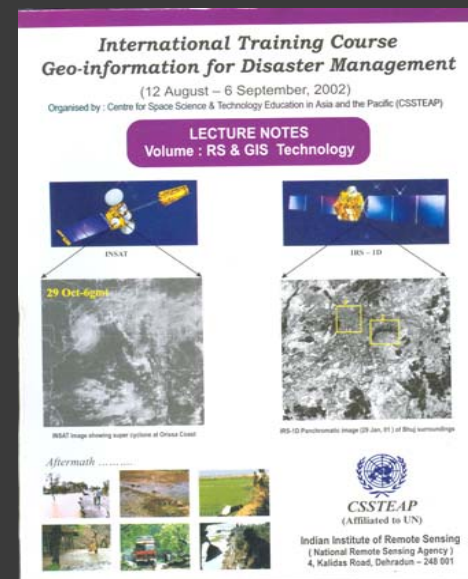
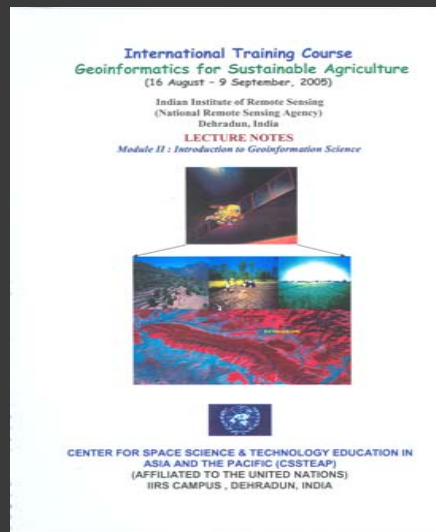
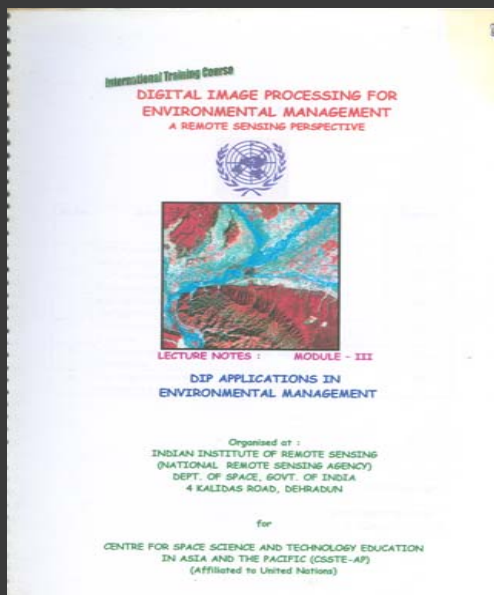


Geosciences & Disaster Management

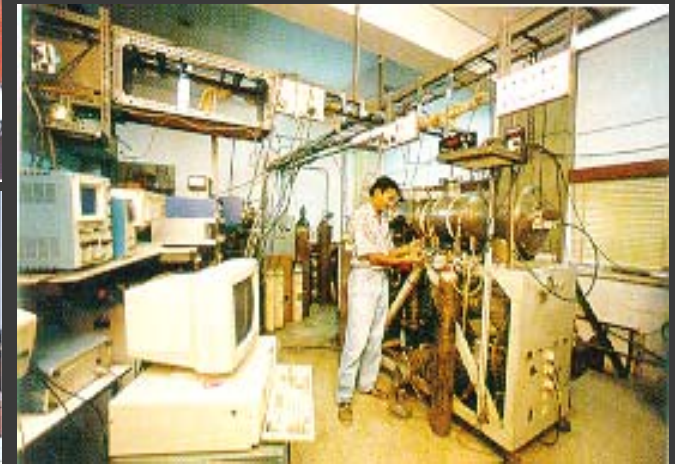
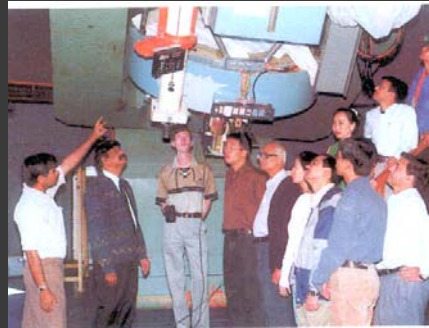
Water Resources

Marine Science

Publications of Short course



State of Art Facilities



Hostel Facilities

- An international Hostel with modern facilities are provide. It is also well equipped with kitchnet facilities.
- Mess serving Indian foods is also available in the campus at reasonable cost.
- Computers with internet and word processing software are also provided in the hostel.
- Indoor/Outdoor games facilities are provided by the host institution.
- Time to time cultural programmes and get together parties are also arranged in the institute. Festivals and National days of course participants are celebrated.



Publications

- Newsletter: So far, 30 issues have been released. Recent one June, 2005 has been released. In general, the newsletters are portraying a lead article from an eminent person in the field, progress of students, centre's activities, announcements and opinion;
- Centre prints an information brochure and periodically updates it;
- Announcement brochure for each educational course is regularly brought out;
- A memoirs marking the end of each course is being regularly brought out ;
- A programme of digitizing the publications and storing them on CD-ROM is completed till 2003. For recent publications the process again will be initiated;

CSSTEAP Courses & Students

The Centre has so far conducted **TWENTY TWO** 9 months PG courses

- 9 courses in RS & GIS
- 5* courses in SATCOM
- 4 courses in SATMET
- 4 courses in SPACE SCIENCE

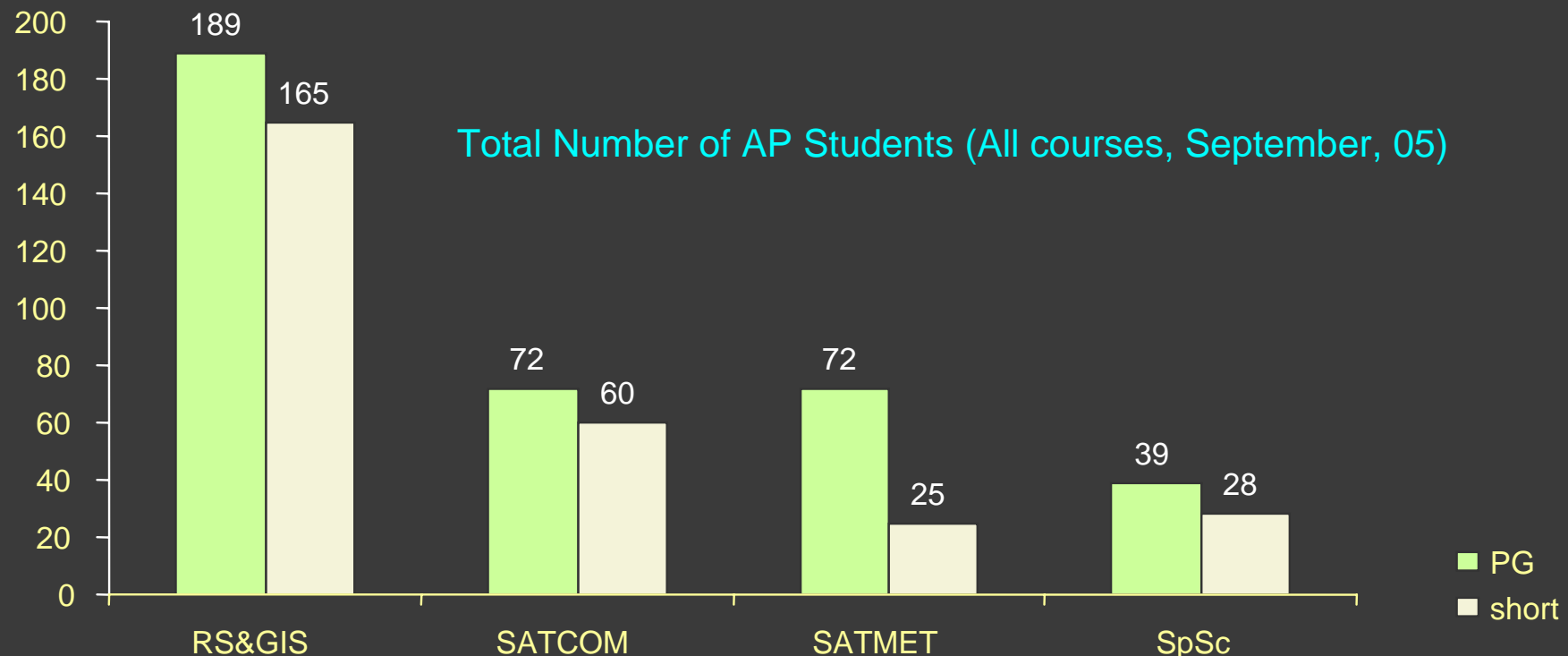
* course is in progress

The Centre conducted 17 short courses/Workshops in the last 9 years

Students

Total of 624 students from 30 countries of AP region:(371 in long courses and 253 in short courses and workshops.)

In addition, 26 students from 16 countries outside the AP region have been trained at CSSTEAP (1 student participated in a PG course)



Award of M.Tech degree: STATUS

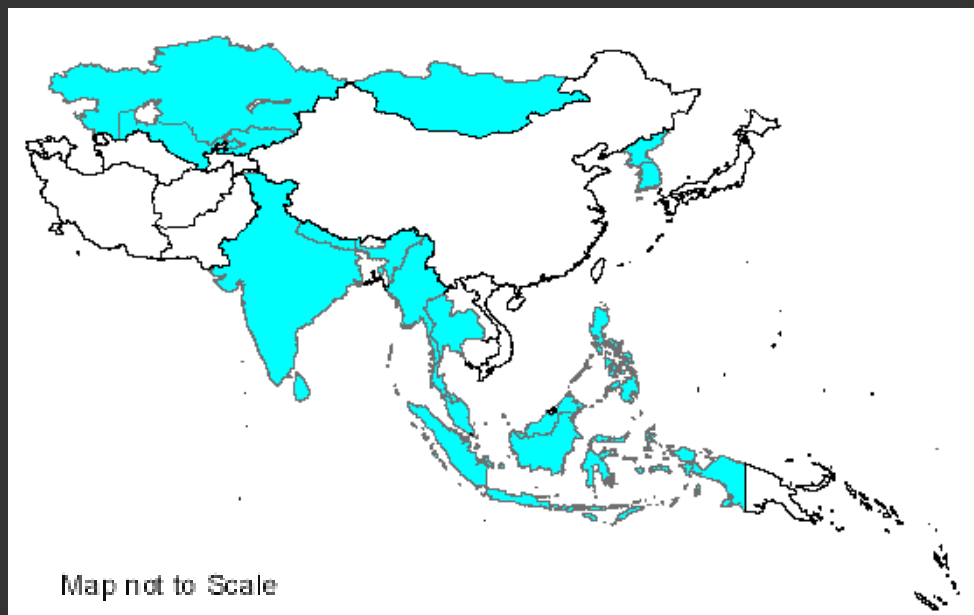
In pursuance of the MOU, the Andhra University is involved in the process of all academic decision making. Awardees of M.Tech degree so far is given here:

- REMOTE SENSING & GIS - 32 participants have been awarded.
- SATELLITE COMMUNICATIONS - 12 participants have been awarded
- SATELLITE METEOROLOGY - 12 participants have been awarded.
- SPACE SCIENCES – 9 participants have been awarded.

Total – 65 have been awarded

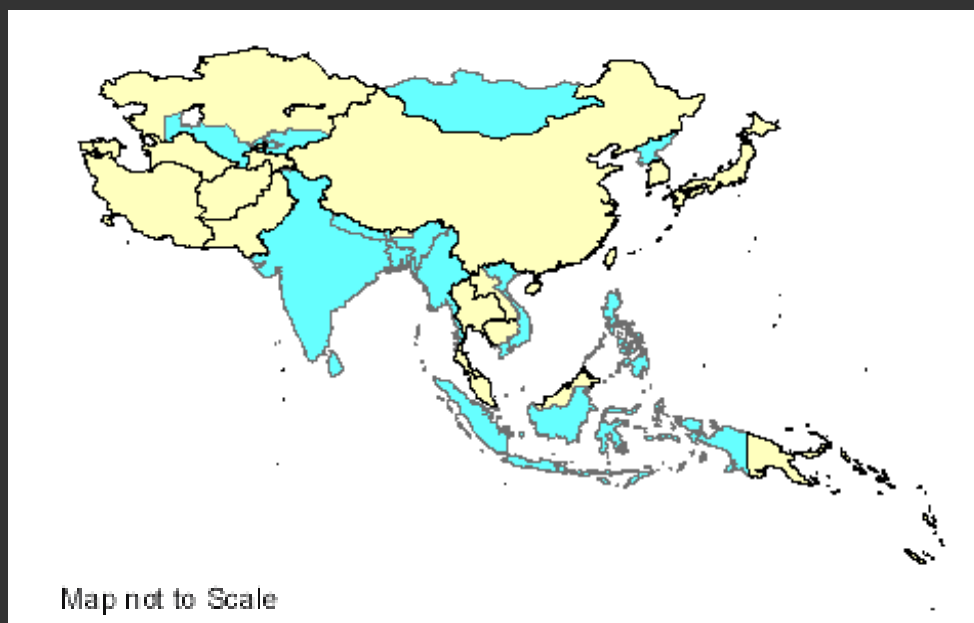




CSSTEAP member countries & Student turn over



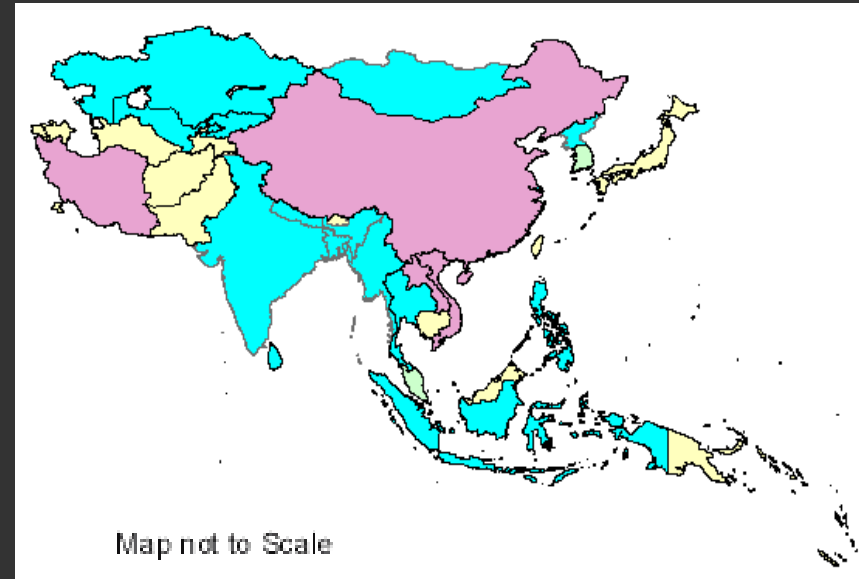
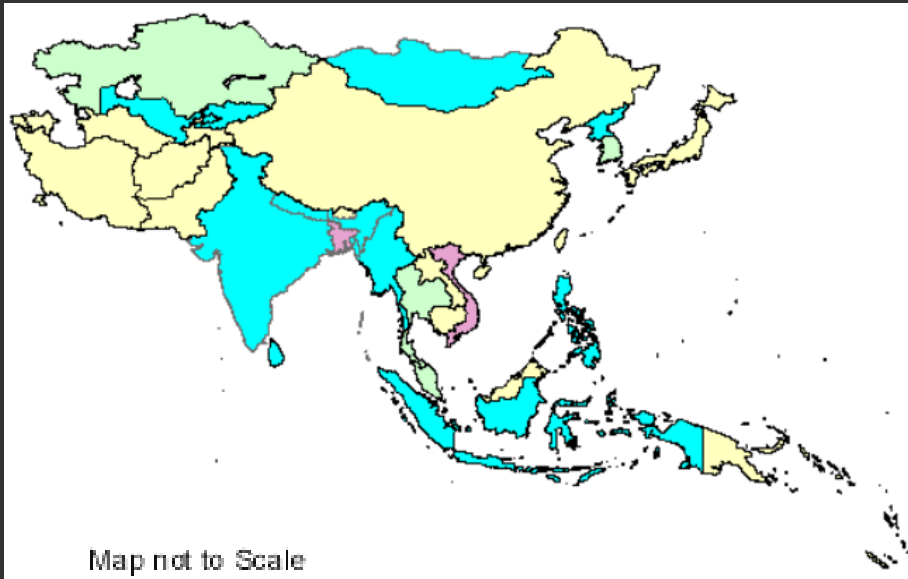
DPR Korea, India, Indonesia, Kazakhstan, Kyrgyzstan, Malaysia, Mongolia, Myanmar, Nauru, Nepal, Philippines, Republic of Korea, Sri Lanka, Thailand, Uzbekistan

 Member Countries of CSSTEAP
 Non-member Countries



 10 or more PG students
 Less than 10 PG students

CSSTEAP Student turn over



- CSSTEAP member, 10 or more PG students
- CSSTEAP member, less than 10 PG students
- Non-CSSTEAP member, 10 or more PG students
- Non-CSSTEAP member, less than 10 PG students

- CSSTEAP member, 10 or more students
- CSSTEAP member, less than 10 students
- Non-CSSTEAP member, 10 or more students
- Non-CSSTEAP member, less than 10 students



CSSTEAP

Affiliated to UN



August 28, 2005

- [Introduction](#)
- [Courses](#)
- [Administrative Body](#)
- [Publications](#)
- [Pilot Projects](#)
- [International Linkages](#)

CENTRE FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION IN ASIA AND THE PACIFIC (CSSTEAP)

(Affiliated to The United Nations)

On a mission of capacity building in Space Science and Technology in Asia-Pacific region under the United Nations initiative.

The Centre is an Education and Research Institution that is capable of high attainments in the development and transmission of knowledge in the fields of Space Science and Technology. The initial emphasis of the Centre has been on in-depth education, research and applications programmes, linking to the global programmes/databases, execution of pilot projects, continuing education, awareness and appraisal programmes.

The Centre offers Post Graduate Level Courses in the fields of :

- Remote Sensing and Geographic Information System,
- Satellite Communications,
- Satellite Meteorology and Global Climate,
- Space and Atmospheric Sciences.

A set of standard curricula developed by the United Nations is adapted for the educational programmes. The Centre is affiliated to the United Nations and its education programmes are recognised by Andhra University, India.

The Centre is hosted by the Government of India, Department of Space. Government of India has made available appropriate facility and expertise to the Centre through the Indian Institute of Remote Sensing (IIRS), Dehradun, Space Applications Centre (SAC), Ahmedabad & Physical Research Laboratory (PRL), Ahmedabad.

LATEST NEWS

[Newsletter](#)

[Volume 8, Issue 2](#)

[March 2005](#)



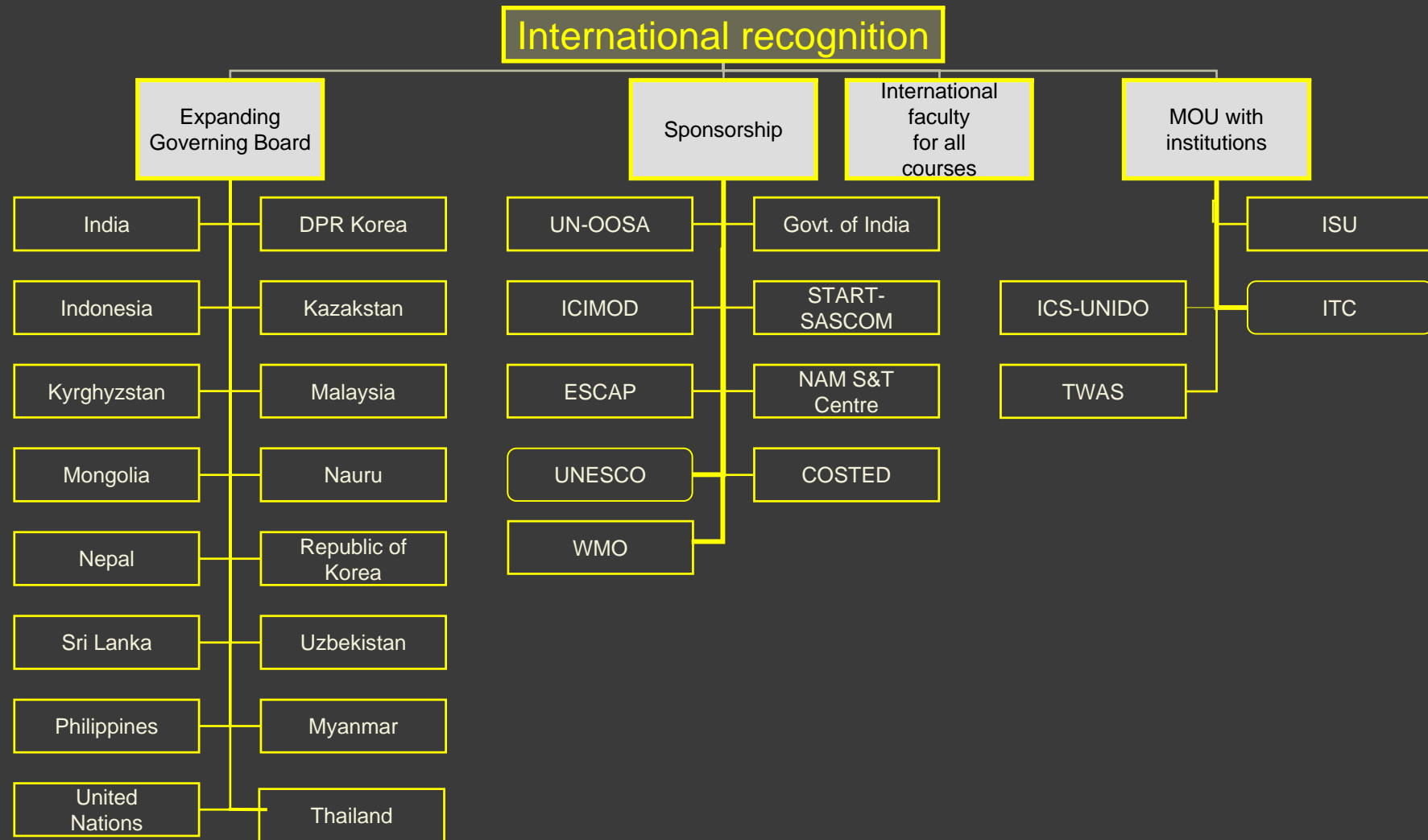
Last Updated : August 14, 2005

[Click here for the
Map of Asia Pacific Region](#)

International Linkages

- Organizations like UN (OOSA & ESCAP), ICIMOD, START-SASCOM, COSTED, NAM S&T, UNESCO, WMO: Providing travel fellowships to some of the course participants
- **International faculty** in the teaching programme of the centre. Students of 30 countries have joined as alumni of the centre.
- **ICS-UNIDO/ Italy**: Sponsorship for regional workshop and also facility for home country project work for one or two participants at ICS. One candidate of RS/GIS 1999 has been deputed to ICS/UNIDO under this arrangement.
- **ISU/ France**: Provision for expert assistance in teaching programme.
- **TWAS/ Italy**: CSSTEAP is recognized as *CENTRE OF EXCELLENCE*
- **Dr. Sunjai Murai**, providing financial assistance to one of the CSSTEAP RS & GIS course participant every year to attend ACRS.
- **UN-ESCAP**, Bangkok have been sponsoring candidates for the PG courses;

International participation and recognition



Future Programmes of the Centre

- Establishment of linkages between CSSTE's (Exchange of students, facility, educational material, etc)
- Initiate Research programmes in the centre - aim to position a higher level image of the Centre as an Institution of Excellence.
- Expanding the network with various institutions/organizations in the Asia-Pacific countries through web based education, etc,

Programmes for 2006

- ❖ 5th SATMET PG course (Aug, 2006 - Apr.2007) at SAC, Ahmedabad
- ❖ 5th Space Science PG course (Aug, 2006 - Apr.2007) at PRL, Ahmedabad
- ❖ Four weeks short course in RS & GIS (Aug - Sept 2006) at IIRS, Dehradun
- ❖ 11th RS & GIS PG course (Oct,2006-June, 2007) at IIRS, Dehradun



Thank You