

RESEARCH PUBLICATION

1. **Singh, L.K.**, Jha, M.K. and Chowdary, V.M. (2017). Multi-criteria analysis and GIS modeling for identifying prospective water harvesting and artificial recharge sites for sustainable water supply. *Journal of Cleaner Production*, 142: 1436-1456. (NAAS: 17.07)
2. Jha, M.K., **Singh, L.K***, Nayak, G.K. and Chowdary, V.M. (2020). Optimization modeling for conjunctive use planning in upper Damodar river basin, India. *Journal of Cleaner Production*, 273: 123098. (NAAS: 17.07)
3. **Singh, L.K.**, Jha, M.K. and Chowdary, V.M. (2018). Assessing the accuracy of GIS-based multi-criteria decision analysis approaches for mapping groundwater potential. *Ecological Indicators*, 91: 24-37. (NAAS: 12.26)
4. **Singh, L.K.**, Jha, M.K. and Chowdary, V.M. (2021). Planning rainwater conservation measures using geospatial and multi-criteria decision making tools for sustainable water management in a canal command. *Environmental Science and Pollution Research*, 28: 1734-1751. (NAAS: 11.19)
5. **Singh, L.K.**, Jha, M.K. and Pandey, M. (2018). Framework for standardizing less data-intensive methods of reference evapotranspiration estimation. *Water Resources Management*, 32(13): 4159-4175. (NAAS: 10.43)
6. **Singh, L.K.**, Jha, M.K. and Chowdary, V.M. (2020). Evaluation of water demand and supply under varying meteorological conditions in eastern India and mitigation strategies for sustainable agricultural production. *Environment, Development and Sustainability*, <http://doi.org/10.1007/s10668-020-00619-y>, (NAAS: 10.08)
7. **Singh, L.K.**, Jha, M.K. and Chowdary, V.M. (2020). Application of catastrophe theory to spatial analysis of groundwater potential in a sub-humid tropical region: A hybrid approach. *Geocarto International*, <http://doi.org/10.1080/10106049.2020.1737970>. (NAAS: 9.45)
8. Singh, L.K., Jha, M.K. and Pandey, M. (2023). Spatiotemporal Variability and Trends in the Rainfall and Temperature of a Sub-Tropical 2 Region of Eastern India and Their Implications. Pure and Applied Geophysics, <https://doi.org/10.1007/s00024-023-03238-6>. Springer (Impact Factor: 2.64; equivalent to NAAS: 8.64).
9. Sannigrahi, S., Chakraborti, S., Banerjee, A., Rahmat, S., Bhatt, S., Jha, S., **Singh, L.K.**, Paul, S.K., and Sen, S. (2020). Ecosystem service valuation of a natural reserve region for sustainable management of natural resources. Environmental and Sustainability Indicators, 5: 100014. (Impact Factor: 4.3; equivalent to NAAS: 10.3).
10. Wahengbam, E.D., Devi, C.P., Sharma, S.K. Roy, S.S., Maibam, A., Dasgupta, M., Luikham, S., Chongtham, T., Ningombam, A., Bhupenchandra, I., **Singh, L.K.**, Devi, Y.P., Thokchom, S., Khaba, C.I. Singh, N.B., Rajashekar, Y., Das, S., Mohanty, S. and Sahoo, M.R. (2023). Reactive oxygen species turnover, phenolics metabolism, and some key gene expressions modulate postharvest physiological deterioration in cassava tubers. Frontiers in Microbiology, 14:1148464. doi: 10.3389/fmicb.2023.1148464.10.3389/fmicb.2023.1148464 (NAAS: 12.06).
11. Sannigrahi, S., Pilla, F., Zhang, Q., Chakraborti, S., Wang, Y., Basu, B., Basu, A.S., Joshi, P.K., Keesstra, S., Roy, P.S., Sutton, P.C., Bhatt, S., Rahmat, S., Jha, S., Singh, L.K. (2021) Examining the effects of green revolution led agricultural expansion on net ecosystem service values in India using multiple valuation

- approaches. *Journal of Environmental Management*, 277, 111381. doi: 10.1016/j.jenvman.2020.111381. (NAAS: 14.91)
12. **Singh, L.K.**, Sannigrahi, S., Bhupenchandra, I., Das, A., Ghosh, S., Dutta, S., Swain, R., Jha, R.K. and Lal, M. (2021). Assessment of Agricultural Relevance on Groundwater Indicator in a Command Area of Eastern India. *Journal of the Indian Society of Remote Sensing*, 49: 3043–3057. (NAAS: 7.89)
 13. Bhupenchandra, I., Chongtham, S. K., Basumatary, A., Singh, A. H., Das, A., Choudhary, A. K., Kamei, G., Sinyorita, S., **Singh, L.K.**, Devi, E.L., Devi, Ch.P. and Harish, M.N. (2022). Changes in Soil Properties, Productivity and Profitability as Influenced by the Adoption of Site-specific Integrated Crop Management Technology in Turmeric (*Curcuma Longa* L.) in Eastern Himalayan Acidic Inceptisol. *Industrial Crops and Products*, 180, 114745. doi:10.1016/j.indcrop.2022.114745. (NAAS: 12.45)
 14. **Singh, L.K.**, Jha, M.K., Chowdary, V.M. and Sannigrahi, S. (2019). Evaluation of crop water demand for sustainable crop production using geospatial tools in a canal command of West Bengal. *Journal of Agrometeorology*, 21(4): 427-433. (NAAS: 6.00)
 15. **Singh, L.K.**, Bhupenchandra, I. and Devi, S.R. (2019). Assessment of crop water requirement of field pea (*Pisum sativum* L.) in foothills valley areas of Manipur, North East India. *Journal of Agrometeorology*, 23 (3) : 306-309. (NAAS: 6.00)
 16. Chongtham, S.K., Devi, E.L., Samantara, K., Yasin, J.K., Wani, S.H., Mukherjee, S., Razzaq, A., Bhupenchandra, I., Jat, A.L., **Singh, L.K.** and Kumar, A. (2022). Correction to: Orphan legumes: harnessing their potential for food, nutritional and health security through genetic approaches. *Planta*, 256(2): 34. doi: 10.1007/s00425-022-03957-5. (NAAS: 10.54)
 17. Bhupenchandra, I, Basumatary, A., Dutta, S., **Singh, L.K.** and Datta, N. (2020). Impact of boron fertilization on boron fractions at different crop growth stages in cauliflower_cowpea_okra sequence in an inceptisols of North East India. *Journal of Plant Nutrition*, 43(8): 1175–1188. (NAAS: 8.28)
 18. Dutta, N., Dutta, S., Bhupenchandra, I., Karmakar, R.M., Das, K.N., **Singh, L.K.**, Bordoloi, A. and Sarmah, T. (2021). Assessment of heavy metal status and identification of source in soils under intensive vegetable growing areas of Brahmaputra valley, North East India. *Environmental Monitoring and Assessment*, 193(6):376. doi: 10.1007/s10661-021-09168-x. (NAAS: 9.31)
 19. Bhupenchandra, I., Basumatary, A., Dutta, S., Das, A., Singh, L.K., Devi, S.H., Sinyorita, S. and Devi, Ch.P. (2022). Direct and residual impact of boron fertilization improves the crop yield, nutrient contents, nutrient uptake, and nutrient use efficiencies in cauliflower–cowpea–okra sequence in an acidic Inceptisol of North East India. *Journal of Plant Nutrition*, 45:7, 963-983, DOI: 10.1080/01904167.2021.1994591. (NAAS: 8.28)
 20. Barala, J., Basumatary, A., Bhupenchandra, I., Dutta, S., Das, K.N. and Singh, L.K. (2022). Profile distribution of trace elements under different land-use systems in North East India. *Archives of Agronomy and Soil Science*, DOI: 10.1080/03650340.2022.2111417. (NAAS: 8.24)
 21. Bhupenchandra, I, Basumatary, A., Dutta, S., **Singh, L.K.** and others (2020). Micronutrient content in plant, its uptake, and crop yield in cauliflower–cowpea–okra cropping sequence as impacted by graded level of boron fertilization.

- Communications in Soil Science and Plant Analysis*, 51(14): 1870–1887. (NAAS: 7.58)
22. Bhupenchandra, I., Basumatary, A., Dutta, S., Singh, A.H., **Singh, L.K.**, Bora, S.S., Devi, S.H. and Bhagowati, S. (2021). Effect of boron fertilization on soil chemical properties, nutrients status in the soil and yield of crops under cauliflower-cowpea okra sequence in North East India. *Communications in Soil Science and Plant Analysis*, 52:11, 1301-1326, DOI: 10.1080/00103624.2021.1879127. (NAAS: 7.58)
 23. Bhupenchandra, I., Basumatary, A., Kumar, A., Dutta, S., Kalita, P., Singh, L.K., Bora, S.S., Devi, S.H., Gudade, B.A., Bhagowati, S., Aage, A.B. and Verma, G. (2022). Physiological performance, yield and quality of crops as influenced by boron. *Indian Journal of Agricultural Sciences*, 91 (4): 568–572. (NAAS: 6.37)
 24. **Singh, L.K.**, Devi, S.R. and Singh, M.H. (2015). Traditional agricultural tools and implements used in Wokha, Nagaland. *Indian Journal of Hill Farming*, 28(1):50-55. (NAAS: 5.04)
 25. Devi, S.R. and **Singh, L.K.** (2015). Women's role in agriculture and allied fields in Manipur. *Indian Journal of Hill Farming*, 28(2):154-157. (NAAS: 5.04)
 26. Devi, S.R. and **Singh, L.K.** (2015). Scope for Post Harvest Management in North East India through Zero Energy Cool Chamber. *Indian Journal of Hill Farming*, 28(2):137-143. (NAAS: 5.04)
 27. **Singh, L.K.** and Devi, S.R. (2016). Rooftop Rainwater Harvesting for Domestic Water Demand and Supply Management and Designing of Optimum Rainwater Harvesting Structure in Imphal West District Manipur. *Indian Journal of Hill Farming*, 29(2):48-54. (NAAS: 5.04)
 28. **Singh, L.K.** and Devi, S.R. (2016). Economic Evaluation for different Level of Agricultural Mechanization in Manipur. *Indian Journal of Hill Farming*, 29(2):25-34. (NAAS: 5.04)
 29. **Singh, L. K.** and Devi, S. R. (2018). Important traditional soil and water conservation techniques practices for sustainable agriculture in north east India. *Indian Journal of Hill Farming*, 31(2): 220-226. (NAAS: 5.04)
 30. Devi, S.R. and Singh, L.K. (2018). Contribution of Smokeless Chulha for Rural Cooking in Churachandpur District, Manipur. *Indian Journal of Hill Farming*, Special Issue, Page 113-117. (NAAS: 5.04)
 31. Dihingia, P.C., **Singh, L.K.**, Devi, S.R., Zimik, L., Lairenjam, Ch., Zimik, W. and Khobragade, Ch. (2021). Ergonomic Assessment of Women Tea Leaf Pluckers of Small Garden in Assam. *Indian Journal of Hill Farming Special Issue*, 34: 52-58. (NAAS: 5.04)
 32. Devi, S.R., Singh, L.K., Dihingia, P.C., Zimik, L., Bhupenchandra, I., Singh, H.J. and Singh, H.D. (2021). Comparative evaluation of maize shellers for marginal farmers of Churachandpur district, Manipur. *Indian Journal of Hill Farming*, 34(2): 9-14. (NAAS: 5.04)
 33. **Singh, L.K.**, Singh, K.S. and Devi, S.R. (2018). *Jalkund* an alternative potential rainwater harvesting structure in Wokha District, Nagaland – a case study. *Ecology, Environment and Conservation*, 24(2):799-806. (NAAS rating: 5.41).
 34. Devi, S.R. and **Singh, L.K.** (2018). Use of eco-friendly solar cabinet dryer for drying of agricultural products a boon to rural farmers of Manipur, north east India. *Journal of Krishi Vigyan*, 7(Special Issue): 159-162. (NAAS rating: 4.55).

35. Devi, S.R. and **Singh, L.K. (2018)**. Zero energy cool chamber, low cost storage structure for vegetables and fruits in Churachandpur district of Manipur. Journal of Krishi Vigyan, 7(1): 216-219. **(NAAS rating: 4.55)**.
36. **Singh, L.K.**, Devi, S.R., Sannigrahi, S., Ansari, M.A. and Prakash, N. **(2018)**. Crop water demand and irrigation requirement of *kharif* paddy in Imphal west district of Manipur, north east India. Multilogic in Science, Vol. VIII, Special Issue (A):133-135. **(NAAS rating: 4.51)**.
37. **Singh, L.K.** and Devi, S.R. **(2020)**. Traditional tools and implements used in *jhum* agriculture in Nagaland. Journal of Krishi Vigyan, 8(2): 293-297. **(NAAS rating: 4.55)**.
38. Das, R., Merentoshi , Devi, S.H., Das, S., Baurah, U., Bhupenchandra, I. and **Singh, L.K. (2021)**. Physiological basis of crop response to climate change. Biotech Today, 10 (1): 15-23. **(NAAS rating: 3.84)**.
39. Bhupenchandra, I., Kamei, G., Chongtham, S.K., Kumar, A., Singh, R., Babu, S., Gupta, G., **Singh, L.K.**, Devi, E.L., Sinyorita, S., Devi, S.R., Devi, Y.P. and Devi, Ch.P. (2021). Impact study of front line demonstration on performance, yield and economics of field pea (*Pisum sativum*) in Tamenglong district of Manipur. Annals of Agricultural Research, 42(2): 214-221. **(NAAS: 4.78)**.
40. Devi, S.R., Singh, L.K., Bhupenchandra, I., Sinyorita, S., Premabati, Ch. and Kumar, A. (2021). Importance of nutritional home garden during this COVID-19 pandemic in Churachandpur district Manipur. Annals of Agricultural Research, 42(2): 1-9. **(NAAS: 4.78)**.
41. Singh, L.K., Zimik, L. and Devi, S.R. (2022). Impact of Cluster Front Line Demonstration on Field Pea (*Pisum sativum* L.) in valley areas of Manipur. Indian Journal of Extension Education, 58(2): 1-3. **(NAAS rating: 5.95)**.
42. Zimik, L., Singh, L.K., Rangnamei, K.L., Devi, S.R., Devi, H.N. and Devi, N.J. (2022). Water requirement and irrigation management of mustard cultivation in Imphal West areas of Manipur, North East India. The Pharma Innovation Journal, 11(8): 1968-1972. **(NAAS rating: 5.23)**.
43. Singh, H.J., Singh, H.D., Ajaykumar, K., Chakraborty, D., Talang, H.D., Devi, M.T. and **Singh, L.K. (2022)**. Performance evaluation and modification of mini power weeder for intercultural operation under upland condition in northeast India. Indian Journal of Hill Farming, 35(2): 13-19. **(NAAS rating: 5.04)**.
44. **Singh, L.K.**, Devi, S.R., Singh, P.C., Singh, H.J., Ningombam, A., Singh, T.B. and Devi, M.T. (2023). Evaluation of crop irrigation requirement of French bean (*Phaseolus vulgaris* L.) under varying meteorological conditions in Imphal West district of Manipur, northeast India. India. Indian Journal of Hill Farming, 36(1): 114-121. **(NAAS rating: 5.04)**.