SDG 15: Life on Land

Protect, restore and promote sustainable use of terrestrial ecosystems

INTRODUCTION

Caring for land and living systems

Sustainable Development Goal 15 calls for the protection, restoration and sustainable use of terrestrial ecosystems. It aims to manage forests sustainably, halt biodiversity loss and combat land degradation, recognising that healthy land underpins water, food, livelihoods and resilience for people and wildlife alike.

SRM University-AP follows these principles through greening and conservation-minded campus practice, and by involving students, faculty and staff in hands-on community participation. Learning, research and outreach are brought together so that care for land and living systems becomes part of everyday university life.

WHAT SDG 15 SEEKS TO ACHIEVE

Protect and restore
Terrestrial ecosystems and the land that supports them.

Manage forests
Sustainable forest management that keeps woodlands healthy.

Halt biodiversity loss
Protecting species and the habitats they depend on.

Combat land degradation
Restoring degraded soil and land for people and wildlife.

SDG 15 DATA AND KEY HIGHLIGHTS

SDG 15 at a glance

55
publications mapped to SDG 15
2024–2025

4
events and outreach activities
Aug – Oct 2024

27
participants at the Prerana Vanam plantation drive
9 faculty and 18 UG students

189
unique online users at the largest webinar
Biological Invasions · 31 Aug 2024

Unique online users per webinar



CAMPUS GREENING AND CONSERVATION INITIATIVES

Green spaces as part of disaster prevention

SRM University-AP's Disaster Management Plan lists the upkeep of green spaces among its prevention measures. By maintaining green areas and promoting environmental conservation, the university aims to reduce vulnerability to natural disasters, linking campus greenery directly to safety and resilience.

Tree planting and expert webinars

Prerana Vanam on the Occasion of Founder's Day

TREE PLANTATION DRIVE · 24 AUG 2024 · 10 AM – 1 PM

Date: 24 Aug 2024, 10 am–1 pm

Host: Directorate of Student Affairs with CLM

Place: Nearby area, Amaravati

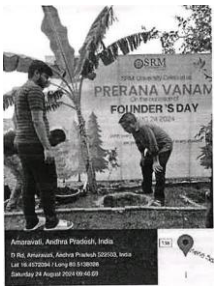
Participants: 27 (9 faculty, 18 UG students)

Faculty and students came together to plant a variety of trees and shrubs in the nearby area as a social-service activity.

Objectives: Enhance local greenery and the quality of the surroundings; Promote environmental sustainability through tree planting; Engage the university community in a shared, hands-on effort.

Students, staff and faculty took part enthusiastically, and the drive is a step towards richer biodiversity and a healthier local ecosystem.

Resource person: Prof. Manoj Arora, Vice Chancellor, SRM University-AP.



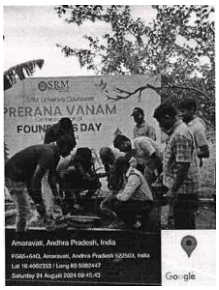
Participants at work beside the event banner



Participants tending a plant, a watering can in hand



Participants crouched around a planting spot



A group gathered closely around a planting spot

Remote Sensing for Biological Invasions: Applications, Challenges and Future Directions

SPATIAL REFLECTIONS WEBINAR SERIES · 31 AUG 2024

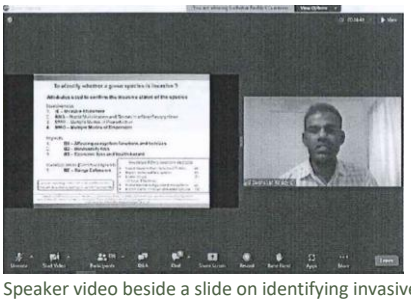
Date: 31 Aug 2024

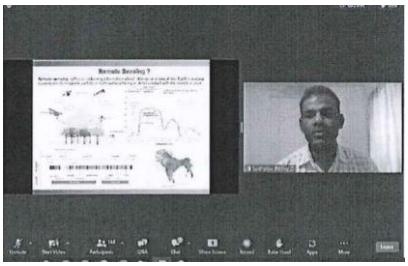
Host: Centre for Geospatial Technology (online, Zoom)

Participants: 189 unique users

Speaker: Dr. Sudhakar Reddy Chintala, NRSC, Hyderabad

A webinar on mapping and managing invasive plant species with remote sensing, covering essential variables, mapping approaches, the distribution of invasive alien species in India and case studies on water hyacinth, Prosopis juliflora and Lantana camara, with species distribution modelling and future directions.


Speaker video beside a slide on identifying invasive species


Speaker video beside a slide titled "Remote Sensing?"

Spatial Reflections Webinar Series: Interactions between Climate Change and the Amazonian Rainforest, a Two-Way Street

SPATIAL REFLECTIONS WEBINAR SERIES · 15 OCT 2024

Date: 15 Oct 2024

Host: Centre for Geospatial Technology (online, Zoom)

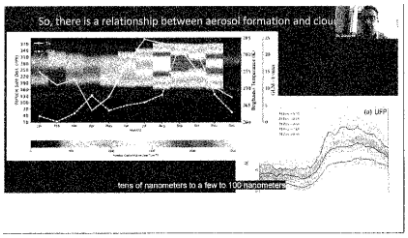
Participants: 98 unique users

Speaker: Prof. Micael Amore Cecchini, University of São Paulo, Brazil

The talk examined how deforestation, aerosol deposition from pollution and land-use change affect the Amazon forest, and how disruption of the aerosol–cloud–precipitation cycle could change cloud regimes over the region.



Slide showing a satellite image of the Amazon region



Slide with aerosol and cloud data charts

Spatial Reflections Webinar Series: Satellite-based Vegetation Growth Condition and Resilience Monitoring, Indian Experience

SPATIAL REFLECTIONS WEBINAR SERIES · 28 OCT 2024

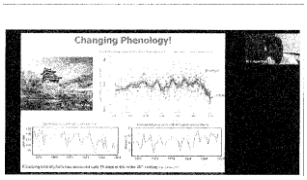
Date: 28 Oct 2024

Host: Centre for Geospatial Technology (online, Zoom)

Participants: 144 unique users

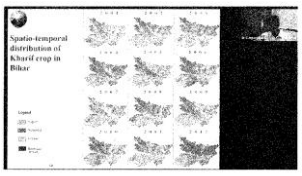
Speaker: Prof. C. Jeganathan, Birla Institute of Technology, Mesra

The session covered the potential of increasing India's forest cover for climate resilience, phenological stages of forest communities, citizen-science documentation of phenology, and satellite-based crop productivity patterns in the Kosi region of Bihar.



Slide titled “Changing Phenology!”


Slide with a map of India

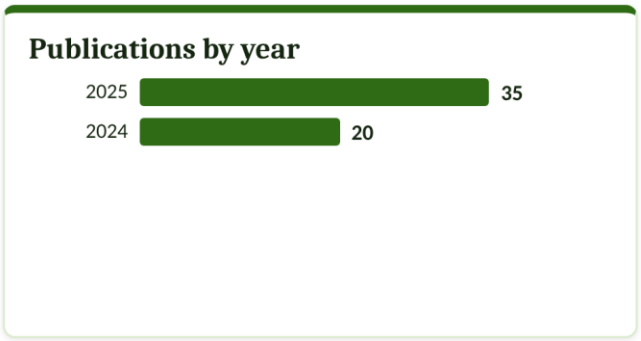


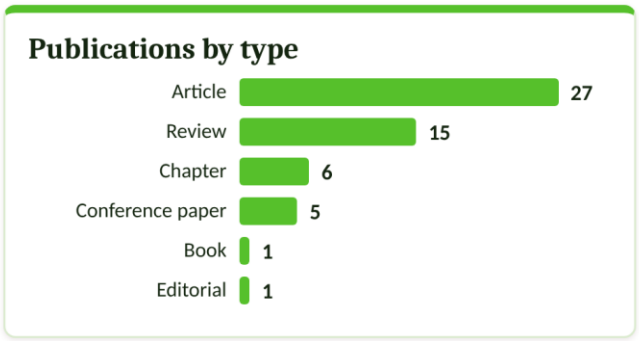
Slide on spatio-temporal distribution of Kharif crop in Bihar

RESEARCH AND PUBLICATIONS

SDG 15 research, 2024–2025

SRM University-AP has 55 publications mapped to SDG 15 for 2024 and 2025. Twenty-three selected publications are listed below. Research spans forests, wetlands, invasive plants, habitat modelling and land restoration. FWCI = Field-Weighted Citation Impact.





SELECTED PUBLICATIONS

#	Title and first author	Year	Type	FWCI
1	**Disturbance intensity drives structural, compositional and diversity attributes in tropical dry forests of Central India** Rathaude, S.K. et al.	2025	Article	2.74
2	**Invasive shrub (Lantana camara L.) alters the tree diversity and ecosystem-level carbon pools in tropical forests of Central India** Lone, P.A. et al.	2025	Article	2.5
3	**Predicting the potential distribution of Podophyllum hexandrum Royle in the Himalaya under CMIP6 climate projections** Wani, Z.A. et al.	2025	Article	1.43
4	**Improving ecosystem vitality in India: overcoming barriers to meet National and International targets** Wani, Z.A. et al.	2025	Review	0.63
5	**Treeline structure and regeneration pattern in protected and non-protected areas, Indian western Himalaya** Negi, V.S. et al.	2025	Article	2.13
6	**Species Diversity, Biomass Production and Carbon Sequestration Potential in the Protected Area of Uttarakhand, India** Upadhyay, G. et al.	2025	Article	1.41
7	**Distribution pattern and habitat suitability modelling of an invasive plant species – Solanum viarum Dunal** Jan, S. et al.	2025	Article	1.41
8	**WebGIS-based decision support system for soil erosion risk assessment for Guder River catchment, Ethiopia** Hajisheko, K.K. et al.	2025	Article	0.87
9	**Religion and Ecology: A Study on the Religious Beliefs and Practices in Conserving Ecology and Adapting to Climate Change Among the Bishnois of the Thar Desert in Rajasthan, India** Bikku, B.	2025	Article	4.68
10	**Species distribution modeling as a forest management tool: prospects and constraints** Kothandaraman, S. et al.	2025	Chapter	3.28
11	**Trade-offs in ecosystem services of a Ramsar wetland due to conversion into aquaculture ponds in the coastal region of Indian peninsula** Dar, S.A. et al.	2025	Article	0.63
12	**Unveiling a novel morphometric approach in claws and canines for species discrimination and age stratification in leopard (Panthera pardus fusca)** Pavithra, R. et al.	2025	Article	0.42
13	**Systematic evaluation of industrial greenbelts for quantifying carbon sequestration potential of afforestation activities** Raval, N.P. et al.	2025	Article	0.2
14	**Editorial: Conserving plants in a changing climate** Ahmad, Z. et al.	2025	Editorial	0.61
15	**Habitat suitability modelling and range change dynamics of Bergenia stracheyi under projected climate change scenarios** Wani, Z.A. et al.	2025	Article	0.37
16	**DTFD: A Transformer Approach for High-Resolution Satellite Image Forest Change Detection** Kaur, G. et al.	2025	Article	0
17	**Invasive plants alters the soil organic carbon storage in tropical forests of Madhya Pradesh, Central India** Lone, P.A. et al.	2025	Chapter	0
18	**Variation in heavy metal accumulation and translocation patterns in plant species utilized for reclamation of coal mine spoils in the southern Godavari Valley coalfield, India** Bashir, Z. et al.	2025	Article	1.07

#	Title and first author	Year	Type	FWCI
19	**Pharmaceuticals and personal care products in soil: Sources, impacts and myco-remediation strategies** Choudhury, M. et al.	2025	Review	2.2
20	**Linking carbon storage with land use dynamics in a coastal Ramsar wetland** Dar, S.A. et al.	2024	Article	1.21
21	**Evaluation of ecosystem services vis-à-vis perceptions and attitudes of local communities towards Wetland conservation in Kashmir Himalaya** Dar, S.A. et al.	2024	Article	1.46
22	**Deforestation Detection from Remote Sensing Images using Machine Learning** Tharun, D.S. et al.	2024	Conference Paper	1.46
23	**A combined bibliometric and sustainable approach of phytostabilization towards eco-restoration of coal mine overburden dumps** Bashir, Z. et al.	2024	Review	0.42

CONCLUSION

Progress towards life on land

SRM University-AP's contribution to SDG 15 combines community action, shared learning and research. Tree planting brought faculty and students together on the ground, while the Spatial Reflections webinars connected the campus with experts on invasive species, forests and vegetation monitoring.

Research on forests, wetlands, invasive plants, habitat modelling and land restoration adds scientific depth to this work. Together, these activities show the university's steady commitment to protecting and restoring life on land.