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[57204587666](#)

57
Journal PUBLICATIONS
8
Sponsored PROJECTS
42
Book and Book Chapters
DOCTORAL STUDENTS
Awarded: 01
Ongoing: 03

Brief Profile

Dr. Saikia has been working as an Assistant Professor in the Department of Environmental Sciences, Central University of Jharkhand, Ranchi since May 2013. She is a trained Plant Ecologist and Conservation Practitioner; with a Ph.D. in Forestry from NERIST, Itanagar and M.Sc. in Botany with Plant Ecology specialization from the Department of Botany, Gauhati University, Guwahati. She is basically working in the field of plant ecology including phytosociology, population and regeneration ecology, conservation of rare, endangered plant species, plant-soil interactions, plant population mapping, biomass and productivity estimation, plant invasions, and ecological niche

modelling in Indian forests. She has received eight different R & D projects sponsored by MoEFCC, DST, DBT, SERB, UGC, SAC-Ahmedabad, Govt. of India for the analyses of vegetation dynamics of Indian forests. She has supervised 01 Ph.D. thesis (03 ongoing) and 34 PG dissertations. Presently, she is an active member of the IUCN-Commission on Ecosystem Management-South Asia and Global Forests Biodiversity Initiatives (GFBI)-USA. She is recipients of the Fellow Award 2021 and Women Scientist Award (Age Group <45 Years) 2020 of The Society for Science of Climate Change and Sustainable Environment-New Delhi, PHSS Foundation Young Women Leadership Award 2018-2019 of the Prof. HS Srivastava Foundation for Science and Society-Lucknow, DBT Research Associate in 2011, startup grant under SERB-Young Scientists Scheme in 2016, UGC-startup grant for newly recruited faculties in 2014, and international travel support scheme from SERB (two times in 2017 & 2013). She has published more than 100 research articles including fifty-seven international/ national refereed articles in different Scopus, web of science, and UGC-care listed journals, 41 chapters in edited book volumes, and 01 authored and 02 edited books in the field of plant ecology, restoration ecology, and conservation biology. She participated in the Inaugural Global Forest Biodiversity Initiative Conference & Joint GFBI-FECS Symposium on Forest Research in the Big Data Era organized by GFBI, USA, and Beijing Forestry University held at Beijing Forestry University, China in September 2017, and 1st International Scientific Symposium on Agarwood (ISSA) on 'Agarwood in the New Era' organized by Faculty of Forestry, Universiti Putra Malaysia, Malaysia during September 2013 in addition to her participation in different international/ national/ regional/ state level seminars/ conferences/ webinars in India with invited talks/ panelists/ oral presentations/ sessions chaired/ co-chaired/ rapporteur, etc.

Present Position/Address

2013 – Present:	Assistant Professor Department of Environmental Sciences School of Natural Resource Management Central University of Jharkhand, Ranchi-835222, JHARKHAND INDIA
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Past Experiences

2012 – 2013	Assistant Professor (on contract), Department of Environmental Sciences, Central University of Jharkhand, Ranchi-835205, Jharkhand, India
2011 – 2012	DBT-Research Associate (I & II) under DBT, Govt. of India, New Delhi in the Department of Environmental Science, Tezpur University, Assam, India.
2011 – 2011	Guest Lecturer in the Department of Forestry, NERIST, Itanagar, Arunachal Pradesh, India
2007 - 2010	Junior Research Fellow/ Senior Research Fellow in a DBT, GoI sponsored research project entitled "Mapping and Quantitative Assessment of Geographic Distribution and Population Status of Plant Resources of Eastern Himalayan Region" in the Department of Forestry, NERIST, Itanagar, Arunachal Pradesh, India

Education Qualification

2011	Ph. D. (Forestry) from the Department of Forestry, NERIST, Itanagar, Arunachal Pradesh, India
	Thesis Title: Population structure and conservation practices of <i>Aquilaria malaccensis</i> Lam. In homegardens of upper Assam and its prospects in socio-economic development
	Supervisor: Prof. M.L. Khan
2006	M. Sc. (Botany with Plant Ecology specialization) from the Department of Botany, Gauhati

	University, Guwahati, Assam, India
2004	B. Sc. (Botany Hons.) from the North Lakhimpur College, under Dibrugarh University, Assam, India

Honours/Awards

<ul style="list-style-type: none"> ▪ Fellow of the Society for Science of Climate Change and Sustainable Environment (FSSCE), New Delhi of the year 2021 in December 2022.
<ul style="list-style-type: none"> ▪ Women Scientist Award 2020 (<45 Years Category) of The Society for Science of Climate Change and Sustainable Environment, New Delhi in December 2020.
<ul style="list-style-type: none"> ▪ PHSS Foundation Young Women Leadership Award 2018-2019 from Prof. H. S. Srivastava Foundation for Science & Society, Lucknow in November 2019.
<ul style="list-style-type: none"> ▪ International Travel Support Scheme from SERB, GoI (twice) to participate in Inaugural Global Forest Biodiversity Initiative Conference & Joint GFBI-FECS Symposium on Forest Research in the Big Data Era held in Beijing Forestry University, China in September 2017 (Ref. No. ITS/2476/2017-18 dated 21 May 2018) and to participate in 1st International Scientific Symposium on Agarwood (ISSA) on 'Agarwood in the New Era' held in Universiti Putra Malaysia, Malaysia in September 2013 (Ref. No. SB/ITS-Y/02873/ 2013-2014 dated 05 December 2014)
<ul style="list-style-type: none"> ▪ DBT-Research Associateship under Department of Biotechnology, GoI, New Delhi in June 2011

Research and Teaching Experience

RESEARCH FIELD:	Plant Ecology, Conservation Biology, Soil Ecology		
POST Ph.D. EXPERIENCE	13 Years		
TEACHING EXPERIENCE	12 Years		
SUPERVISING	Ph.D.: 03	M. Sc.: 05	
SUPERVISED	Ph.D.: 01	M. Sc.: 34	

Research Projects

1.	<p>Title: Level-1 category of DST-FIST Program to strengthen the research facilities in the Department of Environmental Sciences, Central University of Jharkhand, Ranchi.</p> <p>Funding Agency: DST, New Delhi, Govt. of India (Ref. No. SR/FST/ES-I/2019/55 (C) dated 25 March 2021)</p> <p>Total grant: INR 138.00 lakh for five years (PI of the Project, ongoing)</p>
2.	<p>Title: All India coordinating R&D project on 'Long-term monitoring of soil processes in forests and grasslands' coordinated by IISc, Bengaluru</p> <p>Funding Agency: Long-Term Ecological Observatories (LTEO) Programme under the Climate Change Action Plan of MoEFCC, Govt. of India (Ref. No. 13008/72/2019-CC, dt. 12 March 2020)</p> <p>Total grant: INR 319.00 lakh for five years (Co-PI of the Project, ongoing)</p>
3.	<p>Title: All India coordinating R&D project on 'Monitoring Forest structure and dynamics in relation to climate change across different biogeographic zones of India' coordinated by IISc, Bengaluru</p> <p>Funding Agency: Long-Term Ecological Observatories (LTEO) Programme under the Climate Change Action Plan of MoEFCC, Govt. of India (Ref. No. 13008/72/2019-CC, dt. 12 March 2020)</p> <p>Total grant: INR 374.00 lakh for five years (Co-Investigator of the Project, ongoing)</p>
4.	<p>Title: Collaborative R&D project with Dr. Harisingh Gour Vishwavidyalaya (A Central University), Sagar on 'Mapping and Quantitative Assessment of Plant Resources and its Distribution in Madhya Pradesh, Central India'</p> <p>Funding Agency: DBT, New Delhi, Govt. of India (Ref. No. BT/PR12899/NDB/39/506/2015 dated 20 June 2017)</p> <p>Total grant: INR 212.2644 lakh (55.4176 lakh of CUJ) for five years (Co-PI of the Project, completed on 19 June 2022)</p>
5.	<p>Title: 'Monitoring spatio-temporal dynamics of above-ground biomass of forests ecosystems using airborne L & S-band SAR images'</p> <p>Funding Agency: ISRO-SAC-Ahmedabad, Govt. of India (Ref. No. EPSA/3.1.1/2017 dated 13 November 2017)</p> <p>Total grant: INR 24.30 lakh for three years (Co-PI of the Project, completed on 31 March 2021)</p>

6.	Title: 'Monitoring and Mapping of Forest Communities with special reference to Invasive Plant Species using Airborne Visible/Infrared Imaging Spectrometer–Next Generation (AVIRIS-NG) and Sentinel-1 SAR images' Funding Agency: ISRO-SAC-Ahmedabad, Govt. of India (Ref. No. EPSA/4.20/2017 dated 19 December 2017) Total grant: INR 20.50 lakh for three years (Co-PI of the Project, completed on 31 December 2020)
7.	Title: 'Status, Distribution, and Composition of Sal Forests of Ranchi, Jharkhand, East India in relation to Micro-climatic and Edaphic Conditions' Funding Agency: SERB, New Delhi, Govt. of India as Start-Up Grant under Young Scientists Scheme (Ref. No. YSS/2015/000479 dated 12 January 2016) Total grant: INR 29.36 lakh for three years (PI of the Project, completed)
8.	Title: 'Phytosociological analysis of forests of Ranchi, Jharkhand, India' Funding Agency: UGC, New Delhi, Govt. of India under UGC-BSR Research Start-Up grant for newly recruited faculty at Assistant Professor level of Science Departments (Ref. No. F.30-14/2014(BSR) dated 22 July 2014) Total grant: INR 06.00 lakh for two years (PI of the Project, completed)

Courses Taught

1.	Post Graduate: Ecology and Ecosystem (T&P), Restoration Ecology, Forestry and Wildlife Management, Biodiversity Conservation, Instrumentation and Analytical Techniques, Fundamental of Soil Sciences
2.	Under Graduate: Environment and Ecology, Land and Soil Resource Management, Environmental Studies, Forestry and Wildlife Management, Biodiversity Conservation, Instrumentation and Analytical Techniques

Additional roles/ responsibility

1.	Proctor of the University (since December 2015)
2.	Member BoS (DEVS)
3.	Member, Departmental Research Committee

Publications

Journal Articles:

1.	Ekka, P., Shilky, Baishya, R., Saikia, P.* (2024). Ecological Analyses of Street Trees of Indian Cities to Achieve United Nations Sustainable Development Goals. <i>Ecological Frontiers</i> (in press) https://doi.org/10.1016/j.ecofro.2024.03.003 .
2.	Saikia, P.* , Kumar, S., Kumar, A. (2024). Plant population mapping and quantitative assessment of peri-urban vegetation of Ranchi, eastern India. <i>Tropical Ecology</i> (online first) https://doi.org/10.1007/s42965-024-00342-z . IF: 1.6
3.	Diksha, Kumar, A., Saikia, P. , Srivastava, P. (2024). Human-induced Impacts on Ecological Infrastructure in the Himalayan Urban Agglomerations. <i>Acta Ecologica Sinica</i> , 44(1): 84-95. https://doi.org/10.1016/j.chnaes.2023.07.005 .
4.	Kishore, B.S.P.C., Kumar, A., Saikia, P.* (2024). Understanding the Invasion Potential of <i>Chromolaena odorata</i> and <i>Lantana camara</i> in the Western Ghats, India: An Ecological Niche Modelling Approach under Current and Future Climatic Scenarios. <i>Ecological Informatics</i> , 79: 102425. https://doi.org/10.1016/j.ecoinf.2023.102425 . IF: 5.1
5.	Bouchard, E., Saikia, P. et al. (2024). Global patterns and environmental drivers of forest functional composition. <i>Global Ecology and Biogeography</i> , 33(2): 303-324. http://doi.org/10.1111/geb.13790 . IF: 6.4
6.	Kishore, B.S.P.C., Kumar, A., Saikia, P. , Khan, M.L. (2024). Alpha and Beta Diversity Mapping in Tropical Deciduous Forests using High-fidelity Imaging Spectroscopy. <i>Advances in Space Research</i> , 73(2): 1413-1426. https://doi.org/10.1016/j.asr.2023.02.031 . IF: 2.6
7.	Kishore, B.S.P.C., Kumar, A., Saikia, P. , Lele, N., Srivastava, P., Pulla, S., Suresh, H., Bhattacharya, B.K., Khan, M.L., Sukumar, R. (2024). Mapping of understory invasive plant species clusters of <i>Lantana camara</i> and <i>Chromolaena odorata</i> using airborne hyperspectral remote sensing. <i>Advances in Space Research</i> , 73(2):1379-1396. https://doi.org/10.1016/j.asr.2022.12.026 . IF: 2.6
8.	Mo, L., Zonher, C.M. Reich, P.B..... Saikia, P. et al. (2023). Integrated global assessment of the natural forest carbon potential. <i>Nature</i> , 624: 92-101. https://doi.org/10.1038/s41586-023-06723-z . IF: 64.8
9.	Ma, H., Crowther, T.W., Saikia, P. et al. (2023). The global biogeography of tree leaf form and habit. <i>Nature Plants</i> , 9, 1795–1809. https://doi.org/10.1038/s41477-023-01543-5 . IF: 18

10. Kumar, R., Kumar, G., Kumar, A., **Saikia, P.*** (2023). Influence of Topographic Factors on Community Parameters in Tropical Deciduous Forests of Eastern India. *Vegetos* (in press). <https://doi.org/10.1007/s42535-023-00703-4>.
11. Delavaux, C.S., Crowther, T.W., Zohner, C.M., **Saikia, P.** et al. (2023). Native diversity buffers against severity of non-native tree invasions. *Nature*, 621: 773–781. <https://doi.org/10.1038/s41586-023-06440-7>. **IF: 64.8**
12. Kumar, A., Upreti, M., Pandey, A.C., **Saikia, P.**, Khan, M.L. (2023). Contribution of Landscape Transformation in the Development of Heat Islands and Heat Sinks in Urban and Peri-urban Regions of Ranchi City, Chotanagpur Plateau. *Resources*, 12(5): 58. <https://doi.org/10.3390/resources12050058>. **IF: 3.3**
13. Hordijk, I., Maynard, D.S., Hart, S.P., **Saikia, P.** et al. (2023). Evenness mediates the global relationship between forest productivity and richness. *Journal of Ecology*, 111(6): 1308-1326. <https://doi.org/10.1111/1365-2745.14098>. **IF: 5.5**
14. Pandey, A.C., Kumari, N., Ahmad, S., Kumar, A., **Saikia, P.**, Parida, B., Chaudhary, S.K., Lele, N. (2023). Evaluating biochemical and biophysical characteristics of tropical deciduous forests of eastern India using remote sensing and in-situ parameter estimation. *Remote Sensing Applications: Society and Environment*, 29: 100909. ISSN: 2352-9385. <https://doi.org/10.1016/j.rsase.2022.100909>. **IF: 4.7**
15. Kumar, G., Kumar, A., **Saikia, P.**, Khan, M.L. (2022). Ecological impacts of forest fire on composition and structure of Tropical Deciduous forests of Central India. *Physics and Chemistry of the Earth, Parts A/B/C* 128: 103240. <https://doi.org/10.1016/j.pce.2022.103240>. **IF: 3.7**
16. Kumar, R., Kumar, A., **Saikia, P.*** (2022). Forest composition regulates above-ground biomass in Sal forests of Ranchi, Eastern India. *Environmental Sustainability* 5: 355-373. <https://doi.org/10.1007/s42398-022-00240-x>
17. Liang, J., Gamarra, J.G.P., Picard, N., Zhou, M., **Saikia, P.** et al. (2022). Co-limitation towards lower latitudes shapes global forest diversity gradients. *Nature Ecology and Evolution* 6: 1423–1437. <https://doi.org/10.1038/s41559-022-01831-x>. **IF: 16.8**
18. Pragya, M., **Saikia, P.*** (2022). Comparative Analysis of Leguminous and Non-Leguminous Tree Species in Terms of Leaf Chemistry and Nutrient Cycling. *International Journal of Ecology and Environmental Sciences* 48(3): 333-344. <http://dx.doi.org/10.55863/ije.2022.0112>
19. Kishore, B.S.P.C., Kumar, A., **Saikia, P.**, Khan, M.L. (2022). Hyperspectral Remote Sensing for Mapping Foliar Pigment Concentration in Mudumalai Tiger Reserve, India. *International Journal of Ecology and Environmental Sciences* 48(3): 317-331. <http://dx.doi.org/10.55863/ije.2022.0107>
20. Gatti, R.C., Reich, P.B., Liang, J., **Saikia, P.** et al. (2022). The number of tree species on Earth. *PNAS (Proceedings of the National Academy of Sciences of the United States of America)* 119(6): e2115329119. <https://doi.org/10.1073/pnas.2115329119>. **IF: 11.1**
21. Kumar, A., Manisha, Lal, P., Prasad, A., Tripathy, P., **Saikia, P.** (2022). Analysing Urban Damage and Surface Deformation based hazard-risk in Kathmandu City occurred during Nepal Earthquake (2015) using SAR Interferometry. *Advances in Space Research* 70(12): 3892-3904. <https://doi.org/10.1016/j.asr.2022.02.003>. **IF: 2.6**
22. Kumar, A., Kumar, G., **Saikia, P.***, Khare, P.K., Khan, M.L. (2022). Spatial pattern of tree diversity and impacts of ecological disturbances on forest structure in tropical deciduous forests of Central India. *Biotropica* 54(6): 1363-1375. <https://doi.org/10.1111/btp.13068>. **IF: 2.1**
23. Lal, P., Kumar, A., **Saikia, P.***, Das, A., Patnaik, C., Kumar, G., Dwivedi, C.S., Pandey, A.C., Srivastava, P., Khan, M.L. (2022). Effect of Vegetation Structure on Above Ground Biomass in Tropical Deciduous Forests of Central India. *Geocarto International* 37(21): 6294-6310. <https://doi.org/10.1080/10106049.2021.1936213>. **IF: 3.0**
24. Thakur, K.K., Bhat, P., Kumar, A., Ravikanth, G., **Saikia, P.*** (2022). Distribution mapping of *Bauhinia vahlii* Wight & Arn. in India using ecological niche modelling. *Tropical Ecology* 63: 286–299. <https://doi.org/10.1007/s42965-021-00197-8>. **IF: 1.6**
25. Lal, P., Kumar, A., Prasad, A., Kumar, S., **Saikia, P.***, Dayanandan, A., Roy, P.S., Khan, M.L. (2022). COVID-19 Pandemic Hazard–Risk–Vulnerability Analysis: A Framework for an Effective Pan-India Response. *Geocarto International* 37(25): 9098-9109. <https://doi.org/10.1080/10106049.2021.2012529>. **IF: 3.0**
26. Nag, A., Chatterjee, S., **Saikia, P.*** (2022). Floristic status of tropical deciduous forests in Odisha, Eastern India. *Vegetos* 35(1): 51–62. <https://doi.org/10.1007/s42535-021-00283-1>.
27. Tiwari, S., Ghosh, B., Vaidya, S.N., Rahaman, S.K.M., Khatun, M., Garai, S., **Saikia, P.**, Kumar, A. (2021). Modeling potentially suitable lac cultivation zones of *Butea monosperma* to promote livelihood security in rural India. *Vegetos* 34(3): 630-637. <https://doi.org/10.1007/s42535-021-00222-0>.
28. Lal, P., Kumar, A., Bharti, S., **Saikia, P.**, Adhikari, D., Khan, M.L. (2021). Lockdown to Contain the COVID-19

- Pandemic: An Opportunity to Create a less polluted environment. *Aerosol and Air Quality Research* 21(3):1-9. <https://doi.org/10.4209/aaqr.2020.05.0229>. IF: 4.0
29. Kumar, R., **Saikia, P.*** (2021). Spatio-temporal soil nutrient dynamics and plant species diversity in selected Sal (*Shorea robusta*) forests of Ranchi, Eastern India. *Vegetos* 34(1): 235-248. <https://doi.org/10.1007/s42535-020-00173-y>.
 30. Kumar, R., **Saikia, P.*** (2021). Population structure and regeneration status of *Shorea robusta* and associated trees in Sal forests of Ranchi, Eastern India. *Tropical Ecology* 62(1): 34-51. <https://doi.org/10.1007/s42965-020-00121-6>. IF: 1.6
 31. Kishore, B.S.P.C., Kumar, A., **Saikia, P.***, Lele, N., Pandey, A.C., Srivastava, P., Bhattacharya, B.K., Khan, M.L. (2020). Major Forests and Plant Species Discrimination in Mudumalai Forests Region using Airborne Hyperspectral Sensing. *Journal of Asia-Pacific Biodiversity* 13(4): 637-651. <https://doi.org/10.1016/j.japb.2020.07.001>. IF: 0.8
 32. Rajpoot, R., Adhikari, D., Verma, S., **Saikia, P.**, Kumar, A., Grant, K.R., Dayanandan, A., Kumar, A., Khare, P.K., Khan, M.L. (2020). Climate models predict a divergent future for the medicinal tree *Boswellia serrata* Roxb. in India. *Global Ecology and Conservation* 23: e01040. <https://doi.org/10.1016/j.gecco.2020.e01040>. IF: 4.0
 33. Kumar, A., Kumar, A., Adhikari, D., Ravikanth, G., **Saikia, P.***, Khan, M.L. (2020). Ecological Niche Modelling for Assessing Potential Distribution of *Pterocarpus marsupium* Roxb. in Ranchi, Eastern India. *Ecological Research* 35(6): 1095-1105. <https://doi.org/10.1111/1440-1703.12176>. IF: 2.0
 34. Lal, P., Kumar, A., Kumar, S., Kumari, S., **Saikia, P.***, Dayanandan, A., Adhikari, D., Khan, M.L. (2020). The dark cloud with a silver lining: Assessing the impact of the SARS-COVID-19 pandemic on the global environment. *Science of the Total Environment* 732(2020): 139297. <https://doi.org/10.1016/j.scitotenv.2020.139297>. IF: 9.8
 35. Zohner, C.M., Mo, L., Renner, S.S.,..... **Saikia, P.** et al. (2020). Late spring-frost risk between 1959 and 2017 decreased in North America, but increased in Europe and Asia. *PNAS (Proceedings of the National Academy of Sciences of the United States of America)* 117(22): 12192-12200. <https://doi.org/10.1073/pnas.1920816117>. IF: 11.1
 36. Kumar, R., **Saikia, P.*** (2020). Wild edible plants of Jharkhand and their utilitarian perspectives. *Indian Journal of Traditional Knowledge* 19(2): 237-250. <http://nopr.niscpr.res.in/handle/123456789/54361>. IF: 0.8
 37. Lal, P., Prakash, A., Kumar, A., Srivastava, P.K., Srivastava, P., **Saikia, P.**, Pandey, A.C., Khan, M.L. (2020). Evaluating the 2018 Extreme Flood Hazard Events in Kerala, India. *Remote Sensing Letters* 11(5): 436-445. <https://doi.org/10.1080/2150704X.2020.1730468>. IF: 2.3
 38. Singh, E., Kumar, A., Khapre, A., **Saikia, P.**, Shukla, S.K., Kumar, S. (2020). Efficient Removal of Arsenic using Plastic Waste Char: Prevailing Mechanism and Sorption Performance. *Journal of Water Process Engineering* 33(2020): 101095. <https://doi.org/10.1016/j.jwpe.2019.101095>. IF: 7.0
 39. Kumar, R., **Saikia, P.*** (2020). Floristic analysis and dominance pattern of a Sal (*Shorea robusta* C. F. Gaertn.) Forests of Ranchi, Jharkhand, Eastern India. *Journal of Forestry Research* 31(2): 415-427. <https://doi.org/10.1007/s11676-018-0829-9>. IF: 3.0
 40. Steidinger, B.S., Crowther, T.W., Liang, J., **Saikia, P.**, et al. (2019). Climatic control of decomposition drives the global biogeography of forest tree symbioses. *Nature* 569: 404-408. <https://doi.org/10.1038/s41586-019-1128-0>. IF: 64.8
 41. Kumar, A., Kishore, B.S.P.C., **Saikia, P.***, Deka, J., Bharali, S., Singha, L.B., Tripathi, O.P., Khan, M.L. (2019). Tree diversity assessment and above-ground forests Biomass estimation using SAR Remote Sensing: A case study of Higher Altitude vegetation of North-East Himalaya, India. *Physics and Chemistry of the Earth* 111: 53-64. <https://doi.org/10.1016/j.pce.2019.03.007>. IF: 3.7
 42. Shooner, S., Davies, J., **Saikia, P.**, Deka, J., Bharali, S., Tripathi, O.P., Singha, L.B., Khan, M.L., Dayanandan, S. (2018). Phylogenetic diversity patterns in Eastern Himalayan forests reveal evidence for environmental filtering of evolutionarily distinct lineages. *Ecosphere* 9(5): e02157. <https://doi.org/10.1002/ecs2.2157>. IF: 2.7
 43. **Saikia, P.**, Deka, J., Bharali, S., Kumar, A., Tripathi, O.P., Singha, L.B., Dayanandan, S., Khan, M.L. (2017). Plant diversity patterns and conservation status of Eastern Himalayan forests in Arunachal Pradesh, Northeast India. *Forest Ecosystems* 4:28. <https://doi.org/10.1186/s40663-017-0117-8>. IF: 4.1
 44. **Saikia, P.**, Khan, M.L. (2016). Tree species diversity and its population and regeneration status in homegardens of upper Assam, Northeast India. *Journal of Forest and Environmental Science* 32(2):129-139. <https://doi.org/10.7747/JFES.2016.32.2.129>.
 45. Sharma, P., **Saikia, P.**, Sarma, K.P. (2016). Diversity, uses, and *in vitro* propagation of different Bamboos of Sonitpur district, Assam. *Journal of Ecosystem and Ecography* 6(2): 1-9.
 46. **Saikia, P.**, Khan, M.L. (2014). Ecological features of cultivated stands of *Aquilaria malaccensis* Lam.

(Thymelaeaceae) - a vulnerable tropical tree species in Assamese homegardens. *International Journal of Forestry Research* 2014: 1-16. <https://doi.org/10.1155/2014/140926>.

47. **Saikia, P.**, Khan, M.L. (2014). Homegardens of upper Assam, northeast India: a typical example of on-farm conservation of Agarwood (*Aquilaria malaccensis* Lam.). *International Journal of Biodiversity Science, Ecosystem Services & Management* 10(4): 262-269. <https://doi.org/10.1080/21513732.2014.973449>.
48. **Saikia, P.**, Khan, M.L. (2014). Status, distribution, and socio-cultural uses of some selected homegarden plants of upper Assam, Northeast India. *Bharatiya Samajik Chintan* 1(3): 74-78.
49. **Saikia, P.**, Khan, M.L. (2013). Population structure and regeneration status of *Aquilaria malaccensis* Lam. in homegardens of upper Assam, NE India. *Tropical Ecology* 54(1): 1-13. **IF: 1.6**
50. **Saikia, P.**, Khan, M.L. (2012). Seedling survival and growth of *Aquilaria malaccensis* Lam. in different microclimatic conditions of northeast India. *Journal of Forestry Research* 23(4): 569-574. <https://doi.org/10.1007/s11676-012-0296-7>. **IF: 3.0**
51. **Saikia, P.**, Choudhury, B.I., Khan, M.L. (2012). Floristic composition and plant utilization pattern in homegardens of Upper Assam, India. *Tropical Ecology* 53(1): 105-118. **IF: 1.6**
52. **Saikia, P.**, Khan, M.L. (2012). *Aquilaria malaccensis* Lam., a Red-listed and highly exploited tree species in Assamese home garden. *Current Science* 102(4): 546-547. <https://www.currentscience.ac.in/Volumes/102/04/0546.pdf>. **IF: 1.0**
53. **Saikia, P.**, Khan, M.L. (2012). Agar (*Aquilaria malaccensis* Lam.): a promising crop in the homegardens of Upper Assam, northeastern India. *Journal of Tropical Agriculture* 50(1-2): 8-14. <http://www.jtropag.kau.in/index.php/ojs2/article/view/260/260>.
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E-Content Development/ Books/ Book Chapters

E-Content Development

1. **Saikia, P.** (2022). UNIT-2: Biodiversity Values and Ecosystem Services in BLOCK-1: Understanding Biodiversity. M.Sc. in Environmental Sciences, Indira Gandhi National Open University, New Delhi. Available at URL: <http://egyankosh.ac.in//handle/123456789/91201>. **December 2022**
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Authored/Edited Books:

1. **Saikia, P.**, Kumar, A., Khan, M.L., Lei, X. (eds.) (2024). Forests for Inclusive and Sustainable Economic Growth. Elsevier Inc. (in press). **ISBN: 9780443314063**.
2. Kumar, A., Srivastava, P.K., **Saikia, P.**, Mall, R.K. (eds.) (2023). Earth Observation in Urban Monitoring: Techniques and Challenges. Elsevier Inc. Available at URL: <https://doi.org/10.1016/C2021-0-01898-8>, **ISBN: 9780323991643**
3. Pandey, V.C., Mahajan, P., **Saikia, P.**, Praveen, A. (2022). Fibre crops-based Phytoremediation: Socio-Economic and Environmental Sustainability. Elsevier Inc. <https://doi.org/10.1016/C2020-0-00723-1> **ISBN: 9780128239933**

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40. **Saikia, P.**, Kumar, A., Khan, M.L. (2017). Agroforestry: A sustainable land-use system for livelihood security and climate change mitigation. In: *Climate Change and Agroforestry: Adaptation, Mitigation, and Livelihood security*, Pandey, C.B., Gaur, M.K., Goyal, R.K. (eds.), **Chapter 3**, New India Publishing Agency, New Delhi, India, pp. 61-70. ISBN: 9789386546067.
41. **Saikia, P.**, Kumar, A., Khan, M.L. (2016). Biodiversity status and climate change scenario in Northeast India. In: *Climate Change Challenge (3C) and Social-Economic-Ecological Interface-Building*, Nautiyal, S., Schaldach, R., Raju, K.V., Kaechele, H., Pritchard, B.I, Rao, K.S. (eds.), **Chapter 8**, Springer International Publishing, Switzerland, pp. 107-120. https://doi.org/10.1007/978-3-319-31014-5_8. ISBN: 9783319310138.

Papers in Conference Proceedings

1. Garai, S., Kumar, A., **Saikia, P.**, Srivastava, P., Pandey, A.C., Das, A., Patnaik, C., Khan, M.L. (2019). SAR Backscatter for Tree Phenology in Satpura Tiger Reserve Forests, Central India. In: Proceedings of ISG-ISRS National Symposium-2019, NESAC-Shillong, Meghalaya, pp. 320-321.
2. **Saikia, P.**, Khan, M.L. (2009). Conservation and diversity of medicinal plants in homegardens of Teok area of Jorhat district, Assam. In: *Proceedings of National Seminar on Agroforestry for Socioeconomic Development of North Eastern Region*, Singh, B., Rethy, P., Gajurel, P.R. (eds), Department of Forestry, NERIST (Deemed University), Arunachal Pradesh, pp. 152-161.

Seminar/ Conference Participation (Invited Talks/ Session Chair/ Co-Chair/ Panelists/ Resource Person/ Oral Presentations)

International Seminar/ Conferences (abroad)

1. **Saikia, P.** (2023). Plant Inventory Datasets of Arunachal Pradesh, Northeast India at Altitudinal Gradient for Determining Forest Composition and Above-ground Biomass. Delivered an **invited talk** virtually at the 'Purdue Biodiversity Database Development Workshop' organized by **Purdue University, Indianapolis, USA** on 3 August 2023.
2. **Saikia, P.** (2022). Acted as a **panelist** virtually in a panel discussion on the theme 'Women in action' in International Women's Day 2022 organized by International Union for Conservation of Nature-Commission on Ecosystem Management (IUCN-CEM), Southasia on 5 March 2022.
3. **Saikia, P.** (2017). Diversity and dominance of a Tropical Moist Deciduous Forests of Ranchi, Jharkhand, Eastern India. **Paper presented** in Inaugural Global Forest Biodiversity Initiative Conference & Joint GFBI-FECS Symposium on Forest Research in the Big Data Era organized by GFBI, USA and Beijing Forestry University, **China** held at Beijing Forestry University, China during 6 to 9 September 2017.
4. **Saikia, P.**, Khan, M.L. (2013). Cultivation of Agar (*Aquilaria malaccensis* Lam.) in homegardens of upper Assam, Northeast India and its prospect in socio-economic development. **Paper presented** and abstract published on page 42 of the *Proceedings of the 1st International Scientific Symposium on Agarwood (ISSA) on 'Agarwood in the New Era'* organized by Faculty of Forestry, Universiti Putra Malaysia, **Malaysia** during 3 to 5 September 2013.

International Seminar/ Conferences (in India)

1. **Saikia, P.** (2022). Wild edible plants of Jharkhand and their Ethnomedicinal significance. Delivered a **Keynote Lecture** in International Conference on Ethnobotany: Present and Future Perspectives organized by Department of Botany, Government Degree College, Billawar, Jammu on 22 November 2022.
2. **Saikia, P.** (2022). Ecosystem Restoration: A way towards a sustainable future. Delivered an **invited talk** in *International Conference on Biodiversity: Exploration, Exploitation, Conservation for Sustainable Development (ICB-01)-2022* organized by Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Assam on 5 January 2022.
3. **Saikia, P.** (2022). Co-chaired a technical session (TS-21) in *International Conference on Biodiversity: Exploration, Exploitation, Conservation for Sustainable Development (ICB-01)-2022* organized by Pandit

Deendayal Upadhyaya Adarsha Mahavidyalaya, Assam on 5 January 2022.

4. **Saikia, P.** (2021). Co-chaired a technical session on 'Environmental Pollution and Transportation' in *International Webinar on Role of Transportation, Environment and Energy in Integrated Urban Planning (RTEE-IUP-2021)* organized by CUJ, Ranchi from 25-26 November 2021.
5. **Saikia, P.** (2020). Forests Degradation impact on Livelihood Security and Climate Change: Initiatives towards its Mitigation. Delivered an **invited talk** in *International Workshop cum Training on Green Growth Strategies for Climate Resilience and DRR: Policies, Pathways and Tools* organized by NIDM, New Delhi and Institute for Social and Economic Change, Bengaluru from 26-28 November 2020.
6. **Saikia, P.** (2020). Immune-booster plants of Jharkhand to fight against COVID-19 Pandemic. Delivered an **invited talk** in *International Webinar on Public Health, Research and Awareness for Sustainable Environment (IWPHRASE 2020)* organized by Environwaste (Heal the Earth), Harithalay, and The Better Earthlings on 27 September 2020.
7. **Saikia, P.** (2020). Acted as a **panelist** in a panel discussion on the theme 'Mentors and Role Models in Ecology and Conservation' in International Symposium on India's Biodiversity: Origin, Evolution, and Conservation organized by ATREE, Bengaluru at IISc, Bengaluru on 03 February 2020.
8. **Saikia, P.** (2019). Homegarden: A sustainable agroforestry for crop diversity and farm resilience. Delivered an **invited talk** and abstract published on page 18 of Souvenir of *International conference on Advances in Sustainable Agriculture: Bioresources, biotechnology and bioeconomy* organized by Mansarovar Global University, Bhopal and PHSS foundation for Science and Society, Lucknow from 29-30 November 2019.
9. **Saikia, P.** (2019). *Aquilaria malaccensis* Lam.: A critically endangered and IUCN red-listed Indian tree in homegardens of Assam, Northeast India. Delivered an **invited talk** in 3rd World Clean Environment Summit 2019 organized by St. Xavier's College, Ranchi from 19-21 August 2019.
10. **Saikia, P., Kumar, A., Khan, M.L.** (2019). Tree diversity mapping and quantitative assessment of tropical forests of Madhya Pradesh. **Paper presented** and abstract published on page 69 of Souvenir of 3rd World Clean Environment Summit 2019 organized by St. Xavier's College, Ranchi from 19-21 August 2019.
11. **Saikia, P.** (2018). Status, Distribution, and Composition of Sal Forests of Ranchi, Jharkhand, Eastern India. **Paper presented** and abstract published on page 90 of Souvenir of *International Conference on Environmental Challenges and Sustainability (ICECS 2018)* organized by CUJ, Ranchi from 31 October to 02 November 2018.
12. **Saikia, P., Khan, M.L.** (2018). Plant species diversity along an altitudinal gradient of Arunachal Pradesh, Eastern Himalaya. Delivered an **invited talk** in *International Workshop on Biodiversity and Climate Change (BDCC 2018)* organized by CORAL, IIT Kharagpur from 24-27 February 2018.
13. **Saikia, P.** (2018). **Chaired** a session on 'Livelihood and NGOs' in *International Conference on Advances in Environmental and Agricultural Biotechnology (ICAEA 2018)* organized by St. Xavier's College, Ranchi and IGCCIA, Pune from 22-24 February 2018.
14. **Saikia, P.** (2018). Forests and forest resources of Jharkhand, Eastern India and its prospects in sustaining rural livelihood. Delivered an **invited talk** in *International Conference on Advances in Environmental and Agricultural Biotechnology (ICAEA 2018)* organized by St. Xavier's College, Ranchi and IGCCIA, Pune from 22-24 February 2018.
15. **Saikia, P.** (2018). Prospects of Bamboo cultivation and its Environmental Significance. Delivered an **invited talk** at *International Conference on Advances in Environmental and Agricultural Biotechnology (ICAEA 2018)* organized by St. Xavier's College, Ranchi and IGCCIA, Pune from 22 to 24 February 2018.
16. **Saikia, P.** (2018). Status, distribution, and floristic analysis of Eastern Himalayan forests of Arunachal Pradesh, Northeast India. **Paper presented** and abstract published on pages 67-68 of *Book of Abstracts of International Conference on Environment and Ecology (ICEE 2018)* organized by Gauhati University, Assam, IFEE, Kolkata and Confederation of Indian Universities, New Delhi from 12-14 February 2018.
17. **Saikia, P.** (2018). Acted as a **Rapporteur** in a session on "Management of Water Resources in Agriculture" at the *International Conference on Water & Waste Water Management and Modelling (ICWWMM 2018)* organized by the Centre for Water Engineering and Management, Central University of Jharkhand, Ranchi from 16-17 January 2018.
18. **Saikia, P.** (2017). Distribution and Conservation Status of Plant Genetic Resources of Tropical Deciduous Forests of Ranchi, Jharkhand, Eastern India. **Paper presented** and abstract published on page 166 of the *Book of Abstracts of International Conference on Environment and Ecology (ICEE 2017)* organized by St. Xavier's College, Ranchi, IFEE, Kolkata, and Confederation of Indian Universities, New Delhi from 27-29 March 2017.
19. **Saikia, P.** (2016). Homegardens of upper Assam, Northeast India: An Agroecosystem for conservation of tree species diversity. **Paper presented** and abstract published in Sl. No. 10 of the *Souvenir of International Conference on Water, Environment, Energy and Society (ICWEES-2016)* organized by AISECT University, Bhopal and Texas A & M University, USA at AISECT University, Bhopal from 15-18 March 2016.

20. **Saikia, P.**, Deka, J., Bharali, S., Tripathi, O.P., Khan, M.L. (2014). Study on tree population status and diversity in West Kameng district of Arunachal Pradesh, Eastern Himalaya. **Paper presented** and abstract published on page 69 of the *Book of Abstracts of Tropical Ecology Congress, 2014 on 'Tropical Ecosystem in a changing world'* organized by JNU, New Delhi from 10-12 December 2014.
21. **Saikia, P.**, Devi, A. (2012). Cultivation and prospects of energy crop in homegardens of upper Assam, northeast India. **Paper presented** and abstract published on page 210 of the *Proceedings of the International seminar and workshop on 'Energy, sustainability and development (ISWESD) with special focus on Nanoscience and Nanotechnology'* organized by Sibsagar College, Assam and CSIR-NEIST, Jorhat, Assam from 12-14 October 2012.
22. **Saikia, P.** (2012). Population status of *Aquilaria malaccensis* Lam.: a critically endangered tree species of India in Assamese homegardens. **Paper presented** and abstract published on page 36 in the *Proceedings of the International Conference on 'Biodiversity and sustainable energy development'* organized by OMICS Publishing Group, USA at HICC, Hyderabad from 14-15 September 2012.

National Seminar/ Conferences

1. **Saikia, P.** (2024). Long-term Ecological Monitoring and Observation: Opportunities and Challenges. Delivered an **invited talk** virtually in the Meeting of ecologists, wildlife biologists, biodiversity and conservation experts to discuss new initiatives and partnerships organized by NCBS, Bengaluru on 8 April 2024.
2. **Saikia, P.** (2023). Climate-smart agricultural approaches to achieve food security and UN sustainable development goals. Delivered an **invited talk** in the *National Conference on 'Women Scientists in Plant Health Management for Sustainable Development'* organized by Assam Agricultural University, Jorhat on 23 December 2023.
3. **Saikia, P.** (2023). Co-**chaired** a technical session (Session III) on 'Pathogen fitness, disease and pest dynamics and epidemiological advances under the changing climate scenario' in the *National Conference on 'Women Scientists in Plant Health Management for Sustainable Development'* organized by Assam Agricultural University, Jorhat on 23 December 2023.
4. **Saikia, P.** (2023). Paper Writing, Publication, Referencing, and Plagiarism in Research. Delivered an **invited talk** in the PhD coursework program of Department of Zoology, Ranchi University, Ranchi on 26 August 2023.
5. **Saikia, P.** (2023). Recent Trends in Forestry Research to Support Forest Management and Ensure Livelihood Security. Delivered an **invited talk** virtually in the ICFRE-Regional Research Conference on Improvement in Productivity of Forest and Generation of Livelihood through degraded land management" organized by ICFRE-Institute of Forest Productivity, Ranchi in collaboration with ICFRE-Institute of Forest Biodiversity, Hyderabad on 4 August 2023.
6. **Saikia, P.** (2023). Vegetation Sampling Methods and Analytical Techniques used in Ecological Analyses. Delivered an **invited talk** virtually in the 14 days Refresher Course in Environmental Sciences and Ecology organized by the UGC-HRDC, Ranchi University, Ranchi on 21 July 2023.
7. **Saikia, P.** (2023). Analytical Techniques for Forest Ecological Analyses. Delivered an **invited talk** in the Training programme on 'Climate Change, Carbon Sequestration and Mitigation' for technical officers of ICFRE organized by ICFRE-IFP, Ranchi on 16 March 2023.
8. **Saikia, P.** (2022). Land degradation neutrality: commitments to implementation. Acted as a **Resource Person** in World Soil Day Lecture virtually organized by Department of Environmental Sciences and UGC-HRDC, Dr. Harisingh Gour Vishwavidyalaya (A Central University), Sagar on 5 December 2022.
9. **Saikia, P.** (2022). Referencing Systems and Plagiarism in Research. Delivered an **invited talk** virtually in Refresher Course on 'Publication and Research Ethics' (RC5-22) organized by UGC-HRDC, Dr. Harisingh Gour Vishwavidyalaya (A Central University), Sagar on 22 November 2022.
10. **Saikia, P.** (2022). Importance of the S&T Infrastructures in Universities and Higher Educational Institutions in strengthening the Institutional Capacity as well as in STI capacity building of Tribal Scholars. Delivered an **invited talk** in Conclave on Science & Technology Empowerment of Tribal Community' at IIT-Guwahati, Assam as a part of the Government of India's celebration of the National Tribal Day (Janjatiya Gaurav Divas) on 11 November 2022.
11. **Saikia, P.** (2022). Climate Change and its Impacts on Vegetation. Delivered an **invited talk** in Five-day training program for technical staff of the ICFRE organised by ICFRE-IFP, Ranchi on 19 September 2022.
12. **Saikia, P.** (2022). Polyhouse Mist Chamber for Protected Cultivation. Delivered an **invited talk** in One Week Training Programme on Advanced Instrumental Techniques in Water and Wastewater Analysis (AITWWA, 22) on 01 July 2022 organized by DST-FIST sponsored DEVS, CUJ under the DST-STUTI Programme of IIT-ISM, Dhanbad.
13. **Saikia, P.** (2022). Invest in our Planet. Delivered an **invited talk** virtually in the World Earth Day 2022 in the

Webinar on Invest in our Planet organized by the Jharkhand State Forest Department, Ranchi on 22 April 2022.

14. **Saikia, P.** (2022). Hands on Training on R&D instruments used in Environmental Research. Demonstrated in the Short Training and Awareness Program for science popularization among school students under DST-FIST program Organized by DST-FIST sponsored DEVS, CUJ, Ranchi on 28 February 2022.
15. **Saikia, P.** (2022). Detailed overview of Advanced R&D instruments for Environmental Research: Microscopy. Delivered an **invited talk** in Short Training and Awareness Program for science popularization among school students under DST-FIST program Organized by DST-FIST sponsored DEVS, CUJ, Ranchi on 28 February 2022.
16. **Saikia, P.** (2022). Referencing Systems, Tools, and Plagiarism. Delivered an **invited talk** in the two days online workshop on Academic and Research Writing under Scientific Social Responsibility (SSR), SERB, GoI organized by CUJ, Ranchi on 04 February 2022.
17. **Saikia, P.** (2021). Biodiversity Conservation with special reference to Indian Biodiversity. Delivered an **invited talk** in the Refresher Course in Environmental Studies & Disaster Management organized by the UGC-HRDC, Ranchi University, Ranchi on 17 November 2021.
18. **Saikia, P.** (2021). Forest Degradation Prevention through Nature-based Solutions and Forest Landscape Restoration. Delivered an **invited talk** in the *Webinar on Ecosystem Restoration: Different Strategies & Opportunities* on World Environment Day 2021 organized by the Jharkhand State Forest Department, Ranchi on 5th June 2021.
19. **Saikia, P.** (2021). Ecosystem Restoration for Sustainable Development. Delivered an **invited talk** in the World Environment Day 2021 on the theme Ecosystem Restoration organized by the ICFRE-Institute of Forest Productivity, Ranchi on 05 June 2021.
20. **Saikia, P.** (2021). Biodiversity Conservation and Disaster Risk Reduction: An overview. Delivered an **invited talk** in the *National Webinar on Biodiversity Conservation and Disaster Risk Reduction* organized by NIDM, New Delhi and CUJ, Ranchi on 26 March 2021.
21. **Saikia, P.** (2020). NINEISMINE to leverage the work on Climate Action. Delivered an **invited talk** in the virtual interaction with the child–citizens (Kidizens) in the Earth Parliament, Jharkhand organized by UNICEF, Jharkhand on 18 November 2020.
22. **Saikia, P.** (2020). Ethnomedicinal plants of Jharkhand with special reference to Immune-booster plants to fight against COVID-19 Pandemic. Delivered an **invited talk** in the *Workshop on Exploring the Science behind Sericulture, Endocrinology, and Ethnobotany* organized by Nirmala College, Ranchi on 29 August 2020.
23. **Saikia, P.** (2020). The Covid-19 pandemic and the Environment. Delivered an **invited talk** in the *National Webinar on Impact on Environment due to COVID-19* organized by Govt. Vivekanand PG College, Maihar, Santa, MP on 26 August 2020.
24. **Saikia, P.** (2020). My Journey: Story of Choosing Plant Ecology and Conservation Biology as my career. Delivered an **invited talk** in the Young Science Leader Series organized by INSA, New Delhi on 9 August 2020.
25. **Saikia, P.** (2020). Covid-19: The pandemic of mistreated biodiversity, and its impact on the environment. Delivered a **lead talk** in National Webinar organized by Bishwanath College, Assam on 12 June 2020.
26. **Saikia, P.** (2020). Effects of COVID-19 on Environment and Biodiversity. Delivered a **lead talk** in Webinar organized on World Environment Day by Jamshedpur Women’s College, Jharkhand on 5 June 2020.
27. **Saikia, P.** (2020). Tools and techniques used in ecological analyses of forests. Delivered an **invited talk** in the 2nd National Workshop on Techniques in Hyperspectral data analysis and processing organized by IESD, BHU, Varanasi on 28 January 2020.
28. **Saikia, P.** (2019). ICT in Teaching and Research in Biological and Environmental Sciences. Delivered an **invited talk** in Faculty Development Program (FDP) on ICT in Earth System Science organized by Ranchi University, Jharkhand on 30 August 2019.
29. **Saikia, P.** (2019). Biodiversity Conservation: The needs of the time. Delivered an **invited talk** in Refresher Course on Environmental Practices for Sustainable Development (ID) organized by UGC-HRDC, Guru Ghasidas Vishwavidyalaya, Bilaspur on 01 July 2019.
30. **Saikia, P.** (2018). Acted as a **panelist** in the panel discussion on ‘Wood-based Energy’ with special emphasis on ‘Fuelwood and its associated problems and sustainable energy measures’ in Workshop on ‘Climate Change: Opportunities and Challenges in Jharkhand’ jointly organized by the Department of Forest, Environment and Climate Change, Govt. of Jharkhand and UNDP, Ranchi on 26 September 2018.
31. **Saikia, P.** (2017). Prospects and challenges of forest resources of Jharkhand, Eastern India in sustaining rural livelihood. Delivered an **invited talk** in National workshop on Resource use and conservation for sustainable socio-ecological development organized by ISEC, Bengaluru and NIRD-PR, NERC, Assam held in NIRDPR - Guwahati, Assam from 21-22 December 2017.
32. **Saikia, P.** (2016). Bamboos and their uses in day to day life of Common People. Delivered an **invited talk** in State level Training Program for the farmers on ‘Raising, Managing, and Marketing of Bamboo’ organized by

ICFRE-Institute of Forest Productivity, Ranchi on 04 February 2016.

33. Saikia, P. (2015). Socioeconomic Research and its Prospects. Delivered an **invited talk** in National Workshop on 'Research Methodology in Social Sciences' organized by CUJ, Ranchi on 25th August 2015.
34. Saikia, P. (2015). Homegardens of upper Assam, A Sustainable Food Production System. **Paper presented** and abstract published on page 91 of the *Souvenir of National Conference on Environmental Challenges & Solutions (NC-ECS 2015)* organized by CSIR-NML, Jamshedpur from 05-06 November 2015.
35. Saikia, P., Khan, M.L. (2011). Homegarden: An approach for on-farm conservation of *Aquilaria malaccensis* Lam. **Paper presented** and abstract published on pages 6-7 in the *Abstract volume of the National Seminar on Present environment and strategy for biodiversity conservation* organized by Dhemaji Commerce College, Assam and Dhemaji-Dhakuakhana zone, ACTA from 24-25 March 2011.
36. Saikia, P., Khan, M.L. (2011). Conservation and management practices of plant genetic resources in homegardens of Teok area of Jorhat district, Assam. **Paper presented** and abstract published on page 84 in the *Abstracts of the papers of the National Seminar on Plant resource management and conservation strategies in NE region* organized by Cotton College, Assam and ASTEC, Assam from 18-19 February 2011.
37. Saikia, P., Khan, M.L. (2009). Diversity and Prospects of Biodiesel producing species in NE India. **Paper presented** and abstract published on page 138 in the *Proceedings of Regional seminar on Biofuels in North East India: Issues and Prospects* organized by NERIST (Deemed University), Arunachal Pradesh from 20-21 March 2009.
38. Saikia, P., Khan, M.L. (2009). Conservation of *Aquilaria malaccensis* Lam. in homegardens of upper Assam, NE India. **Paper presented** and abstract published on page 43 in the *Abstracts of papers of the National Seminar on Exploration, Utilization and Strategy Action Plan for Sustainable Management of Plant Resources* organized by Gauhati University, Assam from 27-28 February 2009.

Seminar/ Conference Organized

International/ National/State

1. Organized an **International Conference** on Biodiversity, Food Security, Sustainability & Climate Change as Convener at Assam Agricultural University, Jorhat, Assam held during April 24-27, 2023 in collaboration with Prof. H S Srivastava Foundation for Science, Lucknow.
2. Organized a **State level Short Training** and Awareness Program for science popularization among school students under DST-FIST program Organized by DST-FIST sponsored DEVS, CUJ, Ranchi on 28 February 2022.
3. Organized a **National Webinar** on Empowerment of Women through Science and Technology Interventions as Convener at Virtual Platform on 26 February 2022 by Ek Bharat, Shrestha Bharat, CUJ, Ranchi.
4. Organized a two-day **International Webinar** on "Role of Transportation, Environment and Energy in Integrated Urban Planning (RTEE-IUP-2021)" as Co-Convener at Virtual Platform from 25-26 November 2021 jointly by DTST and DEVS, CUJ, Ranchi.
5. Organized a National level **Consultative Workshop** with the Stakeholders to Obtain Feedback/ Suggestions on Research and Development in Higher Education Institutions (HEIs) as Convener at Virtual Platform on 12 November 2021 by R&D Cell, CUJ, Ranchi.
6. Organized a **National Webinar** on 'Disaster Risk Reduction and Urban risk Management' as Convener at Virtual Platform on 06 August 2021 jointly by CUJ, Ranchi & NIDM, New Delhi.
7. Organized a **National Webinar** on 'Restoration of Ecosystem Services: Challenges & Opportunities' as Co-Convener at Virtual Platform on 05 June 2021 jointly by CUJ, Ranchi & PHSS Foundation for Science and Society, Lucknow.
8. Organized a **National Webinar** on 'Biodiversity Conservation and Disaster Risk Reduction' as Convener at Virtual Platform on 26 March 2021 jointly by CUJ, Ranchi & NIDM, New Delhi.
9. Organized an **International Webinar** on 'Public Health, Research, and Awareness for Sustainable Environment (IWPFRASE 2020)' as Mentor on 27 September 2020 at Virtual Platform.
10. Organized an **International Webinar** on 'COVID-19 impacts and implications on Environment' as Convener at Virtual Platform on 11 August 2020 by CUJ, Ranchi.
11. Organized a **Webinar** on 'Contemporary Environmental Issues: Concepts, Tools and Practices' as Co-Convener at Virtual Platform on 24 July 2020 by CUJ, Ranchi.
12. Organized an **International Conference** on 'Environmental Challenges and Sustainability' (ICECS 2018) as

Convener from 31 October to 02 November 2018 by CUJ, Ranchi.

13. Organized **National Conference** on 'Environmental Challenges and Solutions (NC-ECS 2015)' as a Member of the Organizing Committee at CSIR- NML, Jamshedpur from 5th to 6th Nov. 2015.
14. Organized **International Conference** on 'Voices from The Margin: Society, Culture and Exclusion' as a Members of Organizing Committee from 20-22 February 2013 by School of Languages, CUJ, Ranchi.

Participation in Refresher/Orientation/Training (One week/ more than one week)

1. Attended and successfully completed a two-week Online Refresher Course on '**Biodiversity and Conservation (ID)**' organised by UGC-HRDC, NEHU, Shillong from 3 to 18 August 2022 and obtained A Grade.
2. Attended and successfully completed Online Lecture & Training Programme on '**Faculty Development Programme-QIP**' organised by Internal Quality Assurance Cell (IQAC), Central University of Jharkhand, Ranchi from 30 January to 13 February 2022.
3. Attended and successfully completed a **ten days** NMPB sponsored **National Training Program** on 'Medicinal and Aromatic Plants Diversity, Utilization, and their Conservation' organized by the Department of Forestry, Uttar Banga Krishi Viswavidyalaya, West Bengal from 01-10 June 2021.
4. Attended and successfully completed a **one-week (Seven days)** Science Academies' **Science Leader Workshop** India's First Science Leadership Program organized by Central University of Punjab, Bathinda from 22-28 June 2020.
5. Attended and successfully completed a **one-week (Five days) MHRD-GIAN course** on "The use of Molecular Genetics and Genomics Tools in Biodiversity Conservation" organized by the Department of Botany, Dr. Harisingh Gour Vishwavidyalaya (A Central University), Sagar, Madhya Pradesh from 22-26 July 2019.
6. Attended and successfully completed two weeks (Sixteen days) Science Academies' **Refresher course** on 'Plant Taxonomy, Phytogeography and Ecology' in Central University of Punjab, Bathinda from 05-20 March 2019 and obtained A Grade.
7. Attended and successfully completed a three-week (Twenty-one days) UGC sponsored **Refresher course** in Environmental Studies/ Earth Sciences (ID) organized by UGC-HRDC, CPDHE, University of Delhi, New Delhi from 13 October to 04 November 2015 and obtained A Grade.
8. Attended and successfully completed a four-week (Twenty-eight days) UGC sponsored **Orientation program** organized by UGC-Academic Staff College, Ranchi University, Ranchi from 14 July to 10 August 2014 and obtained A Grade.
9. Attended and successfully completed a one-week (Six days) **Training programme** on "Management of Social Forestry for Sustainable Livelihood" organized by NIRD, Guwahati, Assam in collaboration with Dept. of Forestry, NERIST (Deemed University), Arunachal Pradesh from 25-30 April 2011.
10. Attended and successfully completed a ten days **Workshop cum Training Program** on "Taxonomy, ecology and conservation" organized by the Centre for Environmental Management of Degraded Ecosystems (CEMDE), University of Delhi, New Delhi from 29 December 2009 to 07 January 2010.

Any Other Information

Membership of Professional Bodies/Societies, etc.

- Member of Department of Science and Technology (DST)-Local Project Advisory Committee (LPAC) for monitoring the progress of "Women Technology Park (WTP) for capacity building and entrepreneurship development at Ranchi and East Singhbhum of Jamshedpur since December 2021.
- Member of IUCN-Commission on Ecosystem Management (CEM), South Asia for the session 2017-2021 since September 2017 and also for the session 2021-2025 since October 2021.
- Member of Global Forest Biodiversity Initiative (GFBI), USA since January 2017.
- Life member of The Society for the Science of Climate Change and Sustainable Environment (SSCE), New Delhi since August 2020.
- Member of International Association for Water, Environment, Energy, and Society (IAWEES), Bhopal since 2020 (Membership No. 5103).

- Life member of International Society of Environmental Botanists, Lucknow since 21st January 2020.
- Honorary Life member of Prof. H.S. Srivastava Foundation for Science & Society, Lucknow since 27th November 2019.
- Life Member of the Indian Society for Geomatics, Dehradun since January 2017.
- Member of Jharkhand State Wildlife Board, Govt. of Jharkhand for the session 2018-2021 since September 2018 and also for the session 2021-2024 since December 2021.
- RAC member under the discipline Forest Geo-Informatics of ICFRE-Institute of Forest Productivity, Ranchi since July 2021.
- Honorary member of XXIth Research Advisory Group of ICFRE-Institute of Forest Productivity, Ranchi since September 2020.

Editorial Assignments and Other Recognitions

- **Associate Editor** since October 2022 and **Review Editor** since July 2022 of the Conservation and Restoration Ecology (special section of Frontiers in Ecology and Evolution, Frontiers in Environmental Science)
- **Editorial Board Member** of Plants and Environment since Sep. 2019,
- **Subject Editor** (Ecology and Environmental Sciences), Tropical Plant Research, an International Journal by Society for Tropical Plant Research, India since June 2018.
- **Guest editor** (Khan, M.L., Khare, P.K., Kumar, A., **Saikia, P.**) of two special issues on 'Forest dynamics under anthropogenic disturbances and global climate change' of International Journal of Ecology and Environment Sciences, Volume 48 (2 & 3), National Institute of Ecology (NIE), New Delhi of April and June 2022.
- Academic Counselor of Master of Arts in Sustainability Sciences (MASS) of course on Mountain and Hill Ecosystem (MSD 01) of IGNOU, New Delhi from 19 October 2022 to 31 December 2023.