
Sawaid ABBAS

BSc (Math & Physics), MSc (Space Science), Mphil (Remote Sensing & GIS), PhD, Post-Doc

ACADEMIC CREDENTIALS

- PhD Department of Land Surveying and Geo-informatics, The Hong Kong Polytechnic University, Hong Kong, 2013 – 2016. **Hong Kong PhD Fellowship Scheme**
- M.Phil, Department of Remote Sensing and GIS, Asian Institute of Technology, Thailand. 2011 – 2013. **With Distinction - CGPA: 4.00 / 4.00, Japanese Government Scholarship.**
- M.Sc Department of Space Science, University of The Punjab, Lahore, Pakistan. 2006 – 2008. **Gold Medal - CGPA: 4.00 / 4.00.**
- B.Sc. Mathematics and Physics, Government Islamia College, Civil Lines, University of The Punjab, Lahore, Pakistan. 2004 – 2006

RESEARCH PROFILE

65+ Impact Factor Journals; 22 Conferences, 04 Book Chapter

- **Scopus:** Publications 62, Citations 956, h-index 17
<https://scopus.com/authid/detail.uri?authorId=55234716000>
- **Google Scholar:** No of Records 75, h-index 20, i-10-index 37, citations 1454
<https://scholar.google.com.hk/citations?user=JEdGce0AAAAJ&hl>
- **Publons:** Publications 42, h-index 16, citations 803, reviews 278
<https://publons.com/researcher/1238153/sawaid-abbas/>
- **Research Gate:** RG Score 37.57 (Percentile 95%), h-index 18
<https://www.researchgate.net/profile/Sawaid-Abbas>
- **ORCID:** <https://orcid.org/0000-0003-3417-217X>
- **Loop:** <https://loop.frontiersin.org/people/1547209/overview>

Editorial Roles

- **Editorial Board Member of Remote Sensing Applications: Society and Environment (RSASE)**
RSASE is part of the Remote Sensing of Environment family of journals
It addresses specific topics with an emphasis on environmental and societal issues
<https://www.journals.elsevier.com/remote-sensing-applications-society-and-environment/editorial-board/sawaid-abbas-phd>
- **Associate Editor of Frontiers in Remote Sensing** (Section: Multi- and Hyper-Spectral Imaging)
<https://www.frontiersin.org/journals/remote-sensing/sections/multi--and-hyper-spectral-imaging#editorial-board>
- **Topical Advisory Panel Member of Remote Sensing**
https://www.mdpi.com/journal/remotesensing/topic_editors
- **Topical Advisory Panel Member of Earth**
https://www.mdpi.com/journal/earth/topical_advisory_panel
- **Guest Editor of a Special Issue on “Application of Artificial Intelligence in Land Use and Land Cover Mapping”** in the *Remote Sensing*.
https://www.mdpi.com/journal/remotesensing/special_issues/application_land
- **Guest Editor of a Special Issue on “Urban Heat Island and Building Energy Sustainability”** in the *Sustainability*
https://www.mdpi.com/journal/sustainability/special_issues/Urban_HeatIsland
- **Guest Editor of a Special Issue on “Urban Morphology and Environment Monitoring”** in the *Geomatics*
https://www.mdpi.com/journal/geomatics/special_issues/T36379RJC2
- **Editorial Board Member of the Journal of Advanced Remote Sensing**
<https://publish.mersin.edu.tr/index.php/arsej/about/editorialTeam>
- **Editorial Board Member of Journal of Spatial Knowledge and Applied Research (JSKAR)**
<https://journals.pakistanreview.com/index.php/JSKAR/about/editorialTeam>

PUBLICATIONS

1. Sidrah Hafeez, Man Sing Wong, **Sawaid Abbas**, Muhammad Asim (2022). Evaluating Landsat-8 and Sentinel-2 Data Consistency for High Spatiotemporal Inland and Coastal Water Quality Monitoring. *Remote Sensing*. doi: <https://doi.org/10.3390/rs14133155> [IF = 5.349, SCIE, Q1]

2. Jinxin Yang, Qian Shi, Massimo Menenti, Yanhua Xie, Zhifeng Wu, Yong Xu, **Sawaid Abbas** (2022). Characterizing the thermal effects of vegetation on urban surface temperature. *Urban Climate*. [IF = 6.663, SCIE, Q1]
3. Mifrah Ali, Iffat Siddique, **Sawaid Abbas*** (2022). Characterizing Air Pollution and Its Association with Emission Sources in Lahore: A Guide to Adaptation Action Plans to Control Pollution and Smog. *Applied Sciences*. <https://doi.org/10.3390/app12105102> [IF = 2.838, SCIE, Q2].
4. Fatima Saeeda, Mahnoor I Mir, Muhammad R. Khan, R. Z. Sayyed, Samina Mehnaz, **Sawaid Abbas**, Muhammad B. Sadiq, and Rashid Masih (2022). The Optimization of Gelatin Extraction from Chicken Feet and the Development of Gelatin Based Active Packaging for the Shelf-Life Extension of Fresh Grapes. *Sustainability*. <https://doi.org/10.3390/su14137881> [IF = 3.889, SCIE, Q2]
5. Meilian Wang, Man Sing Wong, **Sawaid Abbas** (2022). Tropical Species Classification with Structural Traits Using Handheld Laser Scanning Data. <https://doi.org/10.3390/rs14081948> [IF =5.349, SCIE, Q1]
6. Jing Li, Man Sing Wong, Kwon Ho Lee, Janet Nichol, **Sawaid Abbas**, Hon Li, Jicheng Wang (2022) A physical knowledge-based machine learning method for near-real-time dust aerosol properties retrieval from the Himawari-8 satellite data. *Atmospheric Environment*. <https://doi.org/10.1016/j.atmosenv.2022.119098> [IF =5.755, SCIE, Q1]
7. Karena Ka Wai Hui, Man Sing Wong, Coco Yin Tung Kwok, Hon Li, **Sawaid Abbas**, Janet E Nichol. (2022). Unveiling Falling Urban Trees before and during Typhoon Higos (2020): Empirical Case Study of Potential Structural Failure Using Tilt Sensor. *Forests*. <https://doi.org/10.3390/f13020359> [IF =3.28, SSCI, Q1]
8. Naeem Shahzad, Xiaoli Ding, **Sawaid Abbas*** (2022). A Comparative Assessment of Machine Learning Models for Landslide Susceptibility Mapping in the Rugged Terrain of Northern Pakistan. *Applied Sciences*. <https://doi.org/10.3390/app12052280> [IF =2.838, SSCI, Q2]
9. **Sawaid Abbas**, Ghaffar Ali, Faisal M Qamer, Syed M Irteza (2022). Associations of air pollution concentrations and energy dynamics in Pakistan during lockdown. *Environmental Science and Pollution Research*. <https://doi.org/10.1007/s11356-021-18071-4> [IF =5.19, SSCI, Q1]
10. Salman Arshad, Sajid Rashid Ahmad, **Sawaid Abbas***, Ather Ashraf, Nadia Asad Siddiqui, Zia ul Islam (2022). Quantifying the contribution of diminishing green spaces and urban sprawl to urban heat island effect in a rapidly urbanizing metropolitan city of Pakistan. *Land Use Policy*. <https://doi.org/10.1016/j.landusepol.2021.105874> [IF =6.19, SSCI, Q1]
11. Hammad Gilani, Adeel Ahmad, Isma Younes, **Sawaid Abbas*** (2021). Estimation of annual soil erosion dynamics (2005 - 2015) in Pakistan using Revised Universal Soil Loss Equation (RUSLE). *Land Degradation and Development*. <https://doi.org/10.1002/ldr.4138> [IF =4.97, SSCI, Q1].
12. Ghaffar Ali, **Sawaid Abbas***, Faisal M Qamer, Syed Muhammad Irteza (2021). Environmental Spatial Heterogeneity of the Impacts of COVID-19 in the Top-20 Metropolitan Cities of the Asia-Pacific. *Nature Scientific Reports*. <https://doi.org/10.1038/s41598-021-99546-9> [IF =5.0, SSCI, Q1].
13. Ghaffar Ali, Muhammad K Bashir, **Sawaid Abbas***, Mehwish Murtaza (2021) Drinking-Water Efficiency, Cost of Illness, and Peri-Urban Society: Comprehending the Sustainable Development Goals. *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0257509> [IF =3.58, SSCI, Q2]
14. Jian GUO, Zhe QIN, Man Sing Wong, Siu Wai Wong, Stanley Yeung, **Sawaid Abbas**, Qiping Shen (2021) Spatial Analysis of the Development Potential of a Commercial District: A Case of Hong Kong. *Journal of Urban Planning and Development*. [https://doi.org/10.1061/\(ASCE\)UP.1943-5444.0000773](https://doi.org/10.1061/(ASCE)UP.1943-5444.0000773) [IF =2.5, SSCI, Q3]
15. Jinxin Yang, Massimo Menenti, Man Sing Wong, Zhifeng Wu, Yong Xu, **Sawaid Abbas**, Qunshan Zhao (2021). Observing the impact of urban morphology and building geometry on thermal environment by high spatial resolution thermal images. *Urban Climate*. <https://doi.org/10.1016/j.uclim.2021.100937> [IF =6.6, SSCI, Q1]
16. **Sawaid Abbas**, Qian Peng, Man Sing Wong, Zhilin Li, Jicheng Wang, Kathy Tze Kwun Ng, Coco Yin Tung Kwok, Karena Ka Wai Hui (2021). Characterizing and Classifying Urban Tree Species using Bi-monthly Terrestrial Hyperspectral Images and Deep Learning in Hong Kong. *ISPRS Journal of Photogrammetry and Remote Sensing*. <https://doi.org/10.1016/j.isprsjprs.2021.05.003> [IF =11.774, SSCI, Q1]
17. Janet E. Nichol, **Sawaid Abbas*** (2021). Evaluating plantation policies versus natural forest regeneration for biodiversity enhancement in Hong Kong? *Forests*. <https://doi.org/10.3390/f12050593> [IF =3.28, SSCI, Q1]
18. Zi Yang, Ka Wai Hui, **Sawaid Abbas**, Rui Zhu, Coco Yin Tung Kwok, Joon Heo, Sungha Ju, Man Sing Wong (2021). A Review of Measuring Methods on Tree Sway, Tilt and Rot-plate Movement. *Forests*. <https://doi.org/10.3390/f12030379> [IF =3.28, SSCI, Q1]
19. **Sawaid Abbas**, Janet E. Nichol, Man Sing Wong (2021). Trends in vegetation productivity related to climate change in China's Pearl River Delta. *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0245467> [IF =3.58, SSCI, Q2]
20. Shahid Naeem, Yongqiang Zhang, Xuanze Zhang, Jing Tian, **Sawaid Abbas**, Lili Luo, Hadush Kidane Meresa (2021). Both Climate and Socioeconomic Drivers Contribute in Vegetation Greening of the Loess Plateau. *Science Bulletin*. <https://doi.org/10.1016/j.scib.2021.03.007> [IF =20.6, SCIE, Q1]
21. Ghaffar Ali, **Sawaid Abbas***, Faisal M Qamer, Man Sing Wong, Ghulam Rasool, Syed M Irteza, Naeem Shahzad (2021). Shifts in Air Quality and Urban Heat Island in Industrial and Urban Regions during COVID-19

-
- Lockdown across Pakistan. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2021.125806> [IF =11.1, SSCI, Q1]
22. Sidrah Hafeez, Man Sing Wong, **Sawaid Abbas** (2021). Assessing the Potential of Geostationary Himawari-8 for Mapping Total Suspended Solids (TSS) and its Diurnal Changes. *Remote Sensing*. <https://doi.org/10.3390/rs13030336> [IF =5.35, SCIE, Q1]
 23. **Sawaid Abbas***, Janet E. Nichol, Jinlong Zhang, Gunter A Fischer, Man Sing Wong, Syed M Irteza (2021). Spatial and environmental constraints on natural forest regeneration. *Science of the Total Environment*. <https://doi.org/10.1016/j.scitotenv.2020.141760> [IF =10.8, SCIE, Q1]
 24. **Sawaid Abbas**, Janet E. Nichol, Man Sing Wong (2020). Object-based, multi-sensor habitat mapping of successional age classes for effective management of a 70-year secondary forest succession. *Land Use Policy*, doi: <https://doi.org/10.1016/j.landusepol.2018.04.035> [IF =6.19, SSCI, Q1]
 25. Jinxin Yang , Massimo Menenti, Zhifeng Wu, Man Sing Wong, **Sawaid Abbas**, Yong Xu, Qian Shi (2020). Assessing the impact of urban geometry on Surface Urban Heat Island using complete and nadir temperatures. *International Journal of Climatology*. <https://doi.org/10.1002/joc.6919> [IF =3.928, SCIE, Q1]
 26. **Sawaid Abbas**, Man Sing Wong, Jin Wu, Naeem Shahzad, Syed M Irteza (2020). Approaches of Satellite Remote Sensing for the Assessment of Above-Ground Biomass across Tropical Forests: Pan-tropical to National Scales. *Remote Sensing*. <https://doi.org/10.3390/rs12203351> [IF =5.35, SCIE, Q1]
 27. **Sawaid Abbas**, Coco Yin Tung Kwok, Karena Ka Wai Hui, Hon Li, David C.W. Chin, Sungha Ju, Joon Heo, Man Sing Wong (2020). Tree tilt monitoring in rural and urban landscapes of Hong Kong using smart sensing technology. *Trees, Forests and People*. <https://doi.org/10.1016/j.tfp.2020.100030>
 28. Syed M Irteza, SHI Wen-zhong John, Janet E Nichol, **Sawaid Abbas*** (2020). NDVI and Fluorescence Indicators of Seasonal and Structural Changes in a Tropical Forest Succession. *Earth Systems and Environment*. <https://doi.org/10.1007/s41748-020-00175-5>
 29. Sarah Hasan, SHI Wen-zhong John, ZHU Xiao-lin, **Sawaid Abbas***, Hafiz Usman Ahmed Khan (2020). Future simulation of land use changes in rapidly urbanizing South China based on Land Change Modeler and remote sensing data. *Sustainability*. <https://doi.org/10.3390/su12114350> [IF =3.89, SSCI, Q2]
 30. Janet E. Nichol, Sin Yau Choi, Man Sing Wong, **Sawaid Abbas** (2020). Temperature change and urbanisation in a multi-nucleated megacity: China's Pearl River Delta. *Urban Climate*. ISSN 2212-0955 <https://doi.org/10.1016/j.uclim.2020.100592> [IF =6.66, SSCI, Q1]
 31. Jian Guo, Bingxia Sun, Zhe Qin, Man Sing Wong, Siu Wai Wong, Chi Wai Yeung, Hao Wang, **Sawaid Abbas**, Geoffrey Qiping Shen (2020). Analysing the effects for different scenarios on surrounding environment in a high-density city. *Cities*. <https://doi.org/10.1016/j.cities.2019.102585> [IF =6.08, SSCI, Q1]
 32. Jinxin Yang, Man Sing Wong, Hung Chak Ho, E. Scott Krayenhoff, PW Chan, **Sawaid Abbas**, Massimo Menenti (2020). A simple method to estimate the complete surface temperature over a complex urban area. *Remote Sensing of Environment*. <https://doi.org/10.1016/j.rse.2019.111540> [IF = 13.9, SCIE, Q1]
 33. **Sawaid Abbas**, Janet E. Nichol, Gunter A Fischer, Man Sing Wong, Syed M Irteza (2020). Impact assessment of a super-typhoon on Hong Kong's secondary vegetation and recommendations for restoration of resilience in the forest succession. *Agricultural and Forest Meteorology*. doi:<https://doi.org/10.1016/j.agrformet.2019.107784> [IF = 6.424 SCIE, Q1]
 34. Shamsa Kanwal, Xiaoli Ding, Muhammad Sajjad, **Sawaid Abbas** (2019). Three Decades of Coastal Changes in Sindh, Pakistan (1989–2018): A Geospatial Assessment. *Remote Sensing*. <https://doi.org/10.3390/rs12010008> [IF =5.35, SCIE, Q1]
 35. Hung Chak Ho, Man Sing Wong, **Sawaid Abbas**, Rui Zhu (2019). Development of Adjusted Wind Chill Equivalent Temperature (AWCET) for cold mortality assessment across a subtropical city: validation with a spatially-controlled time-stratified approach. *BMC Public Health*. doi: <https://doi.org/10.1186/s12889-019-7612-5> [IF = 4., SCIE, Q2]
 36. **Sawaid Abbas**, Janet E. Nichol, Jinlong Zhang, Gunter A Fischer (2019). The accumulation of species and recovery of species composition along a 70 year successional gradient in a tropical secondary forest. *Ecological Indicators*. doi: <https://doi.org/10.1016/j.ecolind.2019.105524> [IF = 6.26, SCIE, Q1]
 37. Ghaffar Ali, **Sawaid Abbas***, Yanchun Pan, Zhimin Chen, Jafar Hussain, MUHAMMAD SAJJAD, Aqdas Ashraf (2019). Urban Environment Dynamics and Low Carbon Society: Multi-Criteria Decision Analysis Modeling for Policy Makers. *Sust. Cities and Soc*. <https://doi.org/10.1016/j.scs.2019.101763>. [IF = 10.7, SCIE, Q1]
 38. Sarah Hasan, SHI Wen-zhong John, ZHU Xiao-lin, **Sawaid Abbas** (2019). Monitoring of land use land cover and socioeconomic changes in South China over the last three decades using Landsat and nighttime light data. *Remote Sensing*. doi: <https://doi.org/10.3390/rs11141658> [IF =5.35, SCIE, Q1]
 39. Sidrah Hafeez, Man Sing Wong, Hung Chak Ho, Majid Nazeer, Janet Nichol, **Sawaid Abbas**, Danling Tang, Kwon Ho Lee, Lilian Pun (2019). Comparison of machine learning algorithms for retrieval of water quality indicators in case-II waters: a case study of Hong Kong. *Remote Sensing*. doi: <https://doi.org/10.3390/rs11060617> [IF = 5.35, SCIE, Q1]
 40. Hung Chak Ho, **Sawaid Abbas**, Jinxin Yang, Rui Zhu, Man Sing Wong (2019). Spatiotemporal Prediction of Increasing Winter Perceived Temperature across a Sub-Tropical City for Sustainable Planning and Climate
-

41. Hung Chak Ho, Man Sing Wong, Ho Yin Man, Yuan Shi, **Sawaid Abbas** (2018). Neighborhood-based subjective environmental vulnerability index for community health assessment: Development, validation and evaluation. *Science of the Total Environment*. doi: <https://doi.org/10.1016/j.scitotenv.2018.11.136> [IF =10.8, SCIE, Q1]
42. Wong, M.S., Wang, T., Ho, H.C., Kwok, C.Y.T., Lu, K., **Sawaid Abbas** (2018). Towards a Smart City: Development and Application of an Improved Integrated Environmental Monitoring System. *Sustainability*,10(3), 623. doi:10.3390/su10030623 [IF=3.898, SCIE, Q2]
43. Deli Zhai, Jinwei Dong, Georg Cadisch, Mingcheng Wang, Weili Kou, Jianchu Xu, Xiangming Xiao, **Sawaid Abbas** (2018). Comparison of Pixel- and Object-Based Approaches in Phenology-Based Rubber Plantation Mapping in Fragmented Landscapes. *Remote Sensing*. doi:10.3390/rs10010044 [IF =5.35, SCIE, Q1]
44. Janet E. Nichol, **Sawaid Abbas**, Gunter Fischer (2017). Spatial patterns of degraded tropical forest and biodiversity restoration over 70-years of succession. *Global Ecology and Conservation*. doi: 10.1016/j.gecco.2017.05.005 [IF = 3.97, SCIE, Q2]
45. **Sawaid Abbas**, Janet E. Nichol, Gunter Fischer (2017). Mapping and assessment of impacts of cold and frost on the secondary forest in the marginally tropical landscape of Hong Kong, *Agricultural and Forest Meteorology*. doi: <http://dx.doi.org/10.1016/j.agrformet.2016.10.008> [IF = 6.42, SCIE, Q1]
46. Faisal Mueen Qamer, Chen Xi , **Sawaid Abbas** , MSR Murthy , Wu Ning , BAO Anming (2016). An assessment of productivity patterns of grass-dominated rangelands in the Hindukush Karakoram region, Pakistan. *Sustainability*. doi:10.3390/su8090961. [IF = 3.898, SCIE, Q2]
47. Faisal Mueen Qamer, Khuram Shehzad, **Sawaid Abbas**, MSR Murthy, Chen Xi, Birendra Bajracharya , Hammad Gilani (2016). Mapping Deforestation and forest degradation patterns in the western Himalaya, Pakistan. *Remote Sensing*. doi:10.3390/rs8050385. [IF = 5.35, SCIE, Q1]
48. **Sawaid Abbas**, Janet E. Nichol, Gunter Fischer (2016). A 70-year perspective on tropical forest regeneration. *Science of the Total Environment*. doi:10.1016/j.scitotenv.2015.11.171. [IF =10.8, SCIE, Q1]
49. Garee Khan, Babar Khan, Faisal M. Qamer, **Sawaid Abbas**, Anwar Khan, Chen Xi (2016). Himalayan ibex (*Capra ibex sibirica*) habitatsuitability and range resource dynamics in theCentral Karakorum National Park, Pakistan. *Journal of King Saud University –Science* . doi: 10.1016/j.jksus.2016.04.006 [IF = 4.01, SCIE, Q2]
50. **Sawaid Abbas**, Faisal Mueen Qamer, Murthy, M.S., Nitin Kumar Tripathi, Wu Ning, Sharma, E.; Ali, G (2015). Grassland Growth in Response to Climate Variability in the Upper Indus Basin, Pakistan. *Climate*, 3, 697-714. doi:10.3390/cli3030697 [CiteScore = 2.52, ESCI]
51. Janet E. Nichol, **Sawaid Abbas** (2015). Integration of remote sensing datasets for local scale assessment and prediction of drought. *Science of the Total Environment*. doi:10.1016/j.scitotenv.2014.09.099. [IF=10.8, SCIE, Q1]
52. Chandra Giri, Jordan Long, **Sawaid Abbas**, R.Mani Murali, Faisal M. Qamer, Bruce Pengra, David Thau (2015). Distribution and dynamics of mangrove forests of South Asia, *Journal of Environmental management*, doi:10.1016/j.jenvman.2014.01.020. [IF=8.91, SCIE, Q1]
53. **Sawaid Abbas**.; Janet E. Nichol.; Faisal M. Qamer, Jianchu Xu (2014). Characterization of Drought Development through Remote Sensing: A Case Study in Central Yunnan, China. *Remote Sensing*.6, 4998-5018. doi:10.3390/rs6064998. [IF=5.35, SCIE, Q1]
54. Khuram Shehzad, Faisal M Qamer, MSR Murthy, **Sawaid Abbas**, Laxmi D Bhatta (2014). Deforestation trends and spatial modeling of its drivers in the dry temperate forests of northern Pakistan — A case study of Chitral. *Journal of Mountain Science*. 11 (5), 1192-1207. doi: 10.1007/s11629-013-2932-x . [IF=2.07, SCIE, Q4]
55. Ghaffar Ali, **Sawaid Abbas**, Faisal Mueen Qamer (2013). How effectively low carbon society development models contribute to climate change mitigation and adaptation action plans in Asia, *Renewable and Sustainable Energy Reviews*, Volume 26, October 2013, Pages 632-638, ISSN 1364-0321, <http://dx.doi.org/10.1016/j.rser.2013.05.042>. [IF=16.8, SCIE, Q1]
56. **Sawaid Abbas**, Faisal Mueen Qamer, Ghaffar Ali, Nitin Kumar Tripathi, Khurram Shehzad, Rashid Saleem, Hammad Gilani (2013). An assessment of status and distribution of mangrove forest cover in Pakistan. *Journal of Biodiversity and Environmental Sciences (JBES)*, Vol. 3, No. 6, p. 64-78. eISSN: 2222-3045, ISSN: 2220-6663
57. Ghaffar Ali and **Sawaid Abbas** (2013). Exploring CO₂ sources and sinks nexus through an integrated approach; insight from Pakistan. *Journal of Environmental Informatics*. doi:10.3808/jei.201300250 [IF=10.2, SCIE, Q1]
58. Faisal Mueen Qamer, **Sawaid Abbas**, Rashid Saleem, Khurram Shehzad, Hassan Ali, Hammad Gilani (2012). Forest cover change assessment in conflict-affected areas of northwest Pakistan: the case of swat and shangla districts, *Journal of Mountain Science*, Volume 9, Number 3, Pages 297-306 DOI: 10.1007/s11629-009-2319-1 [IF=2.07, SCIE, Q4]
59. Ghaffar Ali, Vilas Nitivattananon, **Sawaid Abbas**, Muazzam Sabir (2012). Green waste to biogas: Renewable energy possibilities for Thailand's green markets, *Renewable and Sustainable Energy Reviews*, Volume 16, Issue 7, Pages 5423–5429. <https://doi.org/10.1016/j.rser.2012.05.021> [IF=16.8, SCIE, Q1]

-
60. Ghaffar Ali, Vilas Nitivattananon, Hamid Mehmood, Muazzam Sabir, Sana-ur-Rehman Sheikh, **Sawaid Abbas** (2012). A synthesis approach to investigate and validate carbon sources and sinks of a mega city of developing country, Environmental Development. <http://dx.doi.org/10.1016/j.envdev.2012.09.001> [IF=4.69, SCIE, Q2]

Book Chapter

61. Jinxin Yang, Massimo Menenti, Man S. Wong, Zhifeng Wu, Xiaoying Ouyang, Yong Xu, **Sawaid Abbas** (2021). Thermal Infrared Imaging of the Urban Landscape to Understand Urban Microclimate. IN Book: Urban Remote Sensing: Monitoring, Synthesis, and Modeling in the Urban Environment, Second Edition. <https://doi.org/10.1002/9781119625865.ch17>
62. Man Sing Wong, Xiaolin Zhu, **Sawaid Abbas**, Jinxin Yang, Che Heng Fung, Coco Yin Tung Kwok, Meilian Wang (2021). Optical Remote Sensing. In Book: Urban Informatics. <https://link.springer.com/book/10.1007/978-981-15-8983-6>
63. Sidrah Hafeez, Man Sing Wong, **Sawaid Abbas**, Coco Y. T. Kwok, Janet Nichol, Kwon Ho Lee, Danling Tang and Lilian Pun (2018). Detection and Monitoring of Marine Pollution Using Remote Sensing Technologies, DOI: 10.5772/intechopen.81657. In Book: Monitorin of Marine Pollution, DOI: 10.5772/intechopen.76739. IntechOpen.
64. Ghaffar Ali, Faisal Mueen Qamer, Hammad Gilani, **Sawaid Abbas**, Khurram Shehzad (2015). Status of the Forest Cover Assessment and Monitoring System in Pakistan in the Context of REDD. In Book: Geospatial Information Systems for Multi-Scale Forest Biomass Assessment and Monitoring in the Hindu Kush Himalayan region.

Conference Papers/ Abstracts / Invited talks

1. **Sawaid Abbas**, Bashir Ahmad, Faisal M Qamer, M. K. Lodhi (2021). Big Data and Cloud Computing Applications for Mapping Crop Intensification in Pakistan. Consultative workshop on "Crop mapping and zoning for strengthening sustainable agriculture in Pakistan" 11-12 August | Islamabad, Pakistan.
2. **Sawaid ABBAS** (2021). Earth Observation in Environmental Monitoring. University of Management and Technology, 15 March | Lahore, Pakistan. Online Invited Talk.
3. **Sawaid ABBAS** (2021). Applications of Remote Sensing in Wild Life and Ecology. University of Veterinary & Animal Sciences - UVAS Lahore, 02 December | Lahore, Pakistan. Invited Talk.
4. Naeem Shahzad, Xiaoli Ding, **Sawaid Abbas**, Syed Muhammad Iretza (2021) Object based image analysis for delineation of slope units, International Geoscience and Remote Sensing Symposium (IGRASS), A joint initiative of Belgium and The Netherlands, July 12 – 16, Brussels, Vitrual Conference.
5. **Sawaid Abbas**, JiCheng Wang, Li Yin Tung Coco, Man Sing Wong (2020) Development of a spectral library for urban tree species using handheld hyperspectral remote sensing, a study in sub-tropical city Hong Kong. Jun 14 – Jun 20, 2020, XXIV ISPRS Congress 2020 (Nice, France). Postponed amid COVID-19 2020.
6. Sarah Hasan, SHI Wen-zhong John, ZHU Xiao-lin, **Sawaid Abbas** (2020) Monitoring of Land Use/Land Cover and Socioeconomic Changes in South China from 2000 to 2017. Jun 14 – Jun 20, 2020, XXIV ISPRS Congress 2020 (Nice, France). Postponed amid COVID-19 2020.
7. Naeem Shahzad, Xioli Ding, **Sawaid Abbas** (2020). Prediction ability of machine learning algorithms in Himalaya region of Pakistan for landslide susceptibility mapping. May 4 -May 8, 2020, EGU General Assembly 2020 (Vienna, Austria). Cancelled amid COVID-19 2020. Transformed to Sharing Geoscience Online.
8. **Sawaid Abbas**, Man Sing Wong (2020). Assessment of Vegetation Damage by the super-typhoon Mangkhut in Hong Kong . The 4th Hong Kong Wind Engineering Society Workshop (HKWES4). Jan 06 – Jan 08, 2020, HKUST, Hong Kong, SAR China
9. **Sawaid Abbas**, Janet E Nichol, Man Sing Wong, Jinlong Zhang, Gunter A Fischer, Syed Muhammad Irteza (2019). Understanding species diversity and composition along successional and environmental gradients in a tropical secondary forest. AsiaFlux2019 – 20th Anniversary Workshop. Sep 29 – Oct5, 2019, Gifu and Takayama, Japan
10. **Sawaid Abbas** (2019). Remote Sensing Technologies and Applications for Semi-automated Land Cover Mapping. All Pakistan DICE-IET Controll and Automation. 8-9 March 2019, Lahore, Pakistan.
11. **Sawaid Abbas**, M. K. Lodhi (2018). Open-Access Cloud-Based Solution of Crop Area Mapping for Food Security Planning and Policies: A Case Study from Punjab Province, Pakistan. Regional Knowledge Forum on Drought. Earth Observation and Climate Services for Food Security and Agricultural Decision Making in South Asia and Southeast Asia, 8–10 October 2018 | Kathmandu, Nepal.
12. **Sawaid Abbas**, M.S. Wong (2016). Geospatial Technology for Earth Observation: Studies of Urban Heat Island Effect and Vegetation Mapping in Hong Kong, 29 October 2016, The Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong.
13. **Sawaid Abbas**, Nichol, J.E. (2016). Monitoring secondary forest succession in Hong Kong using Remote Sensing and GIS, AsiaFlux mini-workshop on Remote Sensing and Ecological/Environmental Monitoring, Taipei, Taiwan, 1st – 5th March.
14. **Sawaid Abbas**, Nichol, J.E. (2015). Spatial patterns of vegetation succession in the degraded tropical landscape of Hong Kong, 2nd International Conference on Remote Sensing Applications in Tropical and Subtropical Areas (RSATSA), Hong Kong, 8th – 10th December.

-
15. Ali, G., Qamer, F.M., Gilani, H., **Sawaid Abbas**, and Shehzad, K. (2013). Status of Forest Cover Assessment and Monitoring in Pakistan in the Context of REDD. Published in the International Expert Group Meeting on Geospatial Information Systems for Multi-scale Forest Biomass Assessment and Monitoring in the Hindu Kush-Himalayan Region ICIMOD Headquarter, Kathmandu, Nepal on 9-10 December 2013
 16. Ali, H., U. Akram, **Sawaid Abbas**, M.S. Ahmed, F.M. Qamer, R. Saleem, A.A. Chaudhry, M. Nagai and M.N. Awan. (2012). Use of Geospatial Technology for Habitat Evaluation of Western Tragopan (*Tragopan melanocephalus*) in selected areas of AJK, Pakistan (Abstract). In: 32nd Pakistan Congress of Zoology (International). March 6 - 8, 2012. Lahore, Pakistan. p. 273. Abstract # FEWFM 56.
 17. **Sawaid Abbas**, F. M. Qamer, N. Hussain, R. Saleem, K.T. Nitin (2011). NATIONAL LEVEL ASSESSMENT OF MANGROVE FOREST COVER IN PAKISTAN. In ISPRS Proceedings (Digital) Earth Observation for Terrestrial Ecosystems, ISPRS Archives XXXVIII- 8/W20
 18. Ali, H., Grimmett, R., Asraf, S., Khan, U., Saleem, R., **Sawaid Abbas**. and Akram, U. (2011). Diversity and Distribution of Avifauna in Pakistan (Abstract). In: National Symposium on Biodiversity of Pakistan. June 7 - 9, 2011. Islamabad, Pakistan. p. 48. Abstract # 84.
 19. **Sawaid Abbas**, F. M. Qamer, A. D. Rana, N. Hussain, R. Saleem (2010). Application of object-based image analysis for forest cover assessment of moist temperate Himalayan forest in Pakistan. In: ISPRS Proceedings (digital) of Geographic Object-Based Image Analysis (GEOBIA 2010), Vol. XXXVIII-4/C7, 29 June - 2 July 2010, Ghent (Belgium); ed. by Addink, E.A. & F.M.B. Van Coillie.
 20. H. Ali, R. Saleem, F. M. Qamer, A. W. Khan, **Sawaid Abbas**, K. Gunasekara, M. Hazarika, S. M. Ahmed, M. Akhtar (2010). Habitat Evaluation of Smooth-coated Otter (*Lutrogale perspicillata*) in Indus Plains of Pakistan using Remote Sensing and GIS. In: Proceedings of ISPRS Technical Commission VIII Symposium, 9 - 12 August 2010, Kyoto, Japan.
 21. F. M. Qamer, U. Akram, H. Ali, R. Saleem, **Sawaid Abbas**, S.M. Raza (2010). Pakistan Wetlands Inventory data portal - an integrated GIS tool for the Wetlands knowledge and management. International Symposium Benefiting from Earth Observation: Bridging the Data Gap for Adaptation to Climate Change in the Hindu Kush-Himalayan Region. 4 - 6 October 2010, Kathmandu, Nepal.
 22. Shah, F. M. Qamer, G. Khan, H. Gilani, H. Ali, N. Hussain, R. Saleem, S. Asif, **Sawaid Abbas** (2009). Land cover mapping of the Central Karakoram National Park.

RESEARCH PROJECTS

I have conducted or contributed to several national/international research projects including

- Ventilation of a High-rise City, Hong Kong
- A Study of Plot Ratio/Building Height Restrictions for Kai Tak Development Using 3D Spatial Analysis Technology, Hong Kong
- Provision of Vocational Training Course on Remote Sensing Theories and Applications, Hong Kong
- Services for Identification of Rock Outcrops Using Remote Sensing Techniques, Hong Kong
- An Integrated Knowledge-Based Remote Sensing Technique for Coastal Water Quality Monitoring, Hong Kong
- New Technologies for Smart Management of Urban Trees, Hong Kong
- Jockey Club Smart City Tree Management Project, Hong Kong
- A practical application of Integrated micro-Environmental Monitoring System for Construction Sites, Construction Industry Council, Hong Kong
- Remote Sensing of Secondary Forest Succession in Hong Kong's Country Parks (PhD Project Title)
- Drought Mapping and Monitoring: Integration of Remote Sensing Datasets for Assessment and Characterization of Drought Development by developing localised drought index and time series analysis.
- Temporal Patterns of Crops in Pakistan using NDVI Time-Series (Special study project during M.Phil.).
- Grassland Phenology and Productivity Mapping and Determine its Association with Climate Variability in the Upper Indus Basin, Pakistan. (M.Phil. Thesis)
- Mapping heterogeneous crops through Multi-Temporal Satellite Imagery: A Case Study of Irrigated Agriculture in Pakistan. (Collected Field Data and Supervised the MSc thesis while working in the GIS lab of WWF- Pakistan, and University of the Punjab)
- Landslide Mapping: Disasters Risk Assessment in two union councils of Chitral, Upper Indus Basin Pakistan.
- Ecological Impacts of Flood: Post-Flood Ecological Assessment of Taunsa Barrage Wildlife Sanctuary, Pakistan (Land Cover Change Assessment).
- Rapid Flood Extent Mapping during the Flood Period for surveillance and rehabilitation in 2016, Pakistan.
- District-wise forest cover assessment of Pakistan: Standardized and Harmonized Land Cover and National Forest Cover Assessment of Pakistan.
- Land Cover Mapping of the Central Karakoram National Park (CKNP), Upper Indus Basin, Pakistan.

-
- Development of GIS-based National Wetlands Inventory and field surveys of alpine lakes in Pakistan. (Pakistan Wetland Program, WWF-P).
 - Mangrove Cover Assessment in the Mangroves Ecosystem of Pakistan, the first comprehensive assessment in Pakistan.
 - Distribution and habitat mapping of Smooth-coated Otter (*Lutrogale perspicillata*) in Sindh province, Pakistan. (JAXA mini project 2009/2010– Collaborative project with AIT Bangkok and Japanese Aero Space Agency).

WORKSHOPS / MEETINGS / TRAININGS

- Conducted a training course on Remote Sensing and Geographic Information System: Theory and Applications, (26 March 2021), ESRI China, Hong Kong SAR.
- Conducted a One-Day Workshop on Airflow Analyst (26 March 2021), ESRI China, Hong Kong SAR.
- Hyperspectral Data Analysis in the non-invasive study of painting. (16-18 December 2019). Hong Kong Museum of Arts, Hong Kong SAR.
- Conducted a 3 days training course on Hyperspectral Data Analysis in the non-invasive study of painting. (16-18 December 2019). Hong Kong Museum of Arts, Hong Kong SAR.
- Conducted the provisional training course on Remote Sensing Theories and Applications for the Highways Department Government of Hong Kong SAR. (3-7 August 2017), Hong Kong SAR.
- Conducted a vocational training course on Photogrammetry, Aerial Photo Interpretation and Remote Sensing for The Planning Department Government of Hong Kong SAR (26-27 June 2017), Hong Kong.
- East & Central Asia Regional Planning Meeting, Working towards a Sustainable Region, World Agroforestry Centre (ICRAF), Kunming Institute of Botany, China, (10-11 June 2014)
- 1st Annual Progress Meeting of “Building effective water governance in the Asian Highlands,” IDRC (International Development Research) Project, Kunming Institute of Botany, Chinese Academy of Sciences (KIB-CAS) In Collaboration with HELVETAS Swiss Intercooperation. (28 – 30 November 2013)
- Participated in the Workshop on “Ecosystem Services and Livelihoods in changing climate: Understanding adaptations in the upper Mekong and Salween River Basins,” Himalayan Climate Change Adaptation Programme (HICAP), Kunming, China, (11-14 November 2013)
- Conducted a five days workshop on “Application of Remote Sensing and GIS for Natural Resource Management.” Organized by IUCN-Quetta. (01-05 November 2010), Quetta Pakistan.
- Conducted a Workshop for a team of CKNP officials on “Use of GIS and Remote Sensing for Natural Resource Management” (14 June 2010 to 19 June 2010), Islamabad Pakistan.
- Organized the National Workshop on Development and Harmonization of Land Cover Classification and District-wise Forest Cover Assessment of Pakistan (31st May to 4th June 2010), Islamabad Pakistan.

SOCIAL and Co / EXTRA-CURRICULAR ACTIVITIES

- Staff Facilitator of the Book Chat Groups for Read@PolyU, University's Campus-wide Reading program. The Hong Kong Polytechnic University, Hong Kong, 2020/2021.
- Staff Facilitator of the Book Chat Groups for Read@PolyU, University's Campus-wide Reading program. The Hong Kong Polytechnic University, Hong Kong, 2018/2019.
- Participation in the Samsung 58th Festival of Sport, Sports Federation and Olympic Committee of Hong Kong, China, 2015.
- Active participant as a student volunteer in organizing annual Book Fair 2008 (May, 28-30), University of the Punjab, Lahore, Pakistan.
- Member Sports Committee in Annual Sports (2007 & 2008), Department of Space Science, University of the Punjab, Lahore, Pakistan.
- Six Week Training Programme on Health Promotion for HIV/AIDS Prevention; Health Promotion in Adolescents for HIV/AIDS Prevention of AIDS Awareness Group (AAG)
- Basic Life Support Training from Punjab Emergency Service

FIELDWORK

Along with the desktop-based analysis of satellite images, I actively engaged in fieldwork. I have captured Bi-monthly hyperspectral images of Hong Kong's urban trees using a handheld camera. During my PhD work, I collected vegetation census data and soil samples by setting up 28 (20m by 20m) field plots in the secondary tropical forest in Hong Kong. Before, during my stay at WWF-P, I joined several field surveys in Mangroves, Juniper Forest, Alpine Lakes, Forest Inventories, and Alpine Grasslands and Rangelands.

REVIEWER SERVICES

I am reviewing scientific articles (more than 300) and received three awards for review in 2017 and 2018, viz, Top Reviewers for Remote Sensing 2018 (#3), Top Reviewers for Geosciences 2018 (#19) and Top Reviewers for Science of the Total Environment 2017 (#8). I frequently review for the leading journals such as IEEE

Transactions on Geoscience and Remote Sensing, Remote Sensing of Environment, International Journal of Remote Sensing, Science of the Total Environment, GIScience Remote Sensing, Remote Sensing, Acoustics, Climate, Sustainability, Sensors, Hydrology, Applied Sciences, ISPRS International Journal of Geo-Information, Forests, Habitat International, International Journal of Climatology, Journal of Cleaner Production, Land Use Policy, Journal of Coastal Research, Agricultural and Forest Meteorology, Biogeosciences, PLOS ONE, Diversity, Land, Forests, Environmetrics, Journal of Integrative Agriculture.