Curriculum Vitae of *AVIJIT GHOSH*

1.	**Name**	:	Avijit Ghosh
2.	**Designation**	:	Scientist
3.	**Specialization**	:	Soil Science and Agricultural Chemistry
4.	**Address (with Tel. No./Fax No./Mob. No., email)**	:	Grassland and Silvi-pasture Management Division, ICAR-Indian Grassland and Fodder Research Institute, Jhansi, 284 003, Uttar Pradesh, India Mob: 8368612759 Email: avijitghosh19892@gmail.com; avijit.ghosh@icar.gov.in
5.	**Name of institute / university**	:	ICAR-Indian Grassland and Fodder Research Institute, Jhansi, 284 003, Uttar Pradesh, India
6.	**Date of Birth**	:	19-08-1992
7.	**Research experience**	:	>5 years
8.	**Give details of patent filed/owned**	:	Gene bank registration at NCBI database: MT186175, MT186175, MT186176, MT186177, MT186178, MT186179, MT186180, MT186181, MT186182, MT186183, MT186184, MT186185, MT186186, MT186187, MT186188, MT186189, MT186190, MT186191, MT186192, MT186193, MT186194, MT186195, MT186196, MT186197

9. **Major scientific achievements (at least 5) during last five years**

Sl No	Contribution	Proof
1.	Evaluated soil organic carbon sequestration as impacted by long-term fertization and manuring in maize-wheat cropping system in subtropical Inceptisol	DOI: 10.1016/j.still.2017.12.006.
2.	Quantified temperature sensitivity of soil organic carbon decomposition as affected by long-term fertilization in a sub-tropical Alfisol	DOI: 10.1016/j.agee.2016.09.010
3.	Identification of soil enzymes and microbial elemental stoichiometry as bio-indicators of soil quality in diverse cropping systems and nutrient management practices of Indian Vertisols	DOI: 10.1016/j.apsoil.2019.06.007
4.	Evaluated the changes in ^{13}C natural abundance, and deep soil organic carbon sequestration as effected by long-term fertilization effects on in an Alfisol	DOI: 10.1002/ldr.3229
5.	Development of polymer coated novel controlled release rock phosphate formulations for improving phosphorus use efficiency	DOI: 10.1016/j.still.2018.02.009
6.	Quantified temperature sensitivity of soil organic carbon decomposition under conservation agriculture in a subtropical Inceptisol	DOI: 10.1016/j.still.2019.02.016
7.	Evaluated the impact of conservation agriculture on ^{15}N distribution in soil aggregates and ^{15}N use efficiency	DOI: 10.1016/j.geoderma.2018.09.036
8.	Quantified temperature sensitivity of soil organic carbon decomposition as affected by long-term fertilization in a sub-tropical Inceptisol	DOI: 10.1016/j.still.2019.104369
9.	Determined oxidative stability of aggregate-associated soil organic carbon and deep soil carbon sequestration to zero-tillage in subtropical India	DOI: 10.1016/j.still.2019.104370
10.	Synthesised poly (vinyl alcohol) and liquid paraffin-based controlled release nitrogen-phosphorus formulations for improving phosphorus use efficiency	DOI: 10.1007/s42729-020-00249-3
11.	Quantified soil health improvement by long-term in situ moisture conservation in horti-pasture system in tropical degraded land of Bundelkhand region	DOI: 10.1016/j.jenvman.2019.109339
12.	Identified the role soil organic carbon quality and quantity on temperature sensitivity in soil aggregates	DOI: 10.1007/s10533-020-00653-y
13.	Enhanced nitrogen use efficiency by wheat using Phosphorus Enriched Organic Amendments	DOI: 10.1080/00103624.2019.1604736
14.	Studied depth dynamics of soil N contents and natural abundances of ^{15}N as effected by long-term fertilization	DOI: 10.1080/03650340.2018.1428310

	and liming in sub-tropical Alfisol	
15.	Degraded land restoration through ecological way to sustain productive economic viability	DOI: 10.1002/ldr.3340
16.	Studied the role of manure composition on thermal and moisture sensitivity of soil organic carbon decomposition	DOI: 10.1029/2017JG004329
17.	Development of novel bio-filtration method for the removal of heavy metals from municipal solid waste	DOI: 10.1016/j.eti.2020.100619
18.	Studied role of long-term manure application for crop yield stability and carbon sequestration in subtropical region	DOI:10.1111/sum.12700
19.	Studied the impact of contrasting land use systems and soil organic matter quality and temperature sensitivity in North Eastern India	DOI: 10.1016/j.still.2020.104573
20.	Evaluated the role of moisture conservation practices influence stability of soil organic carbon and structure	DOI: 10.1016/j.catena.2020.105127
21.	Conducted Eco-restoration of degraded lands through trees and grasses to improve soil carbon sequestration and biological activity in tropical climates	DOI: 10.1016/j.ecoleng.2021.106176
22.	Differentiated biological and chemical factors of top and deep soil carbon sequestration in semi-arid tropical Inceptisol using structural equation modeling	DOI: 10.1080/17583004.2020.1796143
23.	Studied decay kinetics of enzymes as influenced by manuring under varying hydrothermal regimes in a wheat–maize cropping in Inceptisol	DOI: 10.1007/s42729-021-00410-6
24.	Assessed potassium status in soils under different land use systems of Assam	Das, A., Biswas, D.R., Das, D., Sharma, V.K., Das, R., Ray, P., Ghosh, A., Mridha, N. and Biswas, S.S., 2019. Assessment of potassium status in soils under different land use systems of Assam. Indian Journal of Agricultural Sciences, 89(7), pp.1077-81.
25.	Gene bank registration of 23 microbes at NCBI database suitable for eco-restoration of degraded lands	MT186175, MT186175, MT186176, MT186177, MT186178, MT186179, MT186180, MT186181, MT186182, MT186183, MT186184, MT186185, MT186186, MT186187, MT186188, MT186189, MT186190, MT186191, MT186192, MT186193, MT186194, MT186195, MT186196, MT186197

10. **List of papers published in referred journals (*indicates corresponding author)**

1. Manna, M.C., Rahman, M.M., Naidu, R., Bari, A.F., Singh, A.B., Thakur, J.K., **Ghosh, A.,** Patra, A.K., Chaudhari, S.K. and Subbarao, A., 2021. Organic farming: A prospect for food, environment and livelihood security in Indian agriculture. In ***Advances in Agronomy*** (Vol. 170, pp. 101-153). Academic Press.
2. Biswas, D.R., **Ghosh, A.,** Ramachandran, S., Basak, B.B., Bhattacharyya, R., Biswas, S.S., Sarkar, A. and Moharana, P.C., 2021. Decay Kinetics of Enzymes as Influenced by Manuring Under Varying Hydrothermal Regimes in a Wheat–Maize Cropping System of Subtropical Cambisols in India. ***Journal of Soil Science and Plant Nutrition***, 21(2), pp.908-921.
3. Trivedi, A., Bhattacharyya, R., **Ghosh, A.,** Saha, N.D., Biswas, D.R., Mahapatra, P., Verma, S., Shahi, D.K., Khan, S.A., Bhatia, A. and Agnihorti, R., 2021. 60 years of fertilization and

liming impacts on soil organic carbon stabilization in a sub-tropical Alfisol. ***Environmental Science and Pollution Research,*** 28, pp. 45946–45961.

4. **Ghosh, A.,*** Kumar, R.V., Manna, M.C., Singh, A.K., Parihar, C.M., Kumar, S., Roy, A.K. and Koli, P., 2021. Eco-restoration of degraded lands through trees and grasses improves soil carbon sequestration and biological activity in tropical climates. ***Ecological Engineering,*** 162, p.106176.
5. Biswas, S.S., Biswas, D.R., Purakayastha, T.J., Sarkar, A., Kumar, R., Das, T.K., Barman, M., Pabbi, S., **Ghosh, A.** and Pal, R., 2021. Residual effect of rock-phosphate and PSB on rice yield and soil properties. ***The Indian Journal of Agricultural Sciences,*** 91(3).
6. Wankhede, M., Dakhli, R., Manna, M.C., Sirothia, P., Mahmudur Rahman, M., **Ghosh, A.,*** Bhattacharyya, P., Singh, M., Jha, S. and Patra, A.K., 2021. Long-term manure application for crop yield stability and carbon sequestration in subtropical region. ***Soil Use and Management,*** 37(2), pp.264-276.
7. **Ghosh, A.,*** Singh, A.K., Kumar, S., Manna, M.C., Jha, P., Bhattacharyya, R., Sannagoudar, M.S., Singh, R., Chaudhari, S.K. and Kumar, R.V., 2021. Do moisture conservation practices influence stability of soil organic carbon and structure?. ***CATENA,*** 199, p.105127.
8. Patra, A., Sharma, V.K., Nath, D.J., **Ghosh, A.,** Purakayastha, T.J., Barman, M., Kumar, S., Chobhe, K.A., Anil, A.S. and Rekwar, R.K., 2021. Impact of soil acidity influenced by long-term integrated use of enriched compost, biofertilizers, and fertilizer on soil microbial activity and biomass in rice under acidic soil. ***Journal of Soil Science and Plant Nutrition,*** 21(1), pp.756-767.
9. Sarkar, A., Biswas, D.R., Datta, S.C., Roy, T., Biswas, S.S., **Ghosh, A.,** Saha, M., Moharana, P.C. and Bhattacharyya, R., 2020. Synthesis of poly (vinyl alcohol) and liquid paraffin-based controlled release nitrogen-phosphorus formulations for improving phosphorus use efficiency in wheat. ***Journal of Soil Science and Plant Nutrition***, 20(4), pp.1770-1784.
10. **Ghosh, A.,*** Singh, A.K., Kumar, S., Manna, M.C., Bhattacharyya, R., Agnihortri, R., Singh Gahlaud, S.K., Sannagoudar, M.S., Gautam, K., Kumar, R.V. and Chaudhari, S.K., 2020. Differentiating biological and chemical factors of top and deep soil carbon sequestration in semi-arid tropical Inceptisol: an outcome of structural equation modeling. ***Carbon Management,*** 11(5), pp.441-453.
11. Modak, K., Biswas, D.R., **Ghosh, A.,** Pramanik, P., Das, T.K., Das, S., Kumar, S., Krishnan, P. and Bhattacharyya, R., 2020. Zero tillage and residue retention impact on soil aggregation and carbon stabilization within aggregates in subtropical India. ***Soil and Tillage Research,*** 202, p.104649.
12. **Ghosh, A.,*** Das, A., Das, D., Ray, P., Bhattacharyya, R., Biswas, D.R. and Biswas, S.S., 2020. Contrasting land use systems and soil organic matter quality and temperature sensitivity in North Eastern India. ***Soil and Tillage Research,*** 199, p.104573.
13. **Ghosh, A.,*** Misra, S., Bhattacharyya, R., Sarkar, A., Singh, A.K., Tyagi, V.C., Kumar, R.V. and Meena, V.S., 2020. Agriculture, dairy and fishery farming practices and greenhouse gas emission footprint: a strategic appraisal for mitigation. ***Environmental Science and Pollution Research,*** 27(10), pp.10160-10184.
14. Bhattacharyya, R., **Ghosh, A.,** Zhang, Y., Dalal, R.C., Kopittke, P.M., Jones, A. and Menzies, N.W., 2020. Land use affects temperature sensitivity of soil organic carbon decomposition in macroaggregates but not in bulk soils in subtropical Oxisols of Queensland, Australia. ***Soil and Tillage Research,*** 198, p.104566.
15. Wankhede, M., **Ghosh, A.,*** Manna, M.C., Misra, S., Sirothia, P., Rahman, M.M., Bhattacharyya, P., Singh, M., Bhattacharyya, R. and Patra, A.K., 2020. Does soil organic carbon quality or quantity govern relative temperature sensitivity in soil aggregates?. ***Biogeochemistry,*** 148(2).
16. Sannagoudar, M.S., Patil, R.H., Kumar, R.V., Singh, A.K., **Ghosh, A.** and Halli, H.M., 2020. Simulated impacts of rise in temperature on kharif sorghum genotypes in Northern Transitional Zone of Karnataka, India. ***Cereal Research Communications,*** 48(1), pp.113-120.

17. Manna, M.C., Sahu, A., De, N., Thakur, J.K., Mandal, A., Bhattacharjya, S., **Ghosh, A.,*** Rahman, M.M., Naidu, R., Singh, U.B. and Dakhli, R., 2020. Novel bio-filtration method for the removal of heavy metals from municipal solid waste. ***Environmental Technology & Innovation,*** 17, p.100619.
18. **Ghosh, A.,*** Singh, A.B., Kumar, R.V., Manna, M.C., Bhattacharyya, R., Rahman, M.M., Sharma, P., Rajput, P.S. and Misra, S., 2020. Soil enzymes and microbial elemental stoichiometry as bio-indicators of soil quality in diverse cropping systems and nutrient management practices of Indian Vertisols. ***Applied Soil Ecology***, 145, p.103304.
19. **Ghosh, A.,*** Bhattacharyya, R., Dey, A., Dwivedi, B.S., Meena, M.C., Manna, M.C. and Agnihortri, R., 2019. Long-term fertilisation impact on temperature sensitivity of aggregate associated soil organic carbon in a sub-tropical Inceptisol. ***Soil and Tillage Research,*** 195, p.104369.
20. Moharana, P.C., Biswas, D.R., **Ghosh, A.,** Sarkar, A., Bhattacharyya, R. and Meena, M.D., 2019. Effects of crop residues composts on the fractions and forms of organic carbon and nitrogen in subtropical Indian conditions. ***Soil Research,*** 58(1), pp.95-108.
21. **Ghosh, A.,*** Kumar, S., Manna, M.C., Singh, A.K., Sharma, P., Sarkar, A., Saha, M., Bhattacharyya, R., Misra, S., Biswas, S.S. and Biswas, D.R., 2019. Long-term in situ moisture conservation in horti-pasture system improves biological health of degraded land. ***Journal of Environmental Management,*** 248, p.109339.
22. Modak, K., **Ghosh, A.,** Bhattacharyya, R., Biswas, D.R., Das, T.K., Das, S. and Singh, G., 2019. Response of oxidative stability of aggregate-associated soil organic carbon and deep soil carbon sequestration to zero-tillage in subtropical India. ***Soil and Tillage Research,*** 195, p.104370.
23. Das, A., Biswas, D.R., Das, D., Sharma, V.K., Das, R., Ray, P., **Ghosh, A.,** Mridha, N. and Biswas, S.S., 2019. Assessment of potassium status in soils under different land use systems of Assam. ***Indian Journal of Agricultural Sciences,*** 89(7), pp.1077-81.
24. Biswas, S.S., **Ghosh, A.,** Singhal, S.K., Biswas, D.R., Roy, T., Sarkar, A. and Das, D., 2019. Phosphorus enriched organic amendments can increase nitrogen use efficiency in wheat. ***Communications in Soil Science and Plant Analysis,*** 50(9), pp.1178-1191.
25. Bhattacharyya, R., Das, T.K., Das, S., Dey, A., Patra, A.K., Agnihotri, R., **Ghosh, A.** and Sharma, A.R., 2019. Four years of conservation agriculture affects topsoil aggregate-associated 15nitrogen but not the 15nitrogen use efficiency by wheat in a semi-arid climate. ***Geoderma,*** 337, pp.333-340.
26. Parihar, C.M., Singh, A.K., Jat, S.L., **Ghosh, A.,** Dey, A., Nayak, H.S., Parihar, M.D., Mahala, D.M., Yadav, R.K., Rai, V. and Satayanaryana, T., 2019. Dependence of temperature sensitivity of soil organic carbon decomposition on nutrient management options under conservation agriculture in a sub-tropical Inceptisol. ***Soil and Tillage Research,*** 190, pp.50-60.
27. Meena, M.D., Yadav, R.K., Narjary, B., Yadav, G., Jat, H.S., Sheoran, P., Meena, M.K., Antil, R.S., Meena, B.L., Singh, H.V., Meena, V.S., Rai, P.K., **Ghosh, A.** and Moharana, P.C. 2019. Municipal solid waste (MSW): Strategies to improve salt affected soil sustainability: A review. ***Waste management,*** 84, pp.38-53.
28. Kumar, S., Singh, A.K., Singh, R., **Ghosh, A.,*** Chaudhary, M., Shukla, A.K., Kumar, S., Singh, H.V., Ahmed, A. and Kumar, R.V., 2019. Degraded land restoration ecological way through horti-pasture systems and soil moisture conservation to sustain productive economic viability. ***Land Degradation & Development,*** 30(12), pp.1516-1529.
29. Jat, S.L., Parihar, C.M., Dey, A., Nayak, H.S., **Ghosh, A.,** Parihar, N., Goswami, A.K. and Singh, A.K., 2019. Dynamics and temperature sensitivity of soil organic carbon mineralization under medium-term conservation agriculture as affected by residue and nitrogen management options. ***Soil and Tillage Research,*** 190, pp.175-185.
30. Roy, T., Biswas, D.R., **Ghosh, A.,** Patra, A.K., Singh, R.D., Sarkar, A. and Biswas, S.S., 2019. Dynamics of culturable microbial fraction in an Inceptisol under short-term amendment with municipal sludge from different sources. ***Applied Soil Ecology,*** 136, pp.116-121.

31. Singh, G., Bhattacharyya, R., Das, T.K., Sharma, A.R., **Ghosh, A.,** Das, S. and Jha, P.,2018. Crop rotation and residue management effects on soil enzyme activities, glomalin and aggregate stability under zero tillage in the Indo-Gangetic Plains. ***Soil and Tillage Research,*** 184, pp.291-300.
32. **Ghosh, A.,** Bhattacharyya, R., Agarwal, B.K., Mahapatra, P., Shahi, D.K., Singh, G., Agnihorti, R., Sawlani, R. and Sharma, C., 2019. Long-term fertilization effects on 13C natural abundance, soil aggregation, and deep soil organic carbon sequestration in an Alfisol. ***Land Degradation & Development,*** 30(4), pp.391-405.
33. Biswas, D.R. and **Ghosh, A.,** 2018. Municipal Solid Waste Management vis-a-vis Sustenance of Soil Health. ***Indian Journal of Fertilisers,*** p.47.
34. Sarkar, A., Biswas, D.R., Datta, S.C., Roy, T., Moharana, P.C., Biswas, S.S. and **Ghosh, A.,** 2018. Polymer coated novel controlled release rock phosphate formulations for improving phosphorus use efficiency by wheat in an Inceptisol. ***Soil and Tillage Research,*** 180, pp.48-62.
35. **Ghosh, A.,** Bhattacharyya, R., Dwivedi, B.S., Biswas, D.R., Meena, M.C., Sarkar, A., Agarwal, B.K., Mahapatra, P., Shahi, D.K., Agnihorti, R. and Sawlani, R., 2018. Depth dynamics of soil N contents and natural abundances of 15N after 43 years of long-term fertilization and liming in sub-tropical Alfisol. ***Archives of Agronomy and Soil Science,*** 64(9), pp.1290-1301.
36. Biswas, D.R., **Ghosh, A.,** Ramachandran, S., Basak, B.B. and Moharana, P.C., 2018. Dependence of thermal and moisture sensitivity of soil organic carbon decomposition on manure composition in an Inceptisol under a 5-year-old maize-wheat cropping system. ***Journal of Geophysical Research: Biogeosciences,*** 123(5), pp.1637-1650.
37. **Ghosh, A.,** Bhattacharyya, R., Meena, M.C., Dwivedi, B.S., Singh, G., Agnihotri, R. and Sharma, C., 2018. Long-term fertilization effects on soil organic carbon sequestration in an Inceptisol. ***Soil and Tillage Research,*** 177, pp.134-144.
38. Biswas, S.S., Singhal, S.K., Biswas, D.R., Singh, R.D., Roy, T., Sarkar, A., **Ghosh, A.** and Das, D., 2017. Synchronization of nitrogen supply with demand by wheat using sewage sludge as organic amendment in an Inceptisol. ***Journal of the Indian Society of Soil Science,*** 65(3), pp.264-273.
39. **Ghosh, A.,** Bhattacharyya, R., Dwivedi, B.S., Meena, M.C., Agarwal, B.K., Mahapatra, P., Shahi, D.K., Salwani, R. and Agnihorti, R., 2016. Temperature sensitivity of soil organic carbon decomposition as affected by long-term fertilization under a soybean based cropping system in a sub-tropical Alfisol. ***Agriculture, Ecosystems & Environment,*** 233, pp.202-213.
40. Bhattacharyya, R., Ghosh, B., Singh, R.J., **Ghosh, A.** and Fullen, M., 2019. Use of fibrous structures for land protection. ***Journal of Agricultural Physics,*** 19(2), pp.149-157.
41. Sannagoudar, M.S., Murthy, K.K., Nagaraju, N., Rajanna, G., **Ghosh, A.,** Singh, A.K., Gupta, G. and Kumar, R., 2021. Influence of weed management practices in maize (*Zea mays*) based intercropping system. ***The Indian Journal of Agricultural Sciences,*** 91(7).
42. Sannagoudar, M.S., Murthy, K.K., **Ghosh, A.,** Singh, A.K., Gupta, G., Halli, H.M. and Kumar, R.V., Comparative efficacy of leguminous intercrops and weed management practices on nutrient uptake, productivity and profitability of maize-based intercropping system. ***Legume Research-An International Journal***, 1, p.6.
43. Ghosh, A., Mahanta, S.K., Manna, M.C., Singh, S., Bhattacharyya, R., Tyagi, V.C., Singh, J.B., Ram, S.N., Srinivasan, R., Singh, A.K. and Gupta, A., 2022. Long-Term Grazing Mediates Soil Organic Carbon Dynamics by Reorienting Enzyme Activities and Elemental Stoichiometry in Semi-arid Tropical Inceptisol. ***Journal of Soil Science and Plant Nutrition***, pp.1-12. https://doi.org/10.1007/s42729-021-00742-3.
44. Baradwal, H., Ghosh, A., Kumar, A., Singh, P.D., Sannagoudar, M.S., Ahamad, S., Jha, P., Singh, A.K., Bhattacharyya, R., Manna, M.C. and Kumar, S., Ecological restoration of degraded lands with alternate land use systems improves soil functionality in semiarid tropical India. ***Land Degradation & Development***. https://doi.org/10.1002/ldr.4225.

12.	**Book chapters:** 1. Dey, A., **Ghosh, A.,** Das, S., Bhattacharyya, R. and Tigga, P., 2021. Belowground Carbon Storage and Dynamics. In Soil Science: Fundamentals to Recent Advances (pp. 49-67). Springer, Singapore. 2. Manna, M.C. and **Ghosh, A.,** 2021. Soil Organic Carbon Dynamics, Stabilization, and Environmental Implication. In Soil Science: Fundamentals to Recent Advances (pp. 13-33). Springer, Singapore. 3. Das, R., **Ghosh, A.,** Das, S., Basak, N., Singh, R. and Datta, A., 2021. Soil Carbon Sequestration for Soil Quality Improvement and Climate Change Mitigation. In: Advances in Carbon Capture and Utilization (pp. 57-81). Springer, Singapore. 4. Moharana, P.C., **Ghosh, A.,** Meena, M.D., Mondal, N. and Biswas, D.R., 2021. Resource Recovery from Bio-Waste for Agriculture through Composting and Microbial Technology. In Soil Management for Sustainable Agriculture New Research and Strategies Apple Academic Press. 5. Paul, R., Sahoo, S., **Ghosh, A.** and Gobinath, R., 2019. Tapping soil biodiversity for enhancing resource use efficiency. New and Future Developments in Microbial Biotechnology and Bioengineering, pp.319-339. 6. **Avijit Ghosh,** Abir Dey, Ranjan Bhattacharyya, M C Manna, S K Chaudhari (2021) Hydrothermal Sensitivity of Soil Organic Carbon under Imminent Moisture and Temperature Stress. In book: Soil Management for Sustainable Agriculture New Research and Strategies Publisher: Apple Academic Press. 7. Shrivastava, M., **Ghosh, A.,** Bhattacharyya, R. and Singh, S.D., 2018. Urban pollution in India. John Wiley & Sons, Ltd.: Chichester, UK, pp.341-356.

	Books: 1. **Ghosh, A.,** Singh, A.K., Chaudhary, M. and Prasad, M. (2019) Soil-Plant-Water Analysis: A Complete Knowledge ISBN: Paperback 978-93-88660-57-0.
13.	**Honors and Awards:** 1. ICAR-All India Entrance Examination for Agriculture for Post Graduate Studies: 1st rank in Physical Science group (2014) 2. Recipient of ICAR-Junior Research Fellowship: 2014-16 3. ICAR-All India Entrance Examination for Agriculture for PhD: 1st rank in Natural Resource Management (II) Group (2016) 4. Qualified National Eligibility Test for Lectureship in Soil Science (2016) 5. Recipient of Rajiv Gandhi National Fellowship for Ph.D.: 2017 6. Recipient of ICAR-IARI Merit Medal for Outstanding Academic Performance (2016) 7. Recipient of Indian Society of Soil Science Zonal Award for Outstanding Thesis Work (2016) 8. Recipient of Young Achiever Award 2018 (Institute of Scholars) 9. Recipient of Director Nominee Award 2019 (Indian Grassland and Fodder Research Institute, Jhansi) 10. Received research grant of 39 lakh (INR) from Department of Science and Technology (date 14-08-2020) 11. Received research grant of 13.97 lakh (INR) from UP Council of Agricultural Research (date:01-07-2020) 12. Received research grant of 195 lakh (INR) from National Thermal Power Corporation Limited (date:10-12-2020) 13. Received best poster presentation award in 84th Annual Convention, Indian Society of Soil Science, Banaras Hindu University, Varanasi, India, November 15-18, 2019, entitled "Effect of long-term in situ moisture conservation in horti-pasture system on biological health of degraded land". 14. Received best poster presentation Award In: National Conference on Resource Conservation for soil security and Jalshakti: Farmers Perspective in Bundelkhand (RCSSJ-2020), ICAR-IISWC RC-Datia (MP), India, March 03-05, 2020, entitled "Sustainable fruit and fodder security under rainfed situation of India through Hortipasture land use system" 15. Received best Thesis Award and Gold Medal from ICAR-Indian Agricultural Research Institute for outstanding academic performances in M.Sc. during 55th Convocation programme in 2018 16. Received Indian Society of Soil Science Zonal award for outstanding academic performances and thesis in M.Sc. during the 83rd Annual Convention programme in 2018 17. Editorial board Member of the Range Management and Agroforestry Journal 18. Member of Institute Publication committee, ICAR-IGFRI for the period of 2021-22. 19. Reviewed several papers from Journal of Environmental Management, Ecological Indicators, Science of the total Environment, Journal of Soil Science and Plant Nutrition, etc.
14.	**No. of dissertation work of supervised:** 02 (1 as supervisor; 1 as co-supervisor)
15.	**Google scholar Citation statistics:** Total Citations: 668 h-index: 14 i10-index: 21 Link: https://scholar.google.com/citations?user=2EC6JTwAAAAJ&hl=en.
16.	**Professional Associations:** 1. Life member of the Range Management Society of India. 2. Life member of the Indian Society of Soil Science 3. Annual Member (during 2021 to 2027) of the International Soil and Tillage Research Organization
17.	**Recent/Current Research Projects:** 1. Evaluation of ecosystem productivity in grown up Hortipastoral system for fruit and forage security with management practices 2. Study of restoration ecology in silvi-pasture system for semiarid region 3. Canopy management for enhanced productivity and sustainability of neem based silvi-pastoral system in semi-arid tropics 4. Developing cheaper Nutrigel for improving water and nutrient use efficiency in degraded lands of Bundelkhand

	5. Long-term effect of different grazing intensities on soil health and pasture-animal productivity
	6. Recuperated canopy architecture for higher bael (*Aegle marmelos*; Rutaceae) productivity and forage security in semi-arid region 7. Studies on temperate pastureland for enhanced forage yield, quality and environmental sustainability 8. Development and evaluation of annual Moringa for food, fodder and Nutritional content in Uttar Pradesh 9. Use of fly ash in agriculture for sustainable crop production and environmental protection

Declaration

I hereby declare that the facts given above are genuine to the best of my knowledge and belief.

Signature:

Date: 21-04-2021

Place: Jhansi, India

Name Avijit Ghosh