

Centre for Space Science and Technology Education in Asia and the Pacific

(Affiliated to the United Nations)



Background document for 25th meeting of the Governing Board

Date: December 21, 2020

Mode: Virtual Meeting

**Centre for Space Science and Technology Education in
Asia and the Pacific**

**Indian Institute of Remote Sensing Campus
4, Kalidas Road
Dehradun-248001, India**

Agenda – 8

Activities of CSSTEAP and Future Plans

The Centre has been conducting Post Graduate in the five disciplines and short courses in various themes. Till date the Centre has conducted 61 PG courses 24 in Remote Sensing & Geographic Information System (RS & GIS), 12 in Satellite Communications (SATCOM), 11 in Satellite Meteorology & Global Climate (SATMET), 11 in Space & Atmospheric Science (SAS) and 03 in Global Navigation Satellite Systems. The Centre has also conducted several short courses and workshops in past 25 years. These programmes have benefitted 2624* participants from 36 countries from Asia-Pacific region and 22 countries from outside Asia-Pacific region. PG Courses have benefitted 1018 participants (Figure 1a) while Short Courses have benefitted 1228 participants (Figure 1b). Webinar has benefitted 148 participants (Figure 1c) and Online Short Courses have benefitted 230 participants* (Figure 1d).

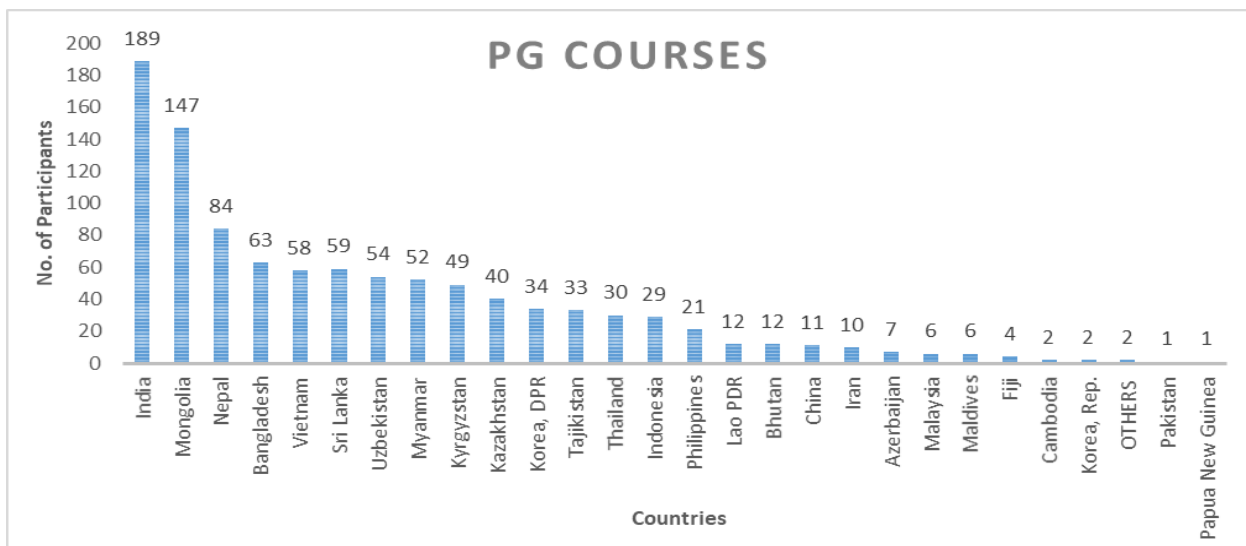


Figure 1a: Country-wise output of CSSTEAP academic programmes of PG Courses

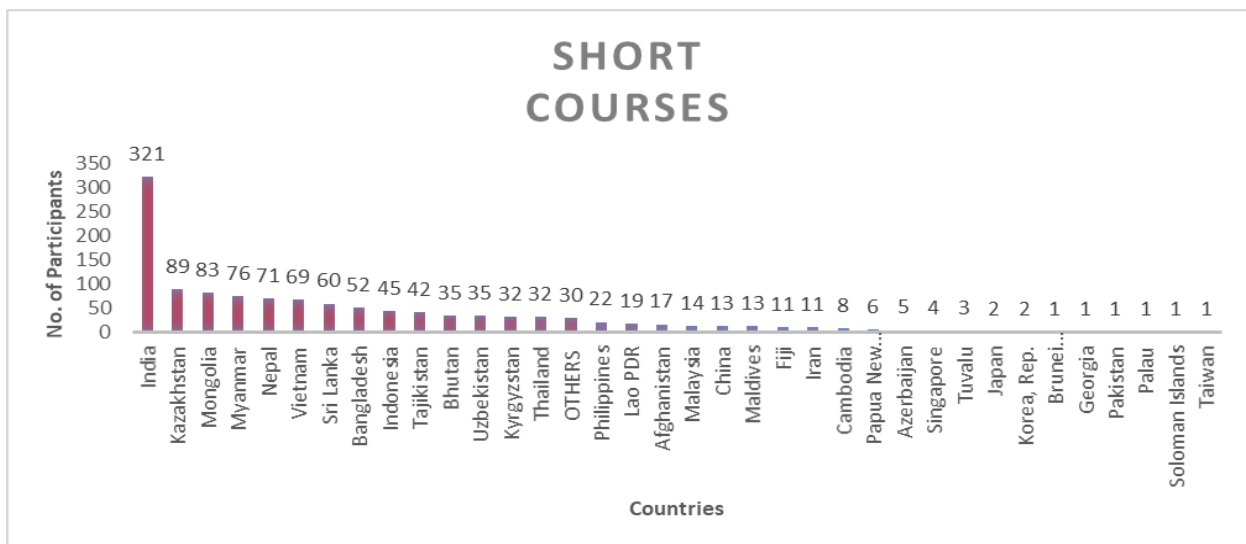


Figure 1b: Country-wise output of CSSTEAP academic programmes of Short Courses

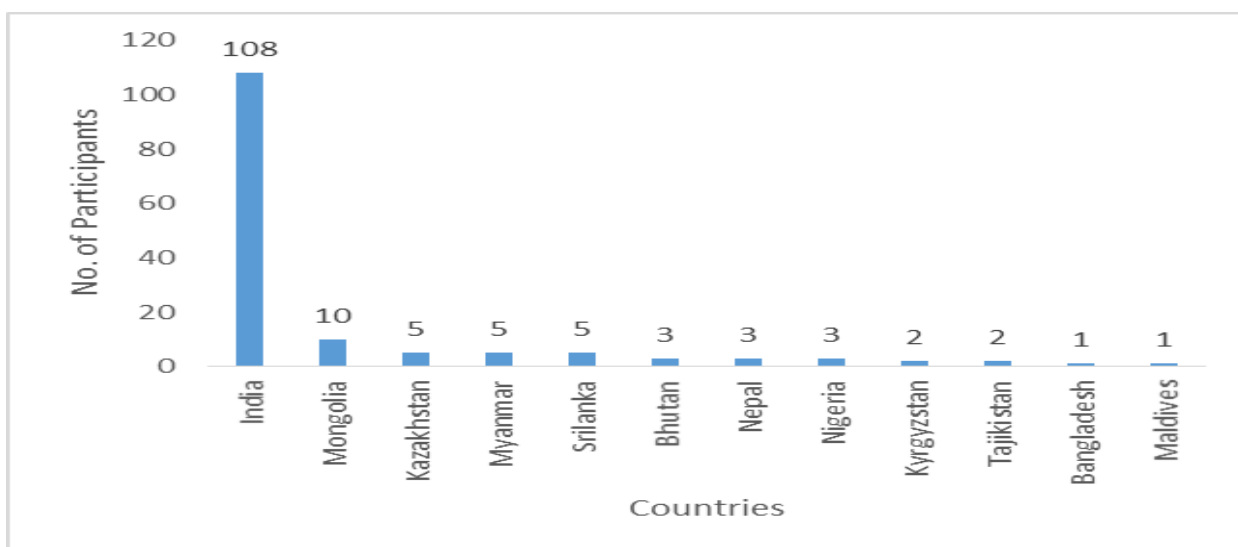


Figure 1c: Country-wise output of CSSTEAP academic programme of Webinar

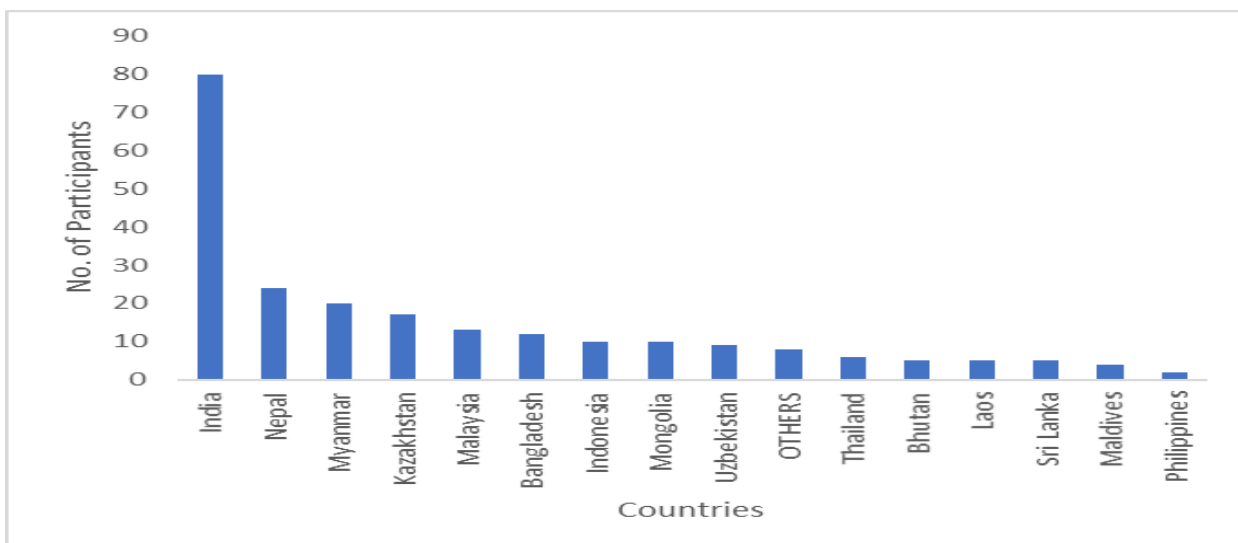


Figure 1d: Country-wise output of CSSTEAP academic programme of Online Short Courses

***Others include countries outside Asia-Pacific Region:** Algeria, Bahrain, Bolivia, Botswana, England, Egypt, Ethiopia, Ghana, Iraq, Kenya, Madagascar, Mauritius, Mexico, Nigeria, Romania, Qatar, Saudi Arabia, South Africa, Syria, UAE, Yemen and Zambia.

Academic Activities of Centre

(i) Completed Courses (2019-20)

During year 2019-20, the center has conducted 3 Post Graduate courses, 4 short courses/workshops and a webinar. The details of the courses conducted and ongoing are mentioned below:

(a) PG COURSES (2019-20)

RS&GIS: 24th PG course in RS & GIS at IIRS, Dehradun during July 1, 2019- March 31, 2020 (22 participants from 10 countries)

SATCOM: 12th Satellite Communications at SAC, Ahmedabad during August 1, 2019 – April 30, 2020 (16 participants from 08 countries)

GNSS: 3rd Global Navigation Satellite Systems at SAC, Ahmedabad during August 1, 2019– April 30, 2020 (14 participants from 07 countries).

(b) SHORT COURSES

(2019)

Short Course on Small Satellite Missions jointly conducted by IIRS, Dehradun and URSC, Bengaluru during November 25 – December 06, 2019 at IIRS, Dehradun (28 participants from 08 countries)

(2020)

Geospatial Applications for Disaster Risk Management: A Massive Open Online Course (MOOC) conducted during October 13 – November 30, 2020 (Total 28423 participants from 154 countries have registered for this course. Out of which, 6077 participants from 102 countries have successfully completed Track I of Basic Module. While, 4370 participants from 87 countries have successfully completed Track I & II consist of Basic & Advanced Module.

Online Short Course on Remote Sensing and GIS Technology and Applications during November 16 - 27, 2020 (68 participants from 16 countries)

Online Short course on Meteorological Satellites: Physical principle, Retrieval and Applications during November 23 - December 05, 2020 (64 participants from 13 countries)

Online Short course on Space and Atmospheric Science during December 07-14, 2020 (65 participants from 11 countries)

(ii) Ongoing Courses (2020-21)

Online Short Course on Small Satellite Missions jointly conducted by IIRS, Dehradun and URSC, Bengaluru during December 14-25, 2020 (33 participants from 12 countries)*

* Numbers will be finalised once the course will be completed

The details of the participants of above ongoing courses are mentioned in **Annexure-II**.

Table 3: Country-wise participation of candidates (all PG Courses)

Countries	RS&GIS	SATCOM	GNSS
	24th	12th	3rd
Bangladesh	1	1	2
Bhutan	2		

India	3	7	7
Indonesia		1	1
Kazakhstan	1	1	1
Kyrgyzstan	1		
Mongolia	3		
Myanmar	3	1	1
Nepal	1	3	
Philippines		1	1
Sri Lanka	5		
Tajikistan	2	1	1
Total	22	16	14

Table 4: Country-wise participation of candidates (Short Courses)

Countries	Short Courses								
	RS&GIS			SATMET		SAS		SSM	
	DRR	Webinar	Online RS>A	NWP	Online SATMET	Space Weather	Online SAS*	SSM	Online SSM*
	2019	2019	2020	2019	2020	2019	2020	2019	2020
Bahrain			3						
Bangladesh		1	5	3	3	1	2		2
Bhutan		3	2		2	1			1
Ethiopia						1	3		1
India	6	108	7	12	29	6	35	9	9
Indonesia			3		4				3
Kazakhstan	8	5	7	4	5	1		6	5
Kyrgyzstan		2		1					
Lao PDR			1			2	1		3
Malaysia			7		5				1
Maldives		1	2	1	2				
Mongolia	2	10	3	2	3	4	1	4	3
Myanmar		5	13	1	4		2	1	1
Nepal	4	3	7	1	1	5	13	3	3
Nigeria		3							
Philippines			1		1				
Sri Lanka		5	4			2	1	2	
Tajikistan	3	2						1	
Thailand			1	1	4	1	1		
Uzbekistan			2		1	2	5	2	1
Yemen							1		
Vietnam						1			
Total	23	148	68	26	64	27	65*	28	33*

* Numbers will be finalised once the course will be completed

(a) M. Tech. degree awarded/Fellowships

Till date 177 participants from 17 countries have been awarded M. Tech. Degree in the 5 disciplines (83 participants in RS & GIS; 48 in SATCOM; 21 in SATMET; 23 participants in Space Science and 02 in GNSS).

During the year 2019-20, 17 participants (7 in RS&GIS, 7 in SATCOM, 1 in SATMET, and 02 in GNSS) who had finished their PG diploma were awarded M.Tech. degree.

(b) Technical Visits/ Cooperation/Interaction meets

- Dr. Keran Wang, Chief Space Application Section (SAS), Information and Communications Technology and Disaster Risk Reduction Division (IDD), UN ESCAP, Bangkok visited CSSTEAP Headquarters, IIRS Campus on Jan. 28, 2020 for updating UN-ESCAP contribution to UNISPACE+50 and also had a bilateral discussion with CSSTEAP and IIRS for strengthening the cooperation between UN-ESCAP and CSSTEAP and he also visited SAC, Ahmedabad and had interaction with SATCOM & GNSS Students on Jan. 29, 2020.
- Dr. Prakash Chauhan, Director, CSSTEAP attended the 24th session of the Intergovernmental Consultative Committee (ICC) on Regional Space Applications Programme for Sustainable Development (RESAP) as an Observer and also made a presentation.
- During the UNCOPUOS meeting at Vienna during Feb 2-9, 2020, CSSTEAP souvenir was distributed to the delegates on the occasion of completion of 25 years of CSSTEAP.
- To commemorate 25 years of service by CSSTEAP, a virtual meet was organized on 02.11.2020.

(a) Host Country Support

The host country is providing all necessary support and facilities to the Centre.

(b) Financial Support from Other Sources

In addition to the financial support from Department of Space, Govt. of India the following support has been received

- During the year 2019, UN-OOSA has provided financial support of US\$ 15000 for international travel of RS&GIS Course participants.
- During the year 2019-20, UN-ESCAP has provided travel grant to 3 participants in 24th RS&GIS Course and 3 participants in 3rd GNSS Course.

(c) Future Programmes for 2021 (subject to approval of GB)

- 25th Post Graduate course in RS & GIS at IIRS, Dehradun from July 1, 2021 – March 31, 2022.

- 12th Post Graduate Course in Satellite Meteorology and Global Climate at SAC, Ahmedabad from August 1, 2021 to April 30, 2022.
- 12th Post Graduate Course in Space and atmospheric Science at PRL, Ahmedabad from August 1, 2021 to April 30, 2022.
- 10th International Training on Small Satellite Mission in the month of November/December 2021.
- Short Course in DRR, NAVSAT, and other courses as per request from UNOOSA and other agencies.
- Phase II of Geospatial Applications for Disaster Risk Management: A Massive Open Online Course (MOOC) in year 2021.
- Thematic online short courses.