

# Curriculum Vitae

## PERSONAL INFORMATION

Akbar Hossain Kanan (PhD)  
Department of Land, Environment, Agriculture and Forestry (TESAF)  
University of Padova, Italy  
E-mail: [akbar.kanan@feem.it](mailto:akbar.kanan@feem.it) / [kanan.sust@gmail.com](mailto:kanan.sust@gmail.com)  
Cell phone: +393889070820



## RESEARCH INTEREST

Land use land cover, Ecosystem services, Forest and environmental economics, Sea level rise modelling, Socio-ecological system, Climate change adaptation (Nature-based solution), Remote sensing and GIS.

## WORK EXPERIENCE

- 3/2024-present**      **Senior Researcher**  
Fondazione Eni Enrico Mattei (FEEM), Venice, Italy  
• Climate change adaptation
- 2019-2022**      **Research Fellow**  
University of Padova, Italy  
• Spatial analysis of climate change, mangrove land cover, and coastal livelihood security
- 4/2022-7/2022**      **Visiting Researcher**  
TU Dresden, Germany  
• Application of environmental remote sensing
- 01/2015-02/2015**      **Visiting Researcher**  
University of Valladolid, Spain  
• Climate change mitigation and adaptation

## ACADEMIC BACKGROUND

- PhD - 2023**      **Area:** Land, Environment, Resources and Health  
**Result:** Competed  
**Institution:** University of Padova, Italy
- MSc - 2017**      **Area:** Environmental and Forest Science  
**Result:** 97 out of 110 (88% marks)  
**Institution:** University of Padova, Italy
- MSc - 2016**      **Area:** Forestry and Natural Resources Management  
**Result:** 16 out of 20 (80% marks)  
**Institution:** University of Lisbon, Portugal
- MSc - 2012**      **Area:** Forestry and Environmental Science  
**Result:** 3.73 out of 4.00 (1<sup>st</sup> position out of 35)  
**Institution:** Shahjalal University of Science and Technology, Bangladesh
- BSc - 2011**      **Area:** Forestry and Environmental Science  
**Result:** 3.69 out of 4.00 (3<sup>rd</sup> position out of 41)  
**Institution:** Shahjalal University of Science and Technology, Bangladesh

## TRAINING & SHORT COURSES

- 2019** Scientific writing in English, Ethics in scientific research, How to prepare and publish a scientific paper, Basic Statistics, Advance Statistics (R); March-June, University of Padova, Italy.
- 2019** Explicit and Implementation UN-SDGs (United Nations Sustainable Development Goals) through Higher Education; 23-27 September, Coruche, Portugal.
- 2016** Assessment and Management of Wildfire Risk from Prevention to Restoration; 22-25 July, Lisbon, Portugal.
- 2015** Forest Pathology and Wood Alternation; 02-12 May, Croatia.
- 2015** Environmental Friendly Wood Harvesting and Transportation System; 23-25 March, Forestry Training Centre, Ossiach, Austria.
- 2015** Model Forest Concept, and Insect Ecology & Biodiversity Management; 05 January- 06 February, Valladolid, Spain.
- 2014** Climate Change and Management of Mountain Forest; 12-16 October, Belluno, Italy.
- 2010** Community Based Management Plan for Chittagong Hill Forest; 05-16 March, Bangladesh.

## SCHOLARSHIPS & AWARDS

- 2019-2021** Italian government scholarship. The award covers tuition fees, insurance, travel and accommodation cost, and others cost for research. Amount: €90,000.
- 2014-2016** Erasmus Mundus Masters Scholarship. Funded by European Commission. The award covered tuition fees, insurance, travel and accommodation cost. Amount: €48,000.
- 2010-2011** MSc merit scholarship. Funded by University Grant commission (UGC), Bangladesh. Amount: €200.
- 2007-2009** BSc scholarship. Funded by Shahjalal University of Science and Technology, Bangladesh. Amount: €200.

## SHORT TERM FELLOWSHIP

- 2019** UN-SDGs fellowship. Funded by UN (United Nations). This fellowship covered travel and accommodation cost. Amount: €700.

## LANGUAGE PROFICIENCY

**English:** Very good

**Italian:** A2 level

## COMPUTER & IT SKILLS

**Microsoft office:** MS word, Excel, Power-point.

**Software:** R, ArcGIS, Endnote, Turnitin, Online data base (Mendeley, Science-direct, Scopus).

## RESEARCH EXPERIENCE

### Graduate & post-graduate research topic

- PhD** Analyzing change dynamics of mangrove forest through remote sensing and geospatial tools for understanding the impact on ecosystem services
- MSc** Characterization and conservation of wetlands resources with global change dynamics: a case study on Ratargul swamp forest, Bangladesh
- MSc** A legal assessment of the functional traits of sawmills of Sylhet city corporation, Bangladesh
- BSc** Textile effluents changes physiochemical parameters of water and soil: threat for agriculture

## **Project based research**

1. Indigenous technique of lemon cultivation and dependence of local people on the practice: a study at Jaintapur Upazilla, Sylhet, Bangladesh
2. Demographic and land use change in saint martin island: question of environmental sustainability and livelihood security
3. Role of ecosystem services on livelihood security of forest dependent people: a Study on Ratargul fresh water swamp forest
4. Maximization of land use with associated crops other than tea and management

## **PUBLICATIONS**

### **Peer-reviewed journal**

1. **Kanan, A.H.;** Masiero, M.; and Pirotti, F. (2024). Estimating Economic and Livelihood Values of the World's Largest Mangrove Forest (Sundarbans): A Meta-Analysis. *Forests*, 15, 837. [\[Link\]](#).
2. **Kanan, A. H.,** Masiero, M., Rahman, M., and Pirotti, F. (2023). Mapping inundation from sea-level rise and its interaction with land cover in the Sundarbans mangrove forest. *Climatic Change*, 176: 1-22. [\[Link\]](#).
3. **Kanan, A. H.,** Masiero, M., and Pirotti, F. (2022). Land cover change across 45 years in the world's largest mangrove forest (Sundarbans): the contribution of remote sensing in forest monitoring. *European Journal of Remote Sensing*, 1-17. [\[Link\]](#).
4. **Kanan, A. H.,** Marine, S. S., Raihan, F., Redowan, M., and Miah, M. D. (2015). Textile Effluents Changes Physiochemical Parameters of Water and Soil: Threat for Agriculture. *International Journal of Soil Science and Agronomy*, 2(1): 18-22. [\[Link\]](#).
5. Ali, M., Islam, M., Saha, N., and **Kanan, A. H.** (2014). Effects of Microclimatic Parameters on Tea Leaf Production in Different Tea Estates in Bangladesh. *World Journal of Agricultural Sciences*, 10 (3): 134-140. [\[Link\]](#).
6. Redowan, M., and **Kanan, A. H.** (2013). A Study on Maximization of Land Use with Associated Crops other than Tea and Management. *International Journal of Ecology and Development*, 25(2): 57-70. [\[Link\]](#).
7. Redowan, M., **Kanan, A. H.,** Kamal, M. M., and Mia, M. D. (2013). Potential of ecotourism in Sylhet forest division, Bangladesh: An assessment from the visitors' profile study. *International Journal of Forest Usufructs Management*, 14(1): 58-73. [\[Link\]](#).
8. Redowan, M., and **Kanan A. H.** (2012). Potentials and Limitations of NDVI and other Vegetation Indices (VIS) for Monitoring Vegetation Parameters from Remotely Sensed Data. *Bangladesh Research Publication Journal*, 7(3): 291-299. [\[Link\]](#).

### **Book publication**

1. Masum, **K. M., Kanan, A. H.,** and Islam, S. (2013). "Plant Species Richness and Territory Characteristics of Hoolock Gibbon". LAP LAMBERT Academic Publishing, Germany. [\[Link\]](#).

### **Conference paper (peer-reviewed)**

1. **Kanan, A. H.**, and Pirotti. F. (2022). A comparative assessment of land use-land cover dynamics between Bangladesh and Indian Sundarbans from 1975-2020: A geospatial and statistical-based approach. *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLIII-B3-2022, 625–632. [\[Link\]](#).
2. **Kanan, A. H.**, Masiero, M., and Pirotti. F. (2021). Assessing thematic land cover change of world's largest mangrove forest (Sundarbans) using remotely sensed data. *Planet Care from Space*, 2, 104–107. [\[Link\]](#).
3. **Kanan, A. H.**, and Sultana. R. (2013). Climate change and regeneration status of food trees of Hoolock Gibbon in Lawachara National Park. Proceeding for International Conference on Engineering Research Education and Innovation, SUST, Bangladesh. [\[Link\]](#).

### **Abstract book publication**

1. **Kanan, A. H.** (2021). Spatio-temporal changes of world largest mangrove forest (Sundarbans). Asita Academy, Milan, Italy.
2. **Kanan, A. H.**, Masiero, M., and Pirotti. F. (2021). Analysing change dynamics of land cover, erosion and accretion of world's largest mangrove forest (Sundarbans) using sensed data. *European Remote Sensing-New Solutions for Science and Practice*, University of Warsaw, Poland.
3. **Kanan, A. H.** (2019). The role of Participatory forest management system in livelihood security and forest restoration, GCSTMR, Sydney, Australia.
4. **Kanan, A. H.** (2019). Traditional system of lemon (*Citrus limon*) cultivation and Marketing: A study on Jaintapur, Sylhet, Bangladesh, GCSTMR, Sydney, Australia.
5. **Kanan, A. H.**, Ferreira, M. T., and Fernandes, M. R. (2016). Characterization and Conservation of Wetlands with Global Change Dynamics: A Case Study on Ratargul Swamp Forest, Bangladesh. *Mediterranean Forestry and Natural Resources Management Publishing*, Italy.
6. **Kanan, A. H.**, and Saha, N. (2015). A Legal Assessment of the Functional Traits of Sawmills of Sylhet City Corporation, Bangladesh. “IX Young Researchers Meeting on Conservation and Sustainable use of Forest System”. Sustainable Forest Management Research Institute Publishing (University of Valladolid-INIA, Spain).

### **Writing on going (paper for peer-reviewed journal)**

1. **Kanan, A. H.**, Giupponi C. (2024-25). Coastal socio-ecological systems in adaptation to climate change: a global overview.
2. **Kanan, A. H.**, Masiero, M., and Pirotti. F. (2023-24). A comparative assessment of spatio-temporal changes between Bangladesh and Indian Sundarbans from 1975-2020: implication for best management approach.
3. Islam, M. S., **Kanan, A. H.**, and Redowan, M. (2023-24). Urban land use and land cover (LULC) changes and impacts on ecosystem services: a case study of Barishal City, Bangladesh.

4. **Kanan, A. H.**, Ferreira, M. T., and Fernandes, M. R.(2023-24). Characterization and Conservation of Wetlands with Global Change Dynamics: A Case Study on Ratargul Swamp Forest, Bangladesh.
5. Redowan, M., Khan, A. A., **Kanan, A. H.**, Mahmud, S., and Haque, M. J. (2023-2024). Random forest classification of Landsat images to assess industrial deforestation and fragmentation of Bhawal National Park, Bangladesh.

#### **CONFERENCE ATTENDED**

1. XXIV<sup>th</sup> ISPRS (International Society for Photogrammetry and Remote Sensing) Congress, June, 6-11 2022, France.
2. 40<sup>th</sup> EARSeL Symposium on European Remote Sensing- New Solution Science and Practice, 07-10 June, 2021, University of Warsaw, Poland.
3. X AIT International Conference - Italian Society of Remote Sensing, September 13-15, 2021, Italy.
4. ASITA conference, July 1,2,9,16,23, 2021, Italy.
5. 4<sup>th</sup> GCSTMR World Congress, 19-22 January 2019, Dhaka, Bangladesh.
6. International conference on Forest Harvesting and Transportation Engineering, 23-25 March, 2015, Ossiach, Austria.
7. International Conference on “XI Young Researchers Meeting on Conservation and Sustainable use of Forest System” 28-30 January, 2015, Valsain, Spain.
8. International Conference on Engineering Research Education and Innovation (ICERIE), 11-13 January, 2013, SUST, Sylhet, Bangladesh.

#### **MEMBERSHIP**

1. General Member, Forestry Association, University of Padova, Italy.
2. Former Country Representative, Erasmus Mundus Association (EMA).
3. Member, Bangladesh Professional Forestry Student Association (BPFSA).

#### **REFERENCES**

1. **Dr. Francesco Pirotti**  
Associate Professor,  
Department of Land, Environment, Agriculture and Forestry (TESAF)  
University of Padova, Italy  
Tel. +3904982710 / +393923952067  
Email: francesco.pirotti@unipd.it
2. **Dr. Carlo Giupponi**  
Professor,  
Department of Economics (Environmental Economics)  
Ca' Foscari University, Venice, Italy  
Tel. +390412349126  
Email: cgiupponi@unive.it