ICAR-NBSS&LUP PUBLICATIONS 2012-2017

2016-17

Reaserch Publications having NAAS rating > 6.0

S.No.	Research Paper	NAAS Rating/IF
1.	Moharana, P.C. and Biswas, D.R. 2016. Assessment of maturity indices of rock phosphate enriched composts using variable crop residues. *Bioresource Technology,* **222:**1-13.	10.92
2.	Suresh Kumar, Raizada, A., Biswas, H., Srinivas, S. and Mondal, B. 2016. Application of indicators for identifying climate change vulnerable areas in semi-arid regions of India. *Ecological Indicators*, **70**:507–517.	9.19
3.	Vasu D., Singh S.K., Ray S.K., Duraisami V.P., Tiwary P., Chandran P., Nimkar A.M. and Anantwar S.G. 2016. Soil quality index as a tool to evaluate crop productivity in semi-arid Deccan plateau, India. *Geoderma*, **282**:70-79.	8.86
4.	Vasu D., Singh S.K., Sahu N., Tiwary P., Chandran P., Duraisami V.P., Ramamurthy V., Lalitha M. and Kalaiselvi B. 2017. Assessment of spatial variability of soil properties using geospatial techniques for farm level nutrient management. *Soil and Tillage Research*, **169**: 25-34.	8.71
5.	Dharumarajan, S., Lalitha, M., Natarajan, A., Naidu, L.G.K., Balasubramanian, R., Hegde, R., Vasundhara, R., Anil Kumar, K. S. and Singh, S.K. 2017. Biophysical and socio economic causes for increasing fallow lands in Tamil Nadu. *Soil Use and Management*. DOI:10.1111/sum.12361	7.82
6.	Chattaraj, S., Srivastava, R., Barthwal, A. K., Giri, J. D., Mohekar, D. S., Obi Reddy, G. P., Daripa, A., Chatterji S. and Singh S.K. 2017. Semi-automated object-based landform classification modelling in a part of the Deccan Plateau of central India, *International Journal of Remote Sensing,* **38(17):**4855-4867.	7.64
7.	Vasu D., Singh S.K., Tiwary P, Chandran P., Ray S.K. and Duraisami V.P. 2017. Pedogenic processes and soil–landform relationships for identification of yield-limiting soil properties. *Soil Research*, **55(3):**273-284.	7.61
8.	Patil, N.G. and Singh S.K. 2016.Pedotransfer functions for estimating soil hydraulic properties: A Review. *Pedosphere,* **26(4):**417–430.	7.54
9.	Moharana, P.C., Naitam, R.K., Verma, T.P., Meena, R.L., Sunil Kumar, Tailor, B.L., Singh, R.S., Singh, S.K. and Samal, S.K. 2017. Effect of long-term cropping systems on soil organic carbon pools and	7.12

	soil quality in western plain of hot arid India. *Archives of Agronomy and Soil Science*, DOI: 10.1080/03650340.2017.1304637.	
10.	Reza, S.K., Nayak, D.C., Mukhopadhyay, S., Chattopadhyay, T. and Singh, S.K. 2017. Characterizing spatial variability of soil properties in alluvial soils of India using geostatistics and geographical information system. *Archives of Agronomy and Soil Science,* (DOI 10.1080/03650340.2017.1296134).	7.12
11.	Bhattacharyya, T., Wani S P., Pal, D.K., Sahrawat, K.L., Pillai, S., Nimje A., Telpande, B.,Chandran, P. and Chaudhury, S. 2016. ICRISAT, India soils: yesterday, today and tomorrow, C*urrent Science*, **110**:1652 -1670.	6.97
12.	Chaudhury, S., Bhattacharyya, T., Wani, S.P., Pal, D.K., Sahrawat, K.L., Nimje, A., Chandran, P., Venugopalan, M.V. and Telpande, B. 2016. Land use and cropping effects on carbon in black soils of semi-arid tropical India C*urrent Science*, **110**:1692 -1698.	6.97
13.	Padekar D., Bhattacharyya T., Ray S.K., Tiwary P. and Chandran P. 2016. Influence of irrigation water on black soils in Amravati district, Maharashtra. *Current Science*, **110(9):**1740-1755.	6.97
14.	Surya, Jaya N., Sidhu, G.S., Lal, T., Katiyar, D.K. and Sarkar, Dipak.2016. Impact of temporal change of land use and cropping system on some soils properties in Northwestern Parts of Indo-Gangetic Plain. *Current Science,* **111(1):**207-212.	6.97
15.	Srivastava, R., Sethi, M., Yadav, R.K., Bundela, D.S., Singh, M., Chattaraj, S., Singh, S.K., Nasre, R.A., Bishnoi, Sita Ram, Dhale, Sanjay, Mohekar, D.S. and Barthwal, A.K. 2016. Visible-near infrared reflectance spectroscopy for rapid characterization of salt-affected soil in the Indo-Gangetic plains of Haryana, India. *Journal of the Indian Society of Remote Sensing: DOI 10.1007/s12524-016-0587-0*	6.68
16.	Sahu, Nisha, Singh, S.K., Obi Reddy, G.P., Nirmal Kumar, Nagaraju, M.S.S. and Srivastava, Rajeev 2016. Large-Scale Soil Resource Mapping using IRS-P6 LISS-IV and Cartosat-1 DEM in Basaltic Terrain of Central India. *Journal of Indian Society of Remote Sensing,* **44(5):**811-819.	6.68
17.	Hegde, R., Niranjana, K.V., Natarajan, A. and Singh, S.K. 2016. Detailed land resources inventory for effective planning of land based rural development programs. *Special Publication of Geological Society of India*. No.1-5 P.	6.55
18.	Nogiya, M., Pandey, R. N. and Singh, Bhupinder. 2016. Physiological basis of iron chlorosis tolerance in rice (*Oryza Sativa*) in relation to the root exudation capacity, *Journal of Plant Nutrition*, **39(11):**1536-1546.	6.51
19.	Moharana, P.C. and Biswas, D.R. 2017. Nutrient transformations in soil amended with rock phosphate enriched composts for improving	6.51

	productivity of wheat-green gram sequence. *Journal of Plant Nutrition*. DOI: 10.1080/01904167.2016.1269346.	
20.	Moharana, P.C., Sharma, B.M. and Biswas, D.R. 2017. Changes in the soil properties and availability of micronutrients after six year application of organic and chemical fertilizers using STCR-based targeted yield equations under pearl millet-wheat cropping system. *Journal of Plant Nutrition,* **40**:165-176.	6.51
21.	Ray, P. and Datta, S.P. 2016. Solid phase speciation of Zn and Cd in zinc smelter effluent-irrigated soils. *Chemical Speciation and Bioavailability*, **29(1)**:6-14.	6.46
22.	Reza, S.K., Singh, S., Datta, S.C., Purakayastha, T.J. and Singh, S.K. 2017. Phosphorus solubilization through organic acids production in pressmud composted with rockphosphate. *National Academy Science Letters,* **40(1):**13–16 (DOI 10.1007/s40009-016-0511-8).	6.35
23.	Gajare A.S., Mandal D.K. and, Jagdish Prasad 2016. Assessment of different pools of organic carbon for better C management in cotton-growing shrink-swell soils of Jalgaon district, Maharashtra. *The Indian Journal of Agricultural Sciences,* **85(5):**77-80.	6.17
24.	Reza, S.K., Baruah, U., Sarkar, D. and Singh, S.K. 2016. Spatial variability of soil properties using geostatistical method: a case study of lower Brahmaputra plains, India. *Arabian Journal of Geosciences,* **9**:446.	6.00

2016-17

Reaserch Publications having NAAS rating < 6.0

25.	Minhas, P.S. and Obi Reddy, G.P. 2017. Edaphic stresses and agricultural sustainability: An Indian Perspective, *Agricultural Research,* **6(1):**8-21.	5.90
26.	Reza, S.K., Baruah, U., Singh, S.K. and Srinivasan, R. 2016. Spatial heterogeneity of soil metal cations in the plains of humid subtropical northeastern India. *Agricultural Research,* **5(4):**346–352.	5.90
27.	Bhaskar, B.P. and Tiwari, G. 2017. Geochemical interpretations of laterite associated soils of east coast Andhra Pradesh. *Chemical Science Review and Letters,* **6(21**):187-197.	5.21
28.	Jagdish Prasad. 2015. Soil health management- A key for sustainable production. *Journal of the Indian Society of Soil Science,* **63:(**Supplement pageS6-S13).	5.23
29.	Gangopadhyay, S.K., Nayak, D.C. and Singh, S.K. 2016. Characteristics of tea growing soils in relation to soil acidity in upper Brahmaputra valley of Assam. *Journal of the Indian Society of Soil*	5.23

	Science, **64(4)**:341-350.	
30.	Dutta, D., Bandyopadhyay, S., Baruah, U. and Sarkar, D. 2016. Characterizations of soil at different landforms in hilly areas of Meghalaya state. *Journal of the Indian Society of Soil Science,* **64(3):**302-309.	5.23
31.	Pradhan, S., Gorai, T., Ahmed, N., Bandopadhyay, K.K., Sahoo, R.N., Mahapatra, S.K. and Singh, R. 2016. Estimating S index, unsaturated hydraulic conductivity and diffusivity through RETC in Indian Agricultural Research Institute farm. *Journal of the Indian Society of Soil Science*, **64(2):**120-127.	5.23
32.	Singh, R., Singh, R.S., Purohit, H.S., Verma, T.P. and Garhwal, R.S. 2016. Productivity and suitability evaluation of orange (citrus reticulata)-growing soils of hot and semi-arid region of Rajasthan (AESR 5.2). *Journal of the Indian Society of Soil Science*, **64(1):**46-57.	5.23
33.	Lalitha, M., Dharumarajan, M., Natarajan, A., Niranjana, K.V., Srinivas, S., Naidu, L.G.K. and Sarkar, Dipak. 2016.Need for site specific land resource database for integrated watershed management.*Indian Journal of Soil Conservation*, **44(22):**168-176.	5.20
34.	Naitam, R.K. and Kharche, V.K. 2016. Characterization and classification of soils of Ramagarh village of Amravati district of Maharashtra. *Multilogic in Science*, **6(17):**211-218.	5.20
35.	Prasad, R., Yadav, S.K., Kumar, P. and Yadav, R.P. 2016. Performance of mango cultivars in eroded soils of Shiwalik foot hills. *Indian Journal of Soil Conservation,***44(1)**:67-72.	5.20
36.	Giri, J.D., Nagaraju, M.S.S., Srivastava, R., Singh, D.S., Nasre, R.A., Barthwal, A.K. and Mohekar, D.S. 2016. Accuracy assessment of large-scale soil map prepared by remote sensing approach. *International Journal of Agricultural and Statistical Sciences,* **12(1):**229-237.	5.13
37.	Naitam, R.K., Singh, R.S., Sharma, R.P., Verma, T.P. and Arora, S. 2016. Morphometric analysis of Chanavada-II watershed in Aravalli hills of southern Rajasthan using geospatial technique. *Journal of Soil and Water Conservation (India),* **15(4):** 318-324.	5.08
38.	Patangray, A.J., Patil, N.G., Singh, S.K., Mishra, V.N., Reddy, C.V.P. and Ramteke, I.K. 2017. Land use/land cover change detection using geospatial techniques in Kupti watershed of Darwha block of Yavatmal district, Maharashtra *Journal of Soil and Water Conservation (India)* **16(1):**10-17.	5.08
39.	Bhaskar, B. P., Prasad, J. and Tiwari, G. 2017. Evaluation of agricultural land resources for irrigation in the cotton growing Yavatmal district, Maharashtra, India. *Journal of Applied and Natural Science,* **9(1):** 102 –113.	4.84
40.	Bhaskar, B.P., Anantwar, S.G., Gaikwad, S.S. and Bobade, S.V. 2016.	4.84

	Land resource assessment for agricultural development in Seoni district, Madhya Pradesh, India. *Journal of Applied and Natural Science,* **8(2):**750-759.	
41.	Dubey, P.N., Bhaskar, B.P., Chandran, P., Singh, B. and Mishra, B.K. 2016. Geochemistry of some ferruginous soils of Kerala, India. *Journal of Applied and Natural Science,* **8(1):**196-207.	4.84
42.	Meena, R.K., Parihar, S.S., Singh, M. and Khanna, M., 2016. Effects of sowing dates and irrigation regimes on grain quality of wheat grown under semi-arid condition of India. *Journal of Applied and Natural Science*, **8**(2):960- 966.	4.84
43.	Sahu, Nisha and Sahu, Asha. 2016. Influence of phosphamidon on microbial biomass carbon, FDA and soil respiration in black soil (Entic Chromusterts). *International Journal of Agricultural Sciences,* **8(39):**1796-1798.	4.82
44.	Ramamurthy, V., Singh, M., Srinivas, A., Silpasree, Ramesh Babu, A.C., Naidu, L.G.K. and Prakasa Rao, E.V.S. 2016. Effect of age of plantation and season on leaf yield, content and composition of oil of *Eucalyptus citriodora* Hook and soil properties in semi-arid conditions of Karnataka. *Res. on Crops,* **17(1):**112-117.	4.75
45.	Dharumarajan, S., Naidu, L.G.K., Lalitha, M., Vasundhara, R., Anil Kumar, K.S., Rajendra Hegde and Singh, S.K. 2016. Assessment of suitability of fallow lands for major medicinal plants in Tamil Nadu. *International Journal of Bio-resource and Stress Management*. **7(4):**877-884.	4.65
46.	Srinivasan, R., Jeevan Rao, K., Reza, S.K. Shelton Padua, Dinesh, D. and Dharumarajan, S. 2016. Influence of inorganic fertilizers and organic amendments on plant nutrients and soil enzyme activities under incubation. *International Journal of Bio-resource and Stress Management,* **7(4):**924-932.	4.65
47.	Srinivasan, R., Natarajan, A., Anil Kumar, K.S., Dharumarajan, S. and Kalaivanan, D. 2016. Distribution of different forms of soil acidity in selective laterite soils under cashew plantations in coastal Karnataka. *International Journal of Bio-resource and Stress Management*, **7(2)**:222-228.	4.65
48.	Anil Kumar, K.S.,Lalitha, M., Kalaiselvi, B., Patil, Siddaram, Nair, K.M. and Sujatha, K.,2015. Soil organic carbon stocks: A potential land quality indicator for soils of western Karnataka, *Agropedology*, **25(2)**:161-168.	4.16
49.	Bandyopadhyay, Siladitya, Obi Reddy, G.P., Dutta, D., Reza, S.K., Dutta, D.P., Baruah, Utpal, Sah, K.D. and Singh, S.K. 2015. Assessment of erosion susceptibility zones in Diring-Thanglong watershed north eastern hill regions of Assam using GIS techniques, *Agropedology,* **25(2):**169-180.	4.16
50.	Dongare, V., Maji, A.K., Obi Reddy, G.P. and Ramteke, I.K. 2016.	4.16

	Land Suitability Evaluation for Rice (*Oryza sativaL.*) in Tirora tehsil of Gondia district, Maharashtra - A GIS approach, *Agropedology,* **26(01):**69-78.	
51.	Jena, R.K., Duraisami, V.P., Sivasamy, R., Shanmugasundaram, R., Krishnan, R., Padua, S., Bandyopadhyay, S., Ramachandran, S., Ray, P., Deb Roy, P., Singh, S.K. and Ray, S.K. 2016. Characterization and classification of soils of Jirang block in Meghalaya plateau, *Agropedology,* **26(1):**47-57.	4.16
52.	Goswami, S.N., Sen, T.K., Jagdish Prasad and Chatterji, S. 2014. Effect of climatic and socio-ecnomic factors on under-utilization of land in Maharashtra. *Agropedology,* **24(1):**41-51.	4.16
53.	Naitam, R.K., Singh, R.S., Mohrana, P.C. and Singh, S.K. 2016. Characterization and evaluation of soils occurring on toposequence in eastern plain, Bhilwara district, Rajasthan for land use planning. *Agropedology,* **26(1)**:94-104.	4.16
54.	Patil, N.G.,Chaturvedi, A. and Singh, S.K. 2016. Land use issues in selected disadvantaged districts of Eastern India. *Agropedology,* **26(1):**57-68.	4.16
55.	Ramesh Kumar, S.C., Tejaswini, A.B., Prakashanaik, M.K., Nandini, S., Rajendra Hedge and Singh, S.K. 2016. Economics of kharif sorghum production in southern dry zone of Karnataka. *Agropedology*, **26(1):**29-33.	4.16
56.	Reza, S.K., Baruah, U. and Singh, S.K. 2016. Spatial distribution of Fe and Mn in paper mill effluent affected agricultural soils in Morigaon, Assam. *Agropedology,* **26(2):**87–93.	4.16
57.	Srinivasan, R., Reza, S.K., Nayak, D.C., Singh, S.K. and Sarkar, G.C. 2016. Characterization and classification of major vegetables growing soils of Odisha coastal system – A case study, *Agropedology,* **25(2):**232-239.	4.16
58.	Srinivasan, R.; Mukhopadhyay, S.; Nayak, D.C. and Singh, S.K. 2016. Characterization, classification and evaluation of soil resources in coastal eco-system – A case study of Gosaba block (Part), South 24-Parganas, West Bengal, *Agropedology,* **25(2):**195-201.	4.16
59.	Vasu, D., Singh, S.K., Karthikeyan, K., and Duraisami, V.P. 2016. Fertility Capability Classification (FCC): A case study in rainfed soils of semi-arid Deccan plateau. *Agropedology* **26(1):**22-28.	4.16
60.	Chattopadhyay, T., Nayak, D.C., Mukhopadhyay, S., Sahoo, A.K. and Singh, S.K. 2017. Land evaluation for crop planning in soils of Indo-Gangetic Plains of Hugli district, West Bengal, *Indian Agriculturist*, **59(4):**215-222.	4.11
61.	Potdar, S.S., Gabhane, V.V., Potdar, H.S., Srivastava, Rajeev, Nasre, R.A. and Nagaraju, M.S.S. 2016. Characterization, classification and mapping the soils of shegaon watershed, Chandrapur district of	3.15

	Maharashtra, using remote sensing and GIS technique. *Advances in Life Sciences,* **5(18):**7489-7495.	
62.	Anil Kumar, K.S.,Kalaiselvi, B., Nair, K.M. and Singh, S.K. 2016. Characterization of red and lateritic soils formed under varied climates and their management, *Clay Research,* **35(1):**42-52.	3.10
63.	Jena, R.K., Duraisami, V.P., Sivasamy, R., Shanmugasundaram, R., Krishnan, R., Padua, S., Bandyopadhyay, S., Ramachandran, S., Ray, P., Deb Roy, P., Singh, S.K. and Ray, S.K. 2015. Spatial variability of soil fertility parameters in Jirang block of Ri-Bhoi district, Meghalaya. *Clay Research*, **34(1):**35-45.	2.97
64.	Surya, J.N., Walia, C.S., Ahamad, N., Singh, H., Giyal, V. and Khajuria, V. 2016. Characterization and clay minerals copmosition of soils derived from metamorphic formations of Kumaun Himalayas., *Clay Research,* **34(1)**:15-24.	2.97
65.	Bhattacharyya T., Tiwary P., Pal D.K., Khobragade R., Telpande B. and Kuchankar H. 2017. Estimating soil organic matter and available N : A ready reckoner for soil testing laboratories. *Advanced Agricultural Research & Technology Journal*, **1(1):**3-13.	-
66.	Bhaskar, B. P., Tiwari, G. and Prasad, J. 2017. Pedogenic influence on profile distribution of total and DTPA - extractable micronutrients in rice growing hydric soils of Majuli river island, Assam, India. *Spanish Journal of Soil Science,* **7(1):** 45-71.	-
67.	Fagodiya, R.K., Pathak, H., Meena, B.L., Meena, R.K., Nagdev, R. 2017. Need to estimate the net global warming potential of nitrogenous fertilizers. *Advances in Plants and Agriculture Research,* **6(4):** 00220.	-
68.	Keshavarzi, A., Omran, E.S.E., Bateni, S.M., Pradhan, B., Vasu, D., Bhagerzadeh, A. **2016**. Modelling of available soil phosphorus (ASP) using multi-objective group method of data handling. *Model Earth System and Environment,* **2**:157.	-
69.	Meena, R.S., Meena, R.L., Rao, S.S., Singh, R.S., Verma, T.P. and Singh, S.K. 2017. Characterization of classification of soils of Jhalarapatan block, Jhalawar district of Rajasthan. *Journal of Plant Development Studies,***9(3):**265-68.	-
70.	Meena, R.S., Rao, S.S., Natrajan, A., Hegde, R. and Singh, S.K. 2017. Available micronutrient in soils of Chikkersinkere hobli of Maddur taluka, Mandya district of Karnataka. *Journal of plant development Studies,* **9(3):**229-233.	-
71.	Nalina, C.N., Anil Kumar, K.S., Chandrakala, M., Sheela Rani, S., Sujata, K., Shilpashree, K.G., Rajendra Hegde and Singh, S.K. 2016. Soil nutrient status mapping of Nagenahalli micro-watershed under Eastern Dry Zone of Karnataka by remote sensing, detailed soil survey and GIS, *Indian Journal of Agriculture Research,* **50(5)**:389-	-

	397	
72.	Ramachandran, S., Nagender Rao, C., Dinesh, D., Srinivasan, R., Sankar, M., Ramesh, T. and Shelton Padua. 2015. Effect of tillage management practices on soil physical properties and yield of groundnut in rice-based cropping system. *International Journal of Bio-resource and Stress Management,* **6(6):**765-777.	-
73.	Ravindra Naik, M. and Anil Kumar, K.S. 2016.Mapping of crop growing soils in Kannur micro watershed Kollegal taluk, Chamarajnagar district, Karnataka, *International Journal of Science and Research (IJSR)*ISSN (Online): 2319-7064: **5(4):**474-481.	-
74.	Ray, P., Datta, S.P., Rakshit, R. and Golui, D. 2016. Agronomic bio-fortification of food crops with zinc and iron for ameliorating their deficiencies in humans: constraints and possibilities. *Indian Journal of Fertilisers*, **12(7**):28-35.	-
75.	Sahoo, A.K., Nayak, D.C., Mukhopadhyay, S., Banerjee, T., Singh, S.K., Sarkar, D., Sarkar, A.K., Agarwal, B.K. and Shahi, D.K. 2016. Mapping of block level soil fertility status of Dumka district, Jharkhand using GPS and GIS, *Indian Journal of Fertilisers*, **12(7):**50-57.	-
76.	Sahu, Nisha, Obi Reddy, G.P., Nirmal Kumar, Nagaraju, M.S.S., Srivastava, Rajeev and Singh, S.K. 2016. Morphometric analysis in basaltic terrain of Central India using GIS techniques - A case study, *Applied Water Science.* DOI 10.1007/s13201-016-0442-z.	-
77.	Sharma, R.P., Singh, R.S., Singh, S.K. and Obi Reddy, G.P. 2016. Extent of land degradation and status of wastelands in Rajasthan (NW India) with a focus on the Bhilwara District, *Journal of Agriculture and Environment for International Development - JAEID*, **110(1**):97–115.	-
78.	Vasu, D., Singh, S.K., Duraisami, V.P., Jangir, A. and Butte, P.S. 2016. Fertility status of cotton growing soils in Thimmajipet mandal, Mahabubnagar district, Telangana. *Andhra Pradesh Journal of Agricultural Sciences,* **2(1):**10-15.	-
79.	Vasu, D., Singh, S.K., Tiwary, P., Sahu, N., Ray, S.K. and Butte, P. 2017. Influence of geochemical processes on hydrochemistry and irrigation suitablity of groundwater in place of semi-arid Deccan Plateau, India. *Applied Water Science*, pp. 1-13. DOI: 10.1007/s13201-017-0528-2.	-
80.	Vasundhara, R., Dharumarajan, S., Hegde, Rajendra, Srinivas, S., Niranjana, K.V., Srinivasan, R. and Singh, S.K. 2017. Characterization and evaluation of soils of Singanallur watershed using remote sensing and GIS. *International Journal of Bio-resource and Stress Management,* **8(1):**51-56.	-

2015-16

Reaserch Publications having NAAS rating > 6.0

1.	Rao, S.S., Tanwar, S.P.S., Regar, P.L. 2016. Effect of deficit irrigation, phosphorous inoculation and cycocel spray on root growth, seed cotton yield and water productivity of drip irrigated cotton in arid environment. *Agricultural Water Management*, **169**:14-25.	8.60
2.	Singh, Raman Jeet, Meena, Roshan Lal, Sharma, N.K., Suresh Kumar, Kuldeep Kumar, Dileep Kumar 2016. Economics, energy, and environmental assessment of diversified crop rotations in sub-Himalayas of India. *Environmental Monitoring and Assessment,* **188**:79.	7.63
3.	Bhattacharya, Ranjan; Ghosh, B.N., Mishra, P.K., Mandal, B., Rao Ch. Srinivas, Sarkar, D., Das, K., Anil, K.S, Lalitha, M., Hati, K.M. and Franzluebbers, A.J. 2015. Soil Degradation in India: Challenges and Potential Solutions, *Sustainability,* **7**:3528–3570	7.34
4.	Yadav, R.K., Minhas, P.S., Lal, Khajanchi, Chaturvedi, R.K., Yadav, Gajender and Verma, T.P. 2015. Accumulation of metals in soils, ground water and edible parts of crops grown under long-term irrigation with sewage mixed industrial effluents. *Bulletin of Environmental Contamination and Toxicology,* **95(2):** 200-206.	7.19
5.	Nath, A.J., Bhattacharyya, T., Ray, S.K., Deka, Jyotirupa, Das, Ashesh Kumar Das and Huma, Devi. 2016. Assessment of rice farming management practices based on soil organic carbon pool analysis. *Tropical Ecology*, **57**: 607-611.	7.17
6.	Reza, S.K., Nayak, D.C., Chattopadhyay, T., Mukhopadhyay, S., Singh, S.K. and Srinivasan, R. 2016. Spatial distribution of soil physical properties of alluvial soils: a geostatistical approach. *Archives of Agronomy and Soil Science*, **62**:972-981.	7.12
7.	Tiwary, P., Bhattacharyya, T., Mandal, C., Dasgupta, D. and Telpande, B. 2015. Pedometric mapping of soil organic carbon loss using soil erosion maps of Tripura. *Current Science,* **108**:1326-1339.	6.97
8.	Bandyopadhyya, K.K., Sahoo, R.N., Ravender Singh, Pradhan, S., Singh, S., Gopal Krishna, Pargal, S. and Mahapatra, S.K. 2015. Characterization and crop planning of rabi fallows using remote sensing and GIS. *Current Science,* **108:** 2051-2062.	6.97
9.	Bhattacharyya, T, Wani, S.P., Chandran, P., Tiwary, P., Pal, D.K., Sahrawat, K.L. and Velayutham, M. 2016. Soil Information System: web-based information technology for agricultural land use planning, *Current Science,* **110**: 241-245.	6.97
10.	Rajan, K., Natarajan, A., Kasturi Tilakam, Anil Kumar, K.S., Dinesh, D., Alam, N.M., Khola, O.P.S. and Gowda, R.C. 2016. Clay dispersion induced by changes in some soil properties in undulating	6.97

	salt affected landscapes of southern Karnataka. India. *Current Science,* **110**: 874-883.	
11.	Bhattacharyya, T., Chandran, P., Ray, S.K., Pal, D.K., Mandal, C. and Mandal, D.K. 2015. Distribution of zeolitic soils in India. *Current Science,* **109**:1305-1313.	6.97
12.	Das, B.S., Sarathjith, M.C., Santra, P., Sahoo, R.N., Srivastava, R., Routray, A. and Ray, S.S. 2015. Hyperspectral remote sensing: opportunities, status and challenges for rapid soil assessment in India. *Current Science*, **108**(5): 860-868.	6.97
13.	Hegde Rajendra, Natarajan A., Meena R. S., Niranjana K. V., Thayalan S. and Singh S.K. 2015. Status of soil degradation in an irrigated command area in Chikkarasinakere Hobli, Mandya district, Karnataka. *Current Science,* **108**: 1501-1511.	6.97
14.	Lalitha, M. and Praveen Kumar 2015. Soil carbon fractions influenced by temperature sensitivity and land use management. *Agroforestry Systems,* **p.1-4** (DOI 10.1007/s10457-015-987-9).	6.91
15.	Nisha Sahu, Singh, S.K., Obi Reddy, G.P., Nirmal Kumar, Nagaraju, M.S.S. and Srivastava, Rajeev. 2016. Large-Scale Soil Resource Mapping using IRS-P6 LISS-IV and Cartosat-1 DEM in Basaltic Terrain of Central India. *J. Indian Soc. Remote Sens.*DOI 10.1007/s12524-015-0540-7.	6.68
16.	Rao, S.S., Dinesh Kumar, S., Wadodkar, M.R., Nagaraju, M.S.S., Chattaraj, S., William, Joseph, Rajankar, P., Sengupta, T., Venugopalan, M.V. Das, S.N., Joshi, A.K., Sharma, J.R. and Amminedu, E. 2016. Performance of global soil moisture product in crop growing region of central India. *Journal of the Indian Society of Remote Sensing,* DOI: 10.1007/s12524-015-0496-7.	6.68
17.	Srivastava, Rajeev, Sarkar, Dipak, Mukhopadhayay, S.S., Sood, Anil, Manjeet Singh, Nasre, R.A. and Dhale, S.A. 2015. Development of hyperspectral model for rapid monitoring of soil organic carbon under precision farming in the Indo-Gangetic Plains of Punjab, India, *J. Indian Society of Remote Sensing,***43**(4):751–759.	6.68
18.	Yadav, R.P., Panwar, Panwar, Arya, S. and Mishra, P.K. 2015. Revisit of Shivalik region in different north western states of India. *Journal of Geological Society of India,* **86**: 351-360.	6.55
19.	Bhattacharyya, T., Chandran, P., Ray, S.K., Mandal, C., Tiwary, P., Pal, D.K., Maurya, U.K., Nimkar, A.M., Kuchankar, H., Sheikh, S., Telpande, B.A. and Kolhe, A. 2015. Walkley-Black recovery factor to reassess soil organic matter: Indo-gangeticplains and black soil region of India case studies. *Communications in Soil Science and Plant Analysis,* **46**:2628–2648.	6.53
20.	Ramachandran, S. and Biswas, D. R. (2015). Nutrient management on crop productivity and changes in Soil organic carbon and soil fertility in a 4 -year old maize-wheat cropping in Indo -Gangetic	6.51

	Plains of India". *Journal of Plant Nutrition,* DoI:10.1080/ 01904167.2015.10870.	
21.	Reza, S.K., Baruah, U., Sarkar, D. and Singh, S.K. 2016. Spatial variability of soil properties using geostatistical method: a case study of lower Brahmaputra plains, India. *Arabian Journal of Geosciences* (Springer publication, DOI 10.1007/s12517-016-2474-y).	6.00

2015-16

Reaserch Publications having NAAS rating < 6.0

22.	Bhattacharyya, T., Mandal, C., Mandal, D.K., Jagdish Prasad, Tiwary, P., Venugopalan, M.V. and Pal, D.K. 2015. Agro-eco sub-region based crop planning in the black soil regions and Indo-gangeticplains – Application of soil information system. *Proceedings of Indian National Science Academy,* **81**:1151-1170.	5.89
23.	Moharana, P.C., Biswas, D.R. and Datta, S.C. 2015. Mineralization of Nitrogen, Phosphorus and Sulphur in soils as influenced by rock phosphate enriched compost and chemical fertilizers. *Journal of the Indian Society of Soil Science*, **63**:283-293.	5.23
24.	Naidu, L.G.K., Lalitha, M., Dharumarajan, S., Srinivas, S. and Ramamurthy, V. 2015. Delineation of prime and marginal lands in Karnataka for sustainable land use. *Journal of Indian Society of Soil Science,* **63**: 373-378.	5.23
25.	Naidu, L.G.K., Ramamurthy, V., Niranjana, K.V., Satyavathi, P.L., Srinivas, S., Dhanorkar, B.A., Ravindra Chary, G. and Reddy, R.S. 2015. Evaluation of regional benchmark soils and agro-climate *vis-à-vis* soils of technology generation sites for agrotechnology transfer-a case study of Andhra Pradesh. *Journal of the Indian Society of Soil Science,* **63**:144-158.	5.23
26.	Reza, S.K., Baruah, U. and Singh, S.K. 2015. Accumulation and translocation of heavy metals in soil and crop irrigated with Paper mill effluents. *Journal of the Indian Society of Soil Science*, **63**: 242-244.	5.23
27.	Reza, S.K., Baruah, U. and Singh, S.K. 2015. Multivariate approaches for soil fertility characterization of lower Brahmaputra valley, Assam, India. *Journal of the Indian Society of Soil Science*, **63**: 379–383.	5.23
28.	Sharma, R.P. and Singh, R.S. 2015. Carbon stock and its management in soils of Bhilwara district, Rajasthan. Journal of the Indian Society of Soil Science, **63**:304-309.	5.23
29.	Singh, Rameshwar, Singh, R.S. and Gupta, P.K. 2015. Moisture Release Behaviour of Orange-Growing Soils Developed from	5.23

	Different Parent Materials in Jhalawar District of Rajasthan. *Journal of the Indian Society of Soil Science*, **63**(2):159-165.	
30.	Yadav, R.P., Prasad, Ram and Arya, Swarn Lata 2015. Effect of different horti-pastoral systems in amelioration soil compaction in Shivalik region. *Indian Journal of Soil Conservation*, **44**(1): 255-259.	5.20
31.	Obi Reddy G.P., Kurothe, R.S., Sena, D.R., Harindranath, C.S., Niranjana, K.V., Naidu, L.G.K., Singh, S.K., Sarkar, Dipak, Mishra, P.K. and Sharda, V.N. 2016. Assessment of soil erosion in tropical ecosystem of Goa, India using Universal Soil Loss Equation, geostatistics and GIS, *Indian Journal of Soil Conservation,* **44**(1):1-7.	5.20
32.	Mandal D.K., Goswami S.N, Mandal C., Jagdish Prasad and Nirmal Kumar 2015. Econimoic loss estimation under rainfall aberration in semi-arid tropics of India. *Indian Journal of Soil Conservation,* **43**:182-186	5.20
33.	Nirmal Kumar, Karthikeyan, K. and Jagdish Prasad. 2016. Visual soil quality assessment – A review. *Journal of Soil and Water Conservation (India),* **15**:6-13.	5.08
34.	Karthikeyan, K., Nirmal Kumar, Jagdish Prasad and Srivastava, Rajeev 2015. Soil quality and its assessment: A Review. *Journal of Soil and Water Conservation (India),* **14**:100-108.	5.08
35.	Naidu, L.G.K., Dharumarajan, S., Lalitha, M., Vasundhara, R., Ramamurthy, V., Obi Reddy, G.P., Singh, R. S., Tailor, B., Rameshwar Singh, Baruah, U., Padmaiah, M., Suresh, G. and Varaprasad, K.S. 2015. Identification and delineation of potential castor growing areas in different Agro-eco sub regions of India. *Journal of Oilseeds Research,* **32**: 39-48.	5.02
36.	Ray, P., Singhal, S.K., Datta, S.P. and Rattan, R.K. 2015. Effect of zinc sulphate and organics on Zn content and yield of *Chenopodium* grown in different soils. *Proceedings of the National Academy of Sciences, India Section B, Biological Sciences*, DOI 10.1007/s40011-015-0649.	5.00
37.	Jat, M.K., Purohit, H.S., Singh, R. and Chaudhary, S.K. 2015. Influence ofintegrated nutrient management practices on post harvest soil properties in sorghum-barley sequence. *Indian Journal of Ecology,* **42**(2): 349-353.	4.96
38.	Anitha, M.S., Anil Kumar K.S. and Prashantha, G.M. 2015. Distribution of plant available boron in major soil types and their correlation with other properties of the soil. *Ecology Environment & Conservation,* **21**:143-148.	4.89
39.	Mahendra Kumar, M. B., Subbarayappa, C. T., Ramamurthy, V., Shreenivas, B. V., Yogendra, N. G. and Vijay Kumar, C. 2015. Effect of graded levels of zinc and boron on availability of zinc and zinc fractions of Paddy. *Ecology Environment & Conservation,* **21**:	4.89

	477-480.	
40.	Mahendra Kumar, M.B., Subbarayappa, C.T., Ramamurthy, V., Shreenivas, B.V., and Vijay Kumar, C. 2015. Characterization of surface soils in irrigated land management unit-1 (Command area) of Mysore District, Karnataka. *Ecology Environment & Conservation,* **21**: 471-476.	4.89
41.	Patil, S., Anil Kumar, K.S., Eresha and Shruthi, T.M. 2016. Characterization of soils and correlation of soil organic carbon stocks with soil properties in west coast of southern Karnataka. *Ecology Environment & Conservation,* **22**:41-46.	4.89
42.	Sahu, Asha, Singh, S.K., Sahu, Nisha and Manna, M.C. 2016. Suitability of extractants for predicting availability of cadmium in Inceptisol, Alfisol and Vertisol. *Ecology Environment & Conservation,* **22**(1):155-162.	4.89
43.	Srinivas, S., Srinivas, C.V., Nair, K.M., Naidu, L.G.K., Sarkar, D. and Singh, S.K. 2016. A climatic water balance model 'WatBal' for bioclimatic classification and agro-climatic analysis. *Ecology Environment & Conservation,* **22**: 177-184.	4.89
44.	Bhaskar, B.P., Bobade, S.V., Gaikwad, S.S., Sarkar, D., Anantwar, S.G. and Bhattacharyya, T. 2015. Soil informatics for agricultural suitability assessment in Seoni district, Madya Pradesh, India. *Indian Journal of Agricultural Research,* **49**:315-320.	4.86
45.	Ramamurthy, V., Venugopalan, M.V., Parhad, V.N. and Prasad, J. 2015. Effect of seed priming on emergence and yield of late sown wheat on Typic Haplusterts of Central India. *Indian Journal of Agricultural Research,* **49**: 245-249.	4.86
46.	Nath, A.J., Bhattacharyya, T., Deka, Jyotirupa, Das, Ashesh Kumar Das and Ray, S.K. 2015. Management effect on soil organic carbon pools in lowland rain-fed paddy growing soil. *Journal of Tropical Agriculture,* **53**:131-138.	4.75
47.	Jagadish, M.R., Biradar, P.I., Nethravathi, B., Parvathy, S., Anil Kumar, K.S. and Viswanath, S. 2015. Nutrient dynamics through litter fall and decomposition in bamboo agroforestry systems in humid tropics of Karnataka, India. *The Ecoscan* (Special Issue), **7**: 497-501.	4.65
48.	Katiyar, D.K., Walia, C.S., Singh, R. and Verma, T.P. 2015. Charaterization and management of salt affected soils of Sultanpur district, Uttar Pradesh. *Annals of Plant and Soil Research,* **17**(1):91-95.	4.39
49.	Gopal, Ram, Verma, T.P., Singh, S.P., Singh, Rameshwar and Katiyar, D.K. 2015. Land resource inventory for Village Level Land Use Planning. *Annals of Plant and Soil Research*, **16**(2):143-147.	4.39
50.	Patil, S., Anil Kumar, K.S. and Eresha. 2015. Depth-wise	4.39

	distribution of major, secondary and micro nutrients in rubber-growing areas of west of western ghats and west coast of southern Karnataka. *Annals of Plant and Soil Research,* **17**: 293-296.	
51.	Singh U., Tomar, S.S., Singh, Rameshwar and Choudhary, Sonali 2015. Yield, nutrient uptake economics of Indian mustard as influenced by varieties, sources and levels of sulphur. *Annals of Plant and Soil Research,* **17**(3): 266-268.	4.39
52.	Gajare, A.S., Mandal, D.K., Nirmal Kumar and Jagdish Prasad. 2015. Modeling water retention characteristics of major shrink swell soils of Jalgaon District, Maharashtra, India. *Agropedology,* **25**:43-53.	4.16
53.	Gangopadhyay, S.K., Obi Reddy, G.P. Mukhopadhyay, S. and Singh, S.K. 2015. Characterization of landforms and soils in complex toposequence of Subarnarekha catchment, Chhotanagpur plateau using remote sensing and GIS. *Agropedology*, **25**(1):95-109.	4.16
54.	Meena, R.S.,Natarajan, A., Hegde, R., Dhanorkar, B.A., Koyal, Arti, Naidu, L.G.K. and Singh,S.K. 2015. Characterization and classification of upland soils of Chikkarsinkere Hobli, Maddur Taluk, Mandya District of Karnataka.*Agropedology*, **25**:154-160.	4.16
55.	Sharma, R.P., Singh, R.S. and Singh, S.K. 2015. Agricultural land use planning of Bhilwara district, Rajasthan. *Agropedology***25**:20-32.	4.16
56.	Mahajan, M.S., Patil, N.G., Chaturvedi, A., Bhaskar, B.P., Hajare, T.N., Saroj Deshmukh, Dubey, P.N. and Singh, S.K. 2015. Development of efficient farming systems through land use planning in Dhule district, Maharashtra, India. *Agropedology,* **25** (1):110-124.	4.16
57.	Patil, N.G., Chaturvedi, A. and Singh, S.K. 2015. Land Use Planning in India: Past and Future. *Agropedology*, **25** (1):1-19.	4.16
58.	Jangir, A., Singh, V., Srivastava, P.C., Shriram and Bhatnagar, A. 2015. Phosphorus and zinc uptake and protein, lysine and tryptophane contents in quality protein maize in relation to phosphorus and zinc fertilization in Mollisols. *Annals of Agricultural Research,* **36**:50-57.	4.01
59.	Pradhan, N., Prakash, P., Manimurugan, C., Tiwari, S.K., Sharma, R.P. and Singh, P.M. 2015. Screening of tomato genotypes using osmopriming with PEG 6000 under salinity stress.*Research in Environment and Life Sciences*, **8**:245-250.	3.74
60.	Dubey, P.N, Bhaskar, B.P., Chandran, P., Singh, B., and Mishra, B.K. 2016. Geochemistry of some ferruginous soils of Kerala, India. *Journal of Applied and Natural Science,* **8**:196-207.	3.73

61.	Srinivas, S., Naidu, L.G.K., Venkatesh, D.H., Dharumarajan, S., Vasundhara, R., Ramamurthy, V., Hegde, R., Nair, K.M. and Singh, S.K. 2015. Development of software "Cropsuit" for evaluating land suitability for different crops. *International Journal of Tropical Agriculture,* **33**: 3063-3067.	3.49
62.	Gajare, A.S., Mandal, D.K., Mandal, C. and Jagdish Prasad. 2015. Cationic micronutrient status in cotton growing shrink-swell soils of Jalgaon district of Maharashtra. *Indian Journal of Fertilisers,* **11**:66-69.	-
63.	Lalitha, M. and Dhakshinamoortthy, M. 2015. Quantity-intensity characteristics of potassium (K) in relation to potassium availability under different cropping system in alluvial soils. *African Journal of Agricultural Research,***10**: 2097-2103.	-
64.	Bhaskar, B.P. 2015. Landscape planning for agridevelopment at regional scale: an example from cotton growing Yavatmal district, Maharashtra, India.*Journal of Agriculture and Environment for International Development,* **109**: 235-269.	-
65.	Biswas, H., Raizada, A., Mandal, D., Suresh Kumar, Srinivas, S. and Mishra, P.K., 2015. Identification of areas vulnerable to soil erosion risk in India using GIS methods. *Solid Earth,* **6**: 1247–1257.	-
66.	Chary, G.R., Rao, G.R., Naidu, L.G.K., Srinivas, S., Sunil, N., Maruthi Sankar, G.R., Srinivasa Rao, Ramamurthy, V., Prathiba, G. and Rani, N., 2015. Climate and soil-site suitability criteria for *Jatropha curcas* L. cultivation under non-arable marginal lands in different agro-ecological regions of India. *Range Management & Agroforestry,* **35**: 210-219.	-
67.	Dharumarajan, S., Lalitha, M., Naidu, L.G.K. and Singh, S.K. 2015. Characterisation of major forests in Tamil Nadu based on climate and soil-site characteristics for identifying potential areas for afforestation. *International Journal of Bio-resource and Stress Management*. 2015. 6(6):656-666.DOI:10.5958/0976-4038.2015.00102.5	-
68.	Ravinder, J., Konde, N.M., Rohi, G.S., Naitam, R.K. 2015. Effect of crop residues, green manuring and gypsum on soil properties and yield of cotton in salt affected soils of Purna Valley in Vidarbha. Progressive Research – An International Journal Society for Scientific Development ISSN: 0973-6417, Online ISSN: 2454-6003 in *Agriculture and Technology*, **10** (Special-IV): 2429-2432.	-
69.	Rehaman, M.A. E.A., Natrajan, A., Srinivasmurthy, C.A. and Hegde, R. 2016. Estimation of soil fertility status in physically degraded lands using GIS and remote sensing techniques in Chamarajanagara district, Karnataka, India. *The Egyptian Journal of Remote Sensing and Space Sciences,* **19**(1): 95-108.	-
70.	Sharma, R.P., Singh, R.S. and Singh, S.K. 2015. A review on	-

	agricultural land use planning: A case study of Bhilwara district. *Advances in Applied Science Research,* **6**:125-133.	
71.	Singh, Rameshwar, Singh, R.S., Jat, M.L., Purohit, H.S., Kaushik, R.A., Gajanand Jat and Singh, D.P. 2016. Influence of Soil Parent Material on Yield and Quality of Nagpur Mandarin *(Citrus reticulata* Blanco*)* in Jhalawar District of Rajasthan. *Indian J. Fertilizers*, **12**(2):16-22.	-
72.	Vasu D., Singh S.K., Tiwary P., Butte P.S. and Duraisami V.P. 2015. Evaluation of groundwater quality for irrigation suitability in Thimmajipet mandal, Mahabubnagar district. *Andhra PradeshJournal of Agricultural Sciences* **1**:1-6.	-
73.	Vasu, D., Biswas, A.K., Singh, A. 2015. Effect of biochar addition on soil carbon emission and nitrogen mineralization in some typical Indian soils. *International Journal of Emerging Research in Management & Technology,* **4**:17-22.	-

2014-15

Reaserch Publications having NAAS rating > 6.0

1.	Chattaraj, S., Chakraborty, D., Sehgal, V.K., Paul, R. K., Singh, S. D., Daripa, A. 2014. Predicting the impact of climate change on water requirement of wheat in the semi-arid Indo-Gangatic Plains of India. *Agriculture, Ecosystems and Environment,* **197**: 174-183.	9.56
2.	Nagaraju, M.S.S., Nirmal Kumar, Srivastava, R. and Das, S.N. 2014. Cadastral-level soil mapping in basaltic terrain using Cartosat-1-derived products. *International Journal of Remote Sensing,* **35**:3764-3781.	7.64
3.	Ambekar, Abhijit. S., Sridhar D.N., Ray, S.K., Bhattacharyya, T., Anantwar, S.G., Sahu, V.T. and Gaikwad, M.S. 2015. Probable source of rocks for millstone and cannon balls of Goa, India. *Current Science,* **108** : 273-282.	6.97
4.	Bhattacharyya, T. *et al.* 2014. Georeferenced soil information system: assessment of database. *Current Science,* **107**:1400-1419.	6.97
5.	Bhattacharyya, T. *et al.* 2014. Soil information system: use and potentials in humid and semi-arid tropics, *Current Science,* **107**:1550-1564.	6.97
6.	Chandran, P. et.al. 2014. Development of SOTER database for major foodgrowing regions of India for resource planning. *Current Science,* **107**:1420-1430.	6.97
7.	Chatterji, S. et al. 2014. Land evaluation for major crops in the Indo-Gangetic Plains and black soil regions using fuzzy model. *Current Science,* **107:**1502–1511.	6.97

8.	Daripa, A., Bhatia, A., Tomer, R., Singh, S. D., Jain N. and Pathak H. 2014. Nitrous oxide and carbon dioxide emission from maize *(Zea mays L.)* under fertiliser application and elevated carbon dioxide in northwest India. *Experimental Agriculture,* 1-19 doi:10.1017/S0014479714000118	6.97
9.	Gangopadhyay, S.K., Bhattacharyya, T. and Sarkar, D. 2015. Hydromorphic soils of Tripura: their pedogenesis and characteristics. *Current Science,* **108**:984 – 993.	6.97
10.	Hegde, R., Natarajan, A., Meena, R.S., Niranjana, K.V., Thayalan, S. and Singh, S.K. 2015. Status of land degradation in an irrigated command area: a case study of Chikkarasinakere Hobli, Mandya district, Karanataka. *Current Science,* **108**:1501-1511.	6.97
11.	Mandal, C. *et al.* 2014. Revisiting agro-ecological sub-regions of India – a case study of two major food production zones, *Current Science,* **107**: 1519-1536.	6.97
12.	Padekar, D.G., Bhattacharyya, T., Deshmukh, P.D., Ray, S.K. Chandran, P. and Tiwary, P. 2014. Is irrigation water causing degradation in black soils? *Current Science,* **106**:1487-1489.	6.97
13.	Patil, N.G. et al. 2014. Natural resources of the Indo-Gangetic Plains: a land-use planning perspective. *Current Science***107**:1537-1549.	6.97
14.	Ray, S.K. *et al.* 2014. Soil and land quality indicators of the Indo-Gangetic Plains of India. *Current Science* **107:**1470–1486.	6.97
15.	Raychaudhuri, M. *et al.* 2014. Soil physical quality of the Indo-Gangetic Plains and black soil region. *Current Science,* **107:**1440–1451.	6.97
16.	Sidhu, G.S. et al. 2014. Impact of management levels and land-use changes on soil properties in rice–wheat cropping system of the Indo-Gangetic Plains. *Current Science* **107:**1487–1501.	6.97
17.	Srivastava, A.K. *et al.* 2014. Impacts of agro-climates and land use systems on culturable microbial population in soils of the Indo-Gangetic Plains, India. *Current Science,***107:**1464–1469.	6.97
18.	Tiwary, P. *et al.* 2014. Pedotransfer functions: a tool for estimating hydraulic properties of two major soil types of India. *Current Science,***107:**1431–1439.	6.97
19.	Velmourougane, K. *et al.* 2014. Impacts of bioclimates, cropping systems, land use and management on the cultural microbial population in black soil regions of India. *Current Science,***107:**1452–1463.	6.97
20.	Venugopalan, M.V. *et al.* 2014. InfoCrop-cotton simulation model – its application in land quality assessment for cotton cultivation. *Current Science,* **107:**1512–1518.	6.97

21.	Yadav, R.P., Sharma, Pawan, Arya, Swarn Lata and Panwar, Pankaj 2014. *Acacia nilotica* based silvipastoral systems for resource conservation and improved productivity from degraded lands of Lower Himalayas. *Agroforestry Systems,* **88**: 851-833.	6.91
22.	Raghupathi H.B. and Srinivas, S. 2014. Spatial variability studies in banana for identification of nutrient imbalance using diagnosis and recommendation integrated system, *Communications in Soil Science and Plant Analysis,* **45:**1667-1686.	6.53
23.	Reza, S.K.,Baruah, U. Nath, D.J., Sarkar, D. and Gogoi, D. 2014. Microbial biomass and enzyme activity in relation to shifting cultivation and horticultural practices in humid subtropical North-eastern India. *Range Management and Agroforestry,* **35:**78–84.	6.39
24.	Khambalkar, P.A., Sen, T.K., Chatterji, S. and Venugopalan, M.V. 2014. Land use changes and their impact on properties of some soil series of Nagpur district of Maharashtra. *Indian Journal of Agricultural Sciences,* **84**: 1517–1524.	6.17
25.	Reza, S.K., Baruah, U., Singh, S.K. and Das, T.H. 2014. Geostatistical and multivariate analysis of soil heavy metal contamination near coal mining area, Northeastern India. *Environmental Earth Sciences,* (DOI 10.1007/s12665-014-3797-1).	6.00

2014-15

Reaserch Publications having NAAS rating < 6.0

26.	Meena, R.K., Parihar, S.S. Singh, M. and Khanna, M. 2015. Influence of date of sowing and irrigation regimes on crop growth and yield of wheat (Triticum aestivum) and its relationship with temperature in semi-arid region. *Indian Journal of Agronomy,* **60**:72-78.	5.46
27.	Jagdish Prasad 2013. Soil Survey – Way forward for land evaluation and agricultural land use planning. *Journal of the Indian Society of Soil Science,* **61**:38-48.	5.23
28.	Karthikeyan, K., Puspanjali and Jagdish Prasad 2014. Soil fertility status of some selected soybean (*Glycine max L.)* - growing soils of Malwa Plateau, India. *Journal of the Indian Society of Soil Science,* **62**:174-178.	5.23
29.	Naidu, L.G.K., Nair, K.M. and Srinivas, S. 2014. Rubber growing areas of Kerala and Tamil Nadu: Assessment of soil related constraints to rubber production and delineation of soil management units. *Journal of the Indian Society of Soil Science,* **62**: 67-70.	5.23
30.	Patil, S. and Anil Kumar, K.S. 2014. Characterization and classification of soils of West Coast of Southern Karnataka. *Journal Indian Society of Soil Science,* **62**:408-413.	5.23

31.	Arya, S.L. and Yadav, R.P. 2014. Joint forest management in Haryana – Assessment of performance and evaluation of impacts. *Indian Journal of Soil Conservation,* **42**:314-321.	5.20
32.	Dutta, D., Baruah, U., Sarkar, D. and Dutta, D.P. 2014. Unfolding the feasibility of rabi cropping through soil moisture characterization in Sibsagar district of Assam, India. *Indian Journal of Soil Conservation,***42**: 46-53.	5.20
33.	Rajan, K.,Natarajan, A.,Anil Kumar, K.S., Gowda, R.C. and Abdul Haris, A. 2014. Assessment of some soil physical indicators in severely eroded lands of Southern Karnataka, *Indian Journal of Soil Conservation,* **42**:154-163.	5.20
34.	Yogita, D.G., Nagaraju, M.S.S., Srivastava, R. and Nasre, R.A. 2014. Mapping spatial variability in soil properties and fertility at field-scale in basaltic terrain for site-specific agricultural input management using geospatial techniques. *International Journal of Agricultural and Statistical Sciences,* **10**: 541-550.	5.13
35.	Ashutosh Kumar, Srivastava, A.K., Velmourougane, K., Sidhu, G.S., Mahapatra, S.K., Singh, R.S., Sahoo, A.K., Das, K., Das, T.H., Reza, S.K., Bhattacharyya, T., Sarkar, D. and Sharma, A.K. 2014. Urease activity and its kinetics in selected benchmark soils of Indo-Gangetic Plains, India. *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences*, (DOI 10.1007/s40011-014-0352-5).	5.00
36.	Sikawal, K. S., Sarolia, D. K., Bhardwaj, R. L., Kaushik, R. A, Jain, H K, Ameta, K. D. and Sharma, R. P. 2013. Extending harvest duration in tomato (Solanum esculentum Mill.) with a combination of varieties, row spacing and planting systems. *Vegetable Science,* **40** :234-236.	4.98
37.	Sharma, R. P., Yadava, R.B., Lama, T.D., Bahadur, Anant and Singh, K. P. 2013. Status of secondary nutrients vis-à-vis soil site-characteristics of vegetable growing soils of Varanasi. *Vegetable Science,* **40**: 65-68.	4.98
38.	Nisha Sahu, Raha, P., Sahu, A. and Singh, U.B. 2014. Effect of acephate on respiration, microbial biomas and fluorescein diacetate-hydrolysing activity in alluvial soil (Typic Ustochrepts). *Pollution Research,* **33**:757-760.	4.97
39.	Verma, T.P., Singh, S.P. Walia, C.S., Singh, R., Katiyar, D.K., Singh, H., Ram Gopal and Dhankar, R.P. 2012. Soil Resource information and alternative land use planning in north-eastern parts of Patiala district (Punjab). *Journal of Soil Salinity and Water Quality,* **4**:72-80.	4.94
40.	Verma, T.P., Singh, S.P., Ram Gopal, Singh, R., Katiyar, D.K. and Dhankar, R.P. 2013. Soil fertility evaluation in alluvial soils of western Uttar Pradesh. *Journal of Soil Salinity and Water Quality,* **2:**14-19.	4.94
41.	Patil, N.G. and Rajput, G.S. 2014. Surrogate estimation of soil water	4.86

	retention characteristics of seasonally impounded soils.doi:10.5958/0976-058X.2014.01324.9 *Indian Journal of Agricultural Research,* **48**: 409-420.	
42.	Sharma, R.P., Singh, R.S., Verma, T.P., Tailor, B.L. Sharma S.S. and Singh, S.K.2014. Coriander the taste of vegetables: present and future prospectus for coriander seed production in southeast Rajasthan. *Economic Affairs,* **59**: 345-354	4.82
43.	Dharumarajan, S. and Singh, S.K. 2014. GIS based soil site suitability analysis for potato - A case study in Lower Indo- Gangetic Alluvial Plain. *Potato Journal,***41**:113-121.	4.74
44.	Meena, R.L., Rao, V. Praveen. and Jat, A.L. (2014). Production potential and quality of rice (*Oryza sativa*) varieties as influenced by date of transplanting under Southern Telangana zone of Andhra Pradesh. *Current Advances in Agricultural Sciences,* **6**: 55-57.	4.69
45.	Reza, S.K.,Baruah, U. and Singh, S.K. 2014. Soil risk assessment of heavy metal contamination near oil refinery area, Northeastern India. *International Journal of Agriculture, Environment & Biotechnology,***7:**787–795.	4.69
46.	Chaturvedi, A., Patil, N.G., Hajare, T.N., Mungole, Arvind, Borkar, L., Mokde, Mamta 2014. Livelihood matrix and technological interventions for efficient farming systems in village clusters of Gondia district of Maharashtra. *Indian Journal of Dryland Agricultural Research & Development***29**:93-99.	4.58
47.	Srivastava, R., Preeti C.S., Nagaraju, M.S.S., Jagdish Prasad, Nasre, R.A., Mohekar, D.S. and Barthwal, A.K. 2014. Status of available micronutrient cations and their relationship with soil properties in Nagpur District, Maharashtra. *Indian Journal of Dryland Agricultural Research & Development,* **29**:68-72.	4.58
48.	Patil, S.D., Sen, T.K., Chatterjee, S., Sarkar, D. and Handore, R.M. 2014. Distribution of DTPA extractable micronutrients in acid soils of Goregaon and Aamgaon tehsil of Gondia District of Maharashtra, *Research Journal of Agricultural Sciences***5**: 273-276.	4.54
49.	Patil, S.D., Sen, T.K., Chatterjee, S., Sarkar, D. and Handore, R.M. 2014. Assessment of soil carbon stock and sequestration potential in forest, paddy and forest to paddy converted land use systems. *Green Farming,***5**: 801-804.	4.38
50.	Wagh, N.S., Mandal, D.K., Gajare, A.S. and Sadanshiv, N.S. 2014. Evaluation of soil characteristics of sunflower growing shrink-swell soils of Eastern Vidarbha. *Asian Journal of Soil Science,* **9**:187-191.	4.34
51.	Nisha Sahu, Obi Reddy, G.P., Nirmal Kumar, Nagaraju, M.S.S., Srivastava, R. and Singh, S.K. 2014. Characterization of landforms and land use/land Cover in basaltic terrain using IRS-P6 LISS-IV and Cartosat-1 DEM data: A case study. *Agropedology,* **24**:166-178.	4.16

52.	Bandyopadhyay, S., Dutta, D., Chattopadhyay, T., Reza, S.K., Dutta, D.P., Baruah, U., Sarkar, D. and Singh, S.K. 2014. Characterization and classification of some tea-growing soils of Jorhat district, Assam. *Agropedology,* **24:** 138–145.	4.16
53.	Baruah, U., Bandopadhyay, S. and Reza, S.K. 2014. Land use planning and strategic measures in North Eastern Region of India. *Agropedology* **24:** 292–303.	4.16
54.	Baruah, U., Das, T.H., Bhaskar, B.P. and Sarkar, D. 2014. Characterization of rice-growing soils: A case study in Gerua farm, Assam. *Agropedology,* **24**: 119-123.	4.16
55.	Bhattacharyya, T., Chandran, P., Ray, S.K., Tiwary, P., Dharmik, Ajit, Mandal, D.K., Mandal, C., Chatterji, S., Pal, D.K. Obi Reddy, G.P., Sarkar, D. and Singh, S.K. 2014. WebGeoSIS as soil information technology: A conceptual framework. *Agropedology,***24**: 222-233.	4.16
56.	Goswami, S.N., Sen,T.K., Jagdish Prasad and Chatterji, S. 2014. Effect of climatic and socio-economic factors on under-utilisation of lands in Maharashtra. *Agropedology,* **24**: 41-51.	4.16
57.	Meena, R.S., Natarajan, A., Thayalan, S., Hegde, R., Niranjana, K. V., Naidu, L.G.K. and Sarkar, D. 2014. Characterization and classificationof low land soils of Chikkarasinakere Hobli, Maddur, Mandya district, Karnataka. *Agropedology,* **24**: 95-101.	4.16
58.	Nagaraju, M.S.S. and Gajbhiye, K.S. 2014 Characterization and evaluation of soils of Kukadi Command (Minor-25) in Ahmednagar district of Maharashtra for land resource management. *Agropedology,* **24**:157-165.	4.16
59.	Naidu, L.G.K., Dharumarajan, S., Lalitha, M., Srinivas, S., Ramamurthy V. and Singh. S.K. 2014. Categorisation and delineation of prime and marginal lands of Andhra Pradesh for different uses. *Agropedology,* **24**:253-261.	4.16
60.	Reza, S.K., Baruah, U., Dutta, D., Sarkar, D and Dutta, D.P. 2014. Distribution of forms of potassium in Lesser Himalayas of Sikkim, India. *Agropedology,* **24**:106-110.	4.16
61.	Sidhu, G.S. and Surya, J. N. 2014. Soils of North Western Himalayan eco-system and their land use, constraints, productivity potential and future strategies. *Agropedology,* **24**:1-19.	4.16
62.	Srinivasan, R., Natarajan, A., Anil Kumar, K.S. and Kalaivanan, D. 2014. Characterization of major cashew growing soils of Dakshina Kannada district of Karnataka, *Agropedology,* **23**: 59-125.	4.16
63.	Vassanda Coumar, M., Karthikeyan,K. and Satyanarayana, T., 2013. Effect of di-ammonium phosphate and rock phosphate enriched biogas slurry on yield and uptake of phosphorus by mustard, *Agropedology,* **23**: 100-105.	4.16

64.	Vasu, D. and Reddy, M.S. 2013. Effect of fertilization on yield, quality, nutrient uptake, fertilizers and water use efficiency in cabbage (*Brassica oleracea*). *Agropedology,* **23:**106-112.	4.16
65.	Nalina, C.N., Anil Kumar, K.S.,Sheela Rani, B.,Shilpa Shree, K.G. Kusuma Patil and Netravathi, B. 2014. Evaluation of land suitability for principal crops of Nagenahalli micro-watershed using remote sensing data and geographical information system techniques. *Trends in Biosciences,* **7**:4022-4025.	3.94
66.	Pradhan Navin, Prakash Pravin, Tiwari, Shailesh Kumar, Manimurugan, C, Sharma, R.P. and Singh, P.M. 2014. Osmopriming of tomato genotypes with polyethylene glycol 6000 induces tolerance to salinity stress. *Trends in Biosciences,* **7:** 4412-4417.	3.94
67.	Nisha Sahu, Raha, P., Sahu, A. and Singh, U.B. 2014. Effect of organophosphorus pesticides on enzyme activities in alluvial soil (Typic Ustochrepts). *Nature Environment and Pollution Technology,* **13**:775-780.	3.85
68.	Sahu, A., Singh, S.K., Sahu, N., Ram, B. and Manna, M.C. 2014 Adsorption-desorption studies of cadmium in three different soil orders. *Nature Environment and Pollution Technology,* **13**: 559-564.	3.85
69.	Srinivasan. R., Jeevan Rao K., Sailaja, V. and Kalaivanan. D. 2014. Influence of organic manures and fertilizers on nutrient uptake, yield and quality in cabbage-baby corn cropping sequence. *Journal of Horticultural Sciences,* **9:**48-54.	3.43
70.	Nalina, C.N., Anil Kumar, K.S., Sandeep Kumar, D.K., Narendra Babu, B., Kumara Naik and Santhosha, V.P. 2015. Characterization and classification of soils of Nagenahalli micro-watershed in Bangalore Rural District of Karnataka, *International Journal on Environmental Sciences,* **6**:102-113.	3.06
71.	Singh, S.K., Patil, N.G., Tiwary P. and Chatterji, S. 2013. Issues and strategies of natural resource management and land use planning in semi-arid regions of India. *Annals of Arid Zone,* **52** : 211-223	3.02
72.	Deshmukh, H.V, Chandran, P., Pal, D.K., Ray, S.K., Bhattacharyya, T. and Potdar, S.S. 2014. A pragmatic method to estimate plant available water capacity (PAWC) of rainfed cracking clay soils (Vertisols) of Maharashtra, Central India. *Clay Research***33**:1-14.	2.97
73.	Bhaskar B.P., Raja, P. and Bhattacharyya, T. 2014. Soil informatics for agricultural land suitability assessment in Seoni district, Madhya Pradesh, India. *Enviro Geochimica Acta,* **1**: 292-300.	-
74.	Bhaskar B.P., Sarkar, D., Bhattacharyya, T., Satyavati, P.L.A., Bobade, S.V. and Anantwar S.G. 2015. Geochemical characterization of shrink-swell soils in Yavatmal district, Maharashtra. *Journal of Applied Geochemistry,* **17**: 98-108.	-
75.	Bhaskar B.P., Sarkar, D., Bobade, S.V., Gaikwad, S.S. and Anantwar,	-

	S.G. 2014. Land evaluation for irrigation in cotton growing Yavatmal district, Maharashtra. *International Journal of Research in Agricultural Sciences,* **1**:128-136.	
76.	Bhattacharyya, T., Ray, S.K. Maurya, U.K., Chandran, P., Pal, D.K., Durge, S.L., Nimkar, A.M., Sheikh, S.M., Kuchankar, H.W. Telpande, B., Dongre, V. and Kolhe, A. 2015. Carbon and nitrogen estimation in soils: Standardizing methods and internal standards for C/N analyzer. *Journal of Indian Chemical Society,* **92**:263-269.	-
77.	Chaturvedi, A., Hajare, T.N., Patil, N.G., Chaturvedi, Alka, Mungole, Arvind, Kamble, Rahul 2015. Land use planning issues in management of common property resources in a backward tribal area. *Land Use Policy* **42**:806–812.	-
78.	Dharumarajan, S. and Singh, S.K. 2014. Variations of soil properties and phosphorous fractions in three cropping systems of Lower Indo-Gangetic Alluvial Plain. *African Journal of Agricultural Research,* **9**:1878-1886.	-
79.	Meena, P.N. and Meena, R.K. 2014. Indigenous technical knowledge used by farmers in district of Lucknow, Uttar Pradesh, India. *International Journal of Traditional and Natural Medicines,* **4**: 26-31.	-
80.	Pable, D., Chatterji, S., Venugopalan, M.V., Sen, T.K., Giri, J.D., Sarkar, D. 2014. Soil Quality Assessment using Fuzzy Modelling - A case study in rainfed cotton growing Agro-ecological Subregions of Vidarbha, Maharashtra. *Journal of Cotton Research,* **5**: 126-131	-
81.	Banerjee, T., Singh, S.K., Dharumarajan, S. and Sarkar, D. 2014. Integration of high resolution satellite data, DEM and GIS for large scale mapping – A Case study from lower Gangetic Alluvial Plain of India. *International Journal of Geomatics and Geosciences,***5:** 345-356.	-
82.	Patil, S.D., Pabale, D.S., Sen, T.K., Chatterji, S. and Handore R.M. 2013. Carbon stock in soils of Gondia district, Maharashtra under different land use systems. *International Journal of Ecology, Environment and Conservation,* **20**: 1575-1580.	-
83.	Sharma, R.P., Singh, R.S., Singh, S.K., Naik P.S. and Singh, B. 2014. Health of soil supporting vegetable cultivation in peri-urban areas. *International Journal of Vegetable Science,* DOI:10.1080/19315260.2014.923549	-
84.	Singh, D., Bhaskar, B.P., Baruah, U. and Sarkar, D. 2014. Evaluaion of rice (*Oryza sativa*) based cropping systems in major soil series of Upper Brahmaputra Valley, Asom. *Global Journal of Science Frontier Research*: *Agriculture and Veterinary,* **14**:73-78.	-
85.	Singh, R., Singh, R.S., Gupta, P.K., Verma, T.P. and Jat, G. 2014. Nutrient status of orange growing soils developed on different parent materials in Jhalawar. *Indian Journal of Fertilisers,* **10:**42-50.	-

2013-14

Reaserch Publications having NAAS rating > 6.0

1.	Dinesh, R. and Ghoshal Chaudhuri, S. 2013. Soil biochemical / microbial indices as ecological indicators of land use change in mangrove forest. *Ecological Indicators,* **32:** 253-258.	9.19
2.	Gupta Choudhury, S., Srivastava, S., Singh, R., Chaudhari, S. K., Sharma, D. K., Singh, S. K., Sarkar, D. 2014. Tillage and residue management effects on soil aggregation, organic carbon dynamics and yield attribute in rice–wheat cropping system under reclaimed sodic soil. *Soil and Tillage Research,* **36:**76-83.	8.71
3.	Singh, U. B., Sahu, A., Sahu, N., Singh, R.K., Singh, R. Dinesh K., Singh, B. P., Jaiswal, R.K., Singh, D. P., Rai, J.P., Manna, M.C., Singh, K.P., Srivastava, J.S., Subba Rao, A., Rajendra Prasad, S. 2013. Nematophagous fungi: Catenaria anguillulae and Dactylaria brochopaga from seed galls as potential biocontrol agents of Anguina tritici and Meloidogyne graminicola in wheat (*Triticum aestivum L.*).*Biological Control,* **67:**475–482.	8.01
4.	Reza, S.K., Baruah, U., Chattopadhyay, T. and Sarkar, D. 2014. Distribution of forms of potassium in relation to different agroecological regions of North-Eastern India. *Archives of Agronomy and Soil Science* (DOI:10.1080/03650340.2013.800943).	7.12
5.	Bhattacharyya T., Pal, D.K., Mandal, C., Chandran, P., Ray, S.K., Sarkar, D., Velmourougane, K., Srivastava, A., Sidhu; G.S., Singh; R.S., Sahoo, A.K., Dutta, D., Nair, K.M., Srivastava, R., Tiwary, P., Nagar, A.P. and Nimkhedkar, S.S. 2013. Soils of India: historical perspective, classification and recent advances (review article). *Current Science,* **104:**1308-1323.	6.97
6.	Singh, S. K., Sidhu, G. S., Gupta Choudhury, S., Pandey, C. B., Banerjee, T. Sarkar, D. 2014. Soil organic carbon density in arable and non-arable lands under varied soil moisture and temperature regimes in cold arid to sub-tropical areas of Western Himalaya, India. *Arid Land Research and* management, **28:**169-185.	6.75
7.	Rao, S.S., Dinesh Kumar, S., Das, S.N., Nagaraju, M.S.S., Venugopalan, M.V., Rajankar, P., Laghate, P., Reddy S., Joshi, A.K. and Sharma, J.R. 2013. Modified Dubois model for estimating soil moisture with dual polarimetric SAR data. *Journal of the Indian Society of Remote Sensing,* **41:** 865-872.	6.68
8.	Banerjee, T., Das, K., Singh, S.K and Sarkar, D. 2013. Microwatershed in Chotanagpur Plateau,West Bengal, India-evaluation of Sabai Grass as alternate farming options. *Range Management & Agroforestry,* **34**:122-126.	6.39

9.	Singh, D., Bhaskar, B. P., Baruah, U. and Sarkar, D. 2014.Agro-economic analysis of sustainable cropping patterns in hydric rice fallows of upper Brahmaputra valley, Asom.*Indian Journal of Agricultural Sciences,* **84**: 385–390**.**	6.17
10.	Singh, D., Bhaskar, B.P., Baruah, U., Sarkar, D. and Vadivelu, S. 2013. Economic Appraisal of rice (*oryza sativa*) based cropping sequences in major soil series of upper Asom. *Indian Journal of Agricultural Sciences,* **83**:326-330.	6.17
11.	Karthikeyan K. Pushpanjali, Jagdish Prasad and Sarkar, D. 2013. Suitability and productivity assessment of soybean (*Glycine max* L*)* – growing soils of Dhar district, Madhya Pradesh, India. *Legume Research,* **36**:442-447.	6.15

2013-14

Reaserch Publications having NAAS rating < 6.0

12.	Singh, D., Bhaskar, B.P., Baruah, U. and Sarkar, D. 2013. Soil analogy for making varietal and fertilizer recommendations for rice (*Oryza sativa*) Cultivars in Brahmaputra valley, Assam. *Indian Journal of Agronomy,* **58:**21-25.	5.46
13.	Rajula Shanthy, T., Singh, M., Sahu, N., Surekha, M. Balaji Rajkumar, Gopala Sundara Raj, S., De, Kalyan, and Ramachandran, S. 2013. Participatory rural appraisal: A holistic approach for getting insight into an agro-ecosystem analysis. *Indian Journal of Extension Education,* **13**:1-9.	5.32
14.	Dutta D., Bandyopadhyay S., Baruah U. and Sarkar, D. 2013. Use of Taxonomic Approach to Estimate Total Soil Organic Carbon (SOC) Pool Sizes in Meghalaya State, India*. Journal of the Indian Society of Soil Science,* **61**:237-243.	5.23
15.	Garhwal, R.S., Qureshi, F.M., Giri, J.D., Yadav, R.S. and Singh, R. 2013. Suitability assessment for arable crops in Sirohi district of Rajasthan. *Journal of the Indian Society of Soil Science,* **61:**141-143.	5.23
16.	Kar, G., Chattaraj, S. and Ashwani Kumar 2013. Pedo-transfer function for determining soil water retention and assessing their utility in simulation model for predicting rice growth and yield. *Journal of the Indian Society of Soil Science,* **61:**300-310.	5.23
17.	Nasre, R.A., Nagaraju, M.S.S., Srivastava, R., Maji, A.K. and Barthwal, A. K. 2013. Characterization, classification and evaluation of soils of Karanji watershed, Yavatmal district of Maharashtra for land resource management using geo-spatial technologies. *Journal of the Indian Society of Soil Science,* **61:**275-286.	5.23
18.	Niranjana, K.V., Anil Kumar, K.S., Koyal, A., Naidu, L.G.K. and	5.23

	Sarkar, D. 2013. Major soils of Pulivedla region, Andhra Pradesh and their constraints. *Journal of the Indian Society of Soil Science,* **61**:140-142.	
19.	Gangopadhyay S.K., Obi Reddy, G.P., Sarkar, D. 2014. Erosion risk mapping in Perugua micro-watershed of semi-arid tropics of India using remote sensing and GIS. *Indian Journal of Soil Conservation,* **42:**99-106.	5.20
20.	Patil, N.G., Mandal, C. and Mandal, D.K. (2013) Comparative evaluation of nearest neighbor and neural networks approach to estimate soil water retention at field capacity and permanent wilting point. *Indian journal of soil conservation,* **41**:25-29.	5.20
21.	Pushpanjali, Karthikeyan, K., Sahu, S.S., Sahoo, A.K. and Sarkar, D. 2013. Delineation and prioritization of Jumar sub-watershed for sustainable development using geospatial techniques. *Indian Journal of Soil Conservation,* **41**:99-106.	5.20
22.	Nasre, R.A., Nagaraju, M.S.S., Srivastava, Rajeev, Maji, A.K. and Barthwal, A.K. 2013. Soil erosion mapping for land resources management in Karanji watershed of Yavatmal District, Maharashtra using remote sensing and gis techniques. *Indian Journal of Soil Conservation,* **41:**248-256.	5.20
23.	Nirmal Kumar, Obi Reddy, G.P., Chatterji, S., Jagdish Prasad and Sarkar, D. 2013. An application of classification and regression tree on qualitative soil survey data for land capability classification. *Journal of Soil and Water Conservation* **12:**301-306.	5.08
24.	Velmourougane, K., Venugopalan, M.V., Bhattacharyya, T., Sarkar, D., Pal, D. K., Sahu A., Chandran, P., Ray, S. K., Mandal, C., Nair, K. M., Jagdish Prasad, Singh, R. S. and Tiwary, P. 2013. Microbial biomass carbon status in agro-ecological sub-regions of black soil in India. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* (DOI 10.1007/s40011-013-0238-y).	5.00
25.	Bhattacharyya, T.; Pal, D.K.; Ray, S.K; Chandran, P., Mandal, C.; Deshmukh, A.S.;Telpande, B. and Tiwari, P. 2013.Simulating change in soil organic carbon in two long term fertilizer experiments in India : with the Roth*C* model. *Climate Change and Environmental Sustainability,* **1**:104-117, 126 (DOI 10.5859/j2320-642X.1.2.010)	4.86
26.	Telpande, B., Bhattacharyya, T., Wankhede, D.M, Jha, P., Tiwari, P., Chandran, P.and Ray, S.K. 2013.Simulating soil organic carbon in high clay in India : DNDC model experience. *Climate Change and Environmental Sustainability,* **1**:118-126. (DOI 10.5859/j2320-642X.1.2.011).	4.86
27.	Jagdish Prasad2013. Evaluation of some typical soils of Jalgaon district of Maharashtra for suitability of cotton. *Journal of Cotton Research and Development,* **27**:242-245.	4.69

28.	Patil, S. D., Sen, T. K., Chatterji, S., Sarkar, D. and Handore, R. 2013. Distribution of DTPA extractable micronutrients in acid soils of Goregaon and Aamgaon tehsil of Gondia district of Maharashtra. *Research Journal of Agricultural Sciences,* **5**:273-276.	4.54
29.	Verma, T.P., Singh, S.P., Ram Gopal, Katiyar, D.K., Singh, R. and Dhankar, R.P.2014. Characterization and management of soils in semi-arid region of Western Uttar Pradesh for sustainable agriculture. *Annals of Plant and Soil Research,* **16**:9-14.	4.39
30.	Chattopadhyay, T., Reza, S.K., Nath, D.J., Baruah, U., and Sarkar, D. 2012. Effect of land use on soil microbial biomass carbon and nitrogen content in the soils of Jorhat district, Assam. *Agropedology,* **22**:119–122.	4.16
31.	Dhanorkar, B.A., Koyal, Arti, Mohekar, D.S., Naidu, L.G.K., Reddy, R.S. and Sarkar, D. 2013. Soil resources assessment for crop planning in Medak district, Andhra Pradesh. *Agropedology,* **23**:23-29.	4.16
32.	Dutta, D.; Banerjee, T. and Sarkar, D. 2013. Length of growing period assessment in Bankura district for micro-level crop planning. *Agropedology,* **22:**80-87.	4.16
33.	Garhwal, R.S., Qureshi, F.M. and Giri, J.D. 2013. Characteristics and classification of the soils of Sirohi district of Rajasthan. *Agropedology,* **23:**8-15.	4.16
34.	Naidu, L.G.K., Ramamurthy V., Srinivas, S., Reddy, R.S. and Sarkar, D. 2013. Need for developing user friendly soil maps: A case study of Andhra Pradesh. *Agropedology,* **23**:30-35.	4.16
35.	Reza, S.K., Baruah, U., Bandyopadhyay, S., Sarkar, D. and Dutta, D.P. 2012. Characterization of soil acidity under different types of land use systems in Assam. *Agropedology,* **22**:123-127.	4.16
36.	Sadanshiv, N. S., Chatterji, S., Sen, T.K., Venugopala, M.V., Tiwary, P., Wagh, N.S. and Chaturvedi, A. 2012. Application of Crop Simulation Model for Quantification of yield Gap of Cotton in Wardha district, Maharashtra *Agropedology,* **22:**74-79.	4.16
37.	Tiwary P., Venugopalan, M.V., Blaise, D., Chatterji, S., Sen, T.K. and Tandulkar, N.R. 2013. Evaluation of sustainability of rainfed cotton yield under conventional and integrated nutrient management practices. *Agropedology,* **23**:53-58.	4.16
38.	Srinivasan, A., Natarajan, A., Anil Kumar, K.S. and Kalaivanan, D. 2013. Distribution of available macro and micronutrients in cashew growing soils of Dakshina Kannada District of Coastal Karnataka. *Madras Agricultural Journal,* **100**:113-117.	3.98
39.	Thakre, P. V., Ray, S. K., Chandran, P., Bhattacharyya, T. and Pal, D. K. 2013. Does sodicity in Vertisols affect the layer –charge of smectites? *Clay Research,* **32**:76-90.	2.97

40.	Nayak, D. C. and Sarkar, D. 2013. Mineralogy of some benchmark soils of the coastal plain, West Bengal. *Clay Research* **32**:1-16.	2.97
41.	Anitha, M.S., Anil Kumar, K.S., Nair, K.M., Shivaprasad, C.R., Naidu, L.G.K. and Sarkar, D. 2013. Soil boron and its fractions in agro-climatic zones of Karnataka. *Clay Research,* **32**:25-33.	2.97
42.	Banerjee, T., Das, A.L. and Mukhopadhyay, S.C. 2011. Prioritisation of Silai subwatersheds for Erosion management using drainage morphometry and soil erosion rates. *Geographical Review of India,* **73**: 323-338	-
43.	Bhaskar B. P., Sarkar Dipak, Bobade, S. V., Gaikwad, S. S., Anantwar, S. G. 2014. Land evaluation for irrigation in cotton growing Yavatmal District, Maharashtra. *International Journal of Research in Agricultural Sciences,* **1**(2) ISSN (Online):2348–3997:128-136.	-
44.	Bhaskar B.P., Sarkar, D., and Baruah, U. 2013. Pedogenesis in rice growing hydric soils of Majuli river island, Assam, India.*J. Indian Chem. Soc*. **90**:1431-1439.	-
45.	Bhaskar B.P.and Sarkar, D. 2013. Capability and quality assessment of rice growing hydric soils in Majuli river Island, Assam, India.*Journal of Agriculture and Environment for International Development,* **107**:1-13-32.	-
46.	Bhaskar B.P.and Saxena, R.K. 2013. Soil-landscape relationship in Lohit valley near Tezu, Arunachal Pradesh, India. *International Journal of Scientific Research,* **12**:55-59.	-
47.	Bhaskar, B.P Sarkar, D. and Baruah, U. 2013. Geochemistry of hydric soils in Majuli river island, Assam, India. *J. Indian Chem. Soc*. **90**:2279-2283.	-
48.	Dharamurajan, S., Singh, S.K., Banerjee, T. and Sarkar, D. 2013. Water retention characteristics and available water capacity in three cropping systems of lower Indo-Gangetic Alluvial Plain. *Communication in Soil and Plant Analysis*. DOI:10.1080/00103624.2013.803561.	-
49.	Goswami S. N., Chaturvedi A., Chatterji, S., Patil, N. G., Sen, T. K., Hajare, T. N. and Gawande, R. S. 2013. Least cost diet plan of cows for small dairy farmers of Central India. *African Journal of Agricultural Research,* **8**:5989-5995.	-
50.	Nirmal Kumar, Obi Reddy, G.P. and Chatterji, S. 2013. Evaluation of best first decision tree on categorical soil survey data for land capability classification. *International Journal of Computer Application,***72:** 5-8.	-
51.	Roy, R.P., Jagdish Prasad and Gupta, R. 2012. Assessment of well-water quality for drinking purpose-A case study in Nari area, Nagpur district Maharashtra. *Journal of Environmental Science*	-

	and Engineering, **54**:420-423.	
52.	Roy, R. P., Jagdish Prasad, Joshi, A.P. and Gupta, R. 2013. Accumulation of heavy metals in soils and radish crop irrigated with wastewater of textile industry in Nagpur district, Maharashtra. *Bangladesh Journal ofAgriculture and Environment,* **9**:25-28.	-
53.	Singh, D., Bhaskar B.P, Baruah U. and Sarkar, D. 2013. Diversification of rice (*Oryza sativa* L.) based cropping systems for higher productivity and resource use efficiency in major soil series of Upper Brahmaputra valley of Assam. *Indian Journal of Dryland Agricultural Research and Development,* **28**:26-32.	-
54.	Singh, D., Bhaskar, B.P., Baruah, U. and Sarkar, D. 2013. Diversification of rice (*Oryza Sativa L.*) based cropping systems for higher productivity and benefits on dominant soil series of upper Brahmaputra Valley, Assam. *Annals of Agriculture Research New Series,* **34:**1-6.	-
55.	Singh, D., Bhaskar, B.P., Baruah, U. and Sarkar, D. 2013. Production potential of Lahangaon soil series for rice based cropping sequences in riverine floodplains of northeastern India. *Annals of Agriculture Research,* **34**:269-275.	-
56.	Singh, D., Bhaskar, B.P., Baruah, U. and Sarkar, D. 2014. Diversification of rice (Oryza sativa L.) based cropping systems for higher productivity and benefits on dominant soil series of upper Brahmaputra valley. *Annals of Agriculture Research,* **35**:37-42.	-
57.	Verma, T. P., Singh, S. P., Ram Gopal and Singh, R. 2014. Nutrient Assessment in Soils of Upper Gangetic Plain to Sustain Soil Productivity. *Indian Journal of Fertilizers,* **10:**58-63.	-

2012-13

Reaserch Publications having NAAS rating > 6.0

1.	Chattaraj, S., Chakraborty, D., Garg, R.N., Singh, G.P., Gupta, V. K., Singh, S. and Singh, R. (2013). Hyperspectral remote sensing for growth-stage-specific water use in wheat. *Field Crops Research,* **144**: 179-191.	8.93
2.	Velmourougane, K., Venugopalan, M.V., Bhattacharyya, T., Sarkar, Dipak, Pal, D. K., Sahu Apeksha, Ray, S. K., Nair, K. M., Prasad Jagdish and Singh, R. S. (2013). Soil dehydrogenase activity in agro-ecological sub regions of black soil regions of India. *Geoderma,***197-198**: 186-192.	8.86
3.	Pal, D.K., Bhattacharyya, T., Sinha, R., Srivastava, P., Dasgupta, A.S., Chandran, P., Ray, S.K. and Nimje, A. (2012). Clay minerals record from late Quaternary drill cores of the Ganga Plains and their implications for provenance and climate change in the	8.53

	Himalayan foreland, *Palaeogeography, Palaeoclimatology, Palaeoecology,* **356-357**: 27-37.	
4.	Chaturvedi Arun, Kamble, R., Patil, N. G. and Chaturvedi, Alka (2013) City - Forest relationship in Nagpur, one of the greenest city of India. *Urban Forestry and Urban Greening,* **12**: 79-87. DOI: http://dx.doi.org/10.1016/j.ufug.2012.09.003.	8.01
5.	Patil, N. G., Tiwary, P., Pal, D. K., Bhattacharya, T., Sarkar, D., Mandal, C., Mandal, D., Chandran, P., Ray, S., Prasad, J., Lokhande, M., and Dongre, V. (2012). Soil water retention characteristics of black soils of India and pedotransfer functions using different approaches. *Journal of Irrigation and Drainage Engineering,***139**: 313-324. *(DOI: http://dx.doi.org/10.1061/(ASCE)IR.1943-4774.0000527)*	7.36
6.	Obi Reddy, G.P., Sarkar Dipak, Jagdish Prasad and Ramamurthy, V. (2013). Geospatial modeling in assessment of biophysical resources for sustainable land resource management. *Tropical Ecology,* **54** : 227-238.	7.17
7.	Obi Reddy, G.P., Nagaraju, M.S.S., Ramteke, I.K. and Sarkar, Dipak (2012). Terrain characteristics for soil resource mapping using IRS-P6 data and GIS – A case study from basaltic terrain of central India. *Journal of the Indian Society of Remote Sensing,***41**:331-343. (*DOI: 10.107/s12524-012-0240-5*).	6.68
8.	Singh, D., Bhaskar, B. P., Baruah U., Sarkar, Dipak, and Vadivellu, S. (2013). Economic appraisal of rice based cropping sequences in major soil series of upper Asom. *Indian Journal of Agricultural Sciences,***83**: 326–330.	6.17

2012-13

Reaserch Publications having NAAS rating < 6.0

9.	Sidhu, G.S., Surya, Jaya N., Lal, T., Katiyar. D.K. and Sharma, J.P. (2012). Soils of lower Siwaliks of Himalayas – Their degradation status and land management. *Journal of Soil and Water Conservation,* **11**: 18-123.	5.08
10.	Chaturvedi, Arun, Obi. Reddy, G.P., Srivastava, Rajeev and Maji, A.K. (2012). Remote sensing and GIS applications in rainfed agriculture management. *J. Soil and water conservation (India)*, **11**: 174-180.	5.08
11.	Bante, Rashmi R., Srivastava, Rajeev, Nagaraju, M.S.S. and Jagdish Prasad (2012). Characterization and evaluation of land resources for watershed management in Vidarbha region of Maharashtra using RS and GIS. *Journal of the Indian Society of Soil Science,***60** : 261-268.	5.23
12.	Gangopadhyay, S.K., Sarkar Dipak, Sahoo, A. K. and Singh. S.K. (2012). Soils of rainfed region of West Bengal and their productivity	5.23

	potential appraisal. *Journal of the Indian Society of Soil Science,* **60**: 83-91.	
13.	Mahesh Kumar, Singh, S.K., Raina, P. and Sharma, B. K. (2011). Status of available major and micronutrients in arid soils of Churu district of Western Rajasthan. *Journal of the Indian Society of Soil Science,* **59**: 188-192.	5.23
14.	Reza, S.K., Baruah, U. and Sarkar, Dipak (2012). Spatial variability of soil properties in Brahmaputra plains of North-Eastern India: A geostatistical approach. *Journal of the Indian Society of Soil Science*, **60**: 108–115.	5.23
15.	Reza, S.K., Pal, S. and Singh, S. (2012). Rock phosphate-enriched pressmud compost: Direct effect in pearl millet (*Pennisetum glaucum* L.) and residual effect in mustard (*Brassica juncea*) in a Typic Haplustept. *Journal of the Indian Society of Soil Science*, **60**: 138–144.	5.23
16.	Reza, S.K., Baruah, U. and Sarkar Dipak (2012). Mapping risk of soil phosphorus deficiency using geostatistical approach: A case study of Brahmaputra plain, Assam, India. *Indian Journal of Soil Conservation*, **40**: 65–69.	5.20
17.	Velmourougane, K., Venugopalan, M.V., Bhattacharyya, T., Sarkar, Dipak, Pal, D. K., Sahu Apeksha, Chandran, P., Ray, S. K., Mandal, C., Nair, K. M., Prasad Jagdish, Singh R. S. and Tiwary, P. (2013). Urease activity in various agro-ecological sub-regions of black soil regions of India. Procedings National Academy of Science, India, Section B - Biol. Sci. *DOI 10.1007/s40011-013-0162-1.*	5.00
18.	Jatav, M. K., Manoj Kumar, Trehan, S. P., Dua, V. K., Lal, S. S. and Sharma, R. P. (2012) Influence of microorganisms inoculation on nutrient economy in Potato-radish crop sequence in North Western Himalayas. *Vegetable Science* **39** : 21-25.	4.98
19.	Patil, N. G. and Chaturvedi, Arun (2011). Surrogate prediction of saturated hydraulic conductivity of seasonally impounded soils. *Journal of Soil Salinity and Water Quality,* **3**: 30-36.	4.94
20.	Surya, Jaya N, Singh, S.P. and Jat, R.S. (2012). Suitability assessment of soil resources for micro level crop planning – A case study. *Journal of Soil and Crops,* **22**: 297-301.	4.46
21.	Gangopadhyay, S.K., Baruah U. and Sarkar, Dipak (2012). Forest soils of Upper Brahmaputra valley of Assam – their characteristics and classification. *Agropedology*, **21**: 1-9.	4.16
22.	Nirmal Kumar, Obi Reddy, G.P., Chatterjee, S. and Sarkar, Dipak (2013). An application of ID3 decision tree algorithm for land capability classification, *Agropedology,* **22**: 35-42.	4.16
23.	Pachpor, Swapnil D., Nagaraju, M.S.S., Srivastava, Rajeev, Barthwal, A.K., Nasre, R.A. and Mohekar, D. (2012). Characterization and evaluation of land resources for management of Savli micro-	4.16

	watershed in Wardha district of Maharashtra. *Agropedology,* **22**: 8-17.	
24.	Surya, Jaya N. and Singh, S.P. (2012). Characterization, classification and management needs of Indo-Gangetic Alluvial Plains in Karnal district of Haryana. *Agropedology,* **22**: 50-55.	4.16
25.	Verma, T.P., Singh, S.P., Ram Gopal, Dhankar, R.P., Rao, R.V.S. and Tarsem Lal (2012). Characterization and evaluation of soils of Trans Yamuna area in Etawah district, Uttar Pradesh for sustainable land use. *Agropedology,* **22**: 26-34.	4.16
26.	Maske, S.P., Anil kumar, K.S., Hegde Rajendra, Ramesh kumar, S.C., Srinivas, S. and Naidu, L.G.K. (2012). Rainfall probability analysis for crop planning –a case study of Kuttanagere micro-watershed. *Mysore Journal of Agricultural Scences,*.**46**: 683-686.	3.93
27.	Vishal, M.K., Aishwath, O.P., Singh., R., Mehta, R.S., Mishra, B.K., Obi Reddy, G.P. and Nirmal Kumar (2013). Spatial and Temporal assessment of area, production and productivity of cumin in Rajasthan. *International Journal of Seed Spices,* **3**: 70-76.	3.91
28.	Goswami S.N., Chaturvedi, A. and Gawande, R.S. (2012). Economics and resource use efficiency of rice farming in Gondia district of Maharashtra. *Agricultural Situation in India*, **68**: 521-528.	3.15
29.	Kolhe, A.H., Chandran, P., Ray, S.K., Bhattacharyya, T., Pal, D.K. and Sarkar, Dipak (2011). Genesis of associated red and black shrink-swell soils of Maharashtra. *Clay Research,***30**: 1-11.	2.97
30.	Pal, D. K., Bhattacharyya, T., Chandran, P., and Ray, S. K. (2012) Linking minerals to selected soil bulk properties and climate change: A review, *Clay Research,* **31**: 38-69.	2.97
31.	Satyavathi, P. L. A., Raja, P., Ray, S. K., Anantwar, S. G. and Bhaskar B. P. (2012) Elemental composition and mineralogy of silt and clay fractions of cracking clay soils of semi arid and arid parts of Gujarat, India, *Clay Research,* **31**: 12-26.	2.97
32.	Chaturvedi Arun, Patil, N. G. and Hajare, T. N. (2012) Land and livelihood issues in different stages of tribal resettlement. *Indian Forester* ,**138** : 584-588	-
33.	Dadhich R. K., Sharma, R. P., Kumawat, S. M., Singh, G. and Sahu, M. P. (2013). Use of ^{59}Fe Isotope in iron chlorosis for fodder sorghum bicolor. *Noto-are Agriculture*, ISSN 1941-2681. http://www.notoare.com/18973108.	-
34.	Mandal D.K., Goswami S. N., Mandal, C., and Sarkar Dipak and Jagdish Prasad (2012). Sustainable use of shallow soils in the context of global climate change, *Indian Journal of Fertilizers,* **8**: 32-44.	-
35.	Mandal, D.K, Goswami, S. N., Mandal, C., Prasad Jagdish and	-

	Sarkar Dipak (2012). Assessment of deep soils of India and their utilisation for food security in the context of climate change, *Indian Journal of Fertilizers,* **8**: 110-120.	
36.	Patil, N.G. and Rajput, G.S. (2011). Pedotransfer functions to predict soil moisture constants in shrink–swell soils of Haveli tract in Jabalpur district of Madhya Pradesh. *Hydrology Journal,* **34**: 135-144.	-
37.	Reza, S.K., Baruah, U. and Sarkar, Dipak (2013). Hazard assessment of heavy metal contamination by the paper industry, North-Eastern India. *International Journal of Environmental Studies,* **70**: 23–32. (*DOI:10.1080/00207233.2012.746810*).	-
38.	Sharma, R. P., Pandey, A. K. and Singh, R. S. (2012). Aggressive action to reduce CO_2 emissions: Burning practice of paddy straw now sequestering carbon. *Noto-are Agriculture,* ISSN 1941-2681. (*http://www.notoare.com/16424734*).	-
39.	Singh, S.K., Kumar, Mahesh, Pandey, C.B., Sarkar, Dipak, Ghosh, Anupam, Mukhopadhya, S. (2012).Soil properties between irrigation and cropping sequence in *Thar* desert of Rajasthan, India. *Journal of Arid Land Research and Management.* (DOI: *10.1080 /15324982.2012.719577*)	-

Books and Brochures (Title, publisher - recognized or local)

Books

2016-17

Singh, S.K., Chattarji, S., Chattaraj, S. and Butte. P.S. 2016. Land Resource Inventory (LRI) on 1:10000 scale, Why and How? NBSS Publ. No. 172. ICAR-National Bureau of Soil Survey and Land Use Planning, Nagpur, India. 94p.

Singh, S.K., Ramamurthy, V., Chattaraj, S., Srinivas, S., Hegde, R. 2016. Extent and Distribution of Fallow Lands in Goa. NBSS Publ. No. 173, ICAR–NBSS&LUP, Regional Centre, Bangalore. p. 264.

Mandal, D.K., Mandal, C. and Singh, S.K. 2016. Agro-Ecological Regions of India (Revised), NBSS&LUP Publ. No 170, ICAR-NBSS&LUP, Nagpur, India, pp.89.

2014-15

Baruah, U., Sahoo, A.K. and Sarkar, D. 2014. Soil Resources of North Eastern States of India. Today and Tomorrow's Printers and Publishers, New Delhi. pp.199.

2013-14

Rajasekharan, P., Nair, K.M., Rajasree, G., Suresh Kumar P. and Narayanan Kutty, M.C. 2013. Kerala State Planning Board, Soil Fertility Assessment and Information

Management for Enhancing Crop Productivity in Kerala, (eds.) Kerala State Planning Board, Thiruvananthapuram, pp. 1-514.

Venugopal, V.K., Nair, K.M., Vijayan, M.R., Susan John, K. and Suresh Kumar, P. 2012. A Manual on Soil, Plant and Water Analysis (Vol.1), DOA, (eds.), Department of Agriculture, Government of Kerala, Thiruvananthapuram, pp. 183.

2012-13

Bhattacharyya, T., Pal, D.K., Sarkar Dipakand Wani, S.P. (Eds.) (2013) Climate Change and Agriculture. Studium Press (India) Pvt. Ltd., 328 p.

Chaturvedi Arun, Hilaluddin and Patil, N. G. (2013). Agriculture and Forests: Land Use Synergies for Rural Livelihood. Narendra Publishing House, New Delhi. 227 p.

Nirmal Kumar, Sahoo, R.N., Sinha, N.K. (2012). Discriminating Different Tillage Options : Through Remote Sensing Approach, Lambert Academic publishers, Germany, pp 92.

Technical Bulletins /Project reports /Working reports /Soil survey Report

2016-17

Bandyopadhyay, S., Reza, S.K., Baruah, U., Sah, K.D., Sarkar, D., Ramachandran, S., Jena, R.K., Ray, P., Deb Roy, P., Singh, S.K. and Ray, S.K. 2017. Land use planning of Jorhat district, Assam. NBSS&LUP Publ. No. 1077, February 2017, p. 92.

Chandran, P., Bhattacharyya, T., Ray, S.K., Sarkar, Dipak, Singh, S.K., Tiwary, P., Mandal, C., Telpande, B.A., Khobragade, R. and Panchbuddhe, A. 2016. Influence of organic and inorganic carbon sequestration on soil and land quality in selected benchmark spots of India. Project Completion Report, p.140 + Annexure lx.

Dutta D., Nayak, D.C., Gupta Choudhury, S. and Singh, S.K. 2016. Effect of different land uses on total Soil Organic Carbon (SOC) and its active pools in humid to per-humid ecoregion of West Bengal. NBSS Publ.No.1097, 40 p.

Hegde, R., Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2017. Land Resource Inventory for Watershed Planning and Development of Padasavli-1 Microwatershed, Aland Taluk, Gulbarga District, Karnataka, Sujala MWS Publ.13, ICAR–NBSS&LUP, RC, Bangalore. p.85.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2017. Land Resource Inventory for Watershed Planning and Development of Nirgudi-1 Microwatershed, Aland Taluk, Gulbarga District, Karnataka, Sujala MWS Publ.10, ICAR–NBSS&LUP, RC, Bangalore. 83p.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2017. Land Resource Inventory for Watershed Planning and Development of Nirgudi-2 Microwatershed, Aland Taluk, Gulbarga District, Karnataka, Sujala MWS Publ.11, ICAR–NBSS&LUP, RC, Bangalore. 89p.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K.2017. “Land Resource Inventory for Watershed Planning and

Development of Nirgudi West Microwatershed, Aland Taluk, Gulbarga District, Karnataka", Sujala MWS Publ.12, ICAR–NBSS&LUP, RC, Bangalore. p.83.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2016. Land Resource Inventory for Watershed Planning and Development of parts of Nilogal, Belhatti, Hadgali and Hullur Subwatersheds, Sujala SWS Publ.1, ICAR–NBSS&LUP, RC, Bangalore. p.163.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2016. Land Resource Inventory for Watershed Planning and Development of parts of Hangala, Basavapura, Shivapura, Annurkeri and Gopalpur Subwatersheds, Gundlupet Taluk, Chamarajanagara District, Karnataka, Sujala SWS Publ.2, ICAR–NBSS&LUP, RC, Bangalore. p.155.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2016. Land Resource Inventory for Watershed Planning and Development of Yelishirur-1 Microwatershed, Gadag Taluk and District, Karnataka, Sujala MWS Publ.2, ICAR–NBSS&LUP, RC, Bangalore. p.83.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2016. Land Resource Inventory for Watershed Planning and Development of Yelishirur-3 Microwatershed, Gadag Taluk and District, Karnataka, Sujala MWS Publ.3, ICAR – NBSS & LUP, RC, Bangalore. p.87.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2016. Land Resource Inventory for Watershed Planning and Development of Shirunj Microwatershed, Gadag Taluk and District, Karnataka, Sujala MWS Publ.4, ICAR–NBSS&LUP, RC, Bangalore. p.87.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2016. Land Resource Inventory for Watershed Planning and Development of Shirol West-2 Microwatershed, Gadag Taluk and District, Karnataka, Sujala MWS Publ.5, ICAR–NBSS&LUP, RC, Bangalore. p.85.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2016. Land Resource Inventory for Watershed Planning and Development of Yelishirur-2 Microwatershed, Gadag Taluk and District, Karnataka, Sujala MWS Publ.6, ICAR–NBSS&LUP, RC, Bangalore. p.99.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2016. Land Resource Inventory for Watershed Planning and Development of Chincholi Khurd -1 Microwatershed, Aland Taluk, Gulbarga District, Karnataka, Sujala MWS Publ.7, ICAR–NBSS&LUP, RC, Bangalore. p.91.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2017. Land Resource Inventory for Watershed Planning and Development of Chincholi Khurd -2 Microwatershed, Aland Taluk, Gulbarga District, Karnataka, Sujala MWS Publ.8, ICAR–NBSS&LUP, RC, Bangalore. p.81.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2017. Land Resource Inventory for Watershed Planning and Development of Matki-3 Microwatershed, Aland Taluk, Gulbarga District, Karnataka, Sujala MWS Publ.9, ICAR–NBSS&LUP, RC, Bangalore. p. 87.

Hegde, Rajendra, Dhanorkar, B.A., Srinivas, S., Nair, K.M., Niranjana, K.V., Reddy, R.S. and Singh, S.K. 2016. Scientific planning for watershed development – A case study of Hosahalli Micro-watershed, Harvehobli, Chamarajanagar taluk & district, Karnataka, Sujala MWS Publ.1, ICAR–NBSS&LUP, RC, Bangalore. p.68.

Mukhopadhyay, S., Nayak, D.C. and Singh, S.K. 2016. Area prioritization for land use planning in some selected blocks of Bankura, Purulia and Paschim Medinipur districts – A remote sensing and GIS approach. NBSS Publ.No.1090.

Natarajan, A., Hegde, Rajendra, Shivananda Murthy, H.S. and Raj, J.N. 2016. Implementation manual for Sujala III project, Karnataka watershed development, GOK pp.189.

Natarajan, A., Reddy, R.S., Niranjana, K.V., Hegde, Rajendra, Srinivasan, R., Dharumarajan, S., Srinivas, S., Danorkar, B.A. and Vasundhara, R. 2016. Field Guide for Land Resources Inventory, Sujala III project Karnataka, NBSS Publ. ICAR-NBSSLUP, Bangalore 154p.

Raja, P., Bhaskar, B.P., Surendran, U., Rajan, K., Nagaraju, M.S.S. and Khola, O.P.S. 2016. Geochemical characterization and pedogenic transformation of soils in Purna valley, Maharashtra, Central India. PS-1/42. 78p.

Reza, S.K., Nayak, D.C., Chatopadhyay, T. Mukhopadhyay, S. and Singh, S.K. 2017. Land Resource Inventory of Kadwa block, Katihar district, Bihar on 1:10,000 scale for optimal agricultural land use planning, using geo-spatial techniques. NBSS Publ. No. 1098, NBSS&LUP, Nagpur, p. 36.

Singh, S.K., Batta, R.K. and Chatterji, S.2016. Land Use Planning for Arresting Land Degradation, Combating Climate Change and Ensuring Food Security – A Training manual, NBSS&LUP Publ. 171, p135.

Srinivasan, R., Gangopadhyay, S.K., Mukhopadhyay, S., Das, K., Nayak, D.C. and Singh, S.K. 2016. Land Resource Inventory at 1:10000 scale in Ganjam block of Ganjam district, Odisha for Optimal Agricultural Land Use Planning Using Geospatial Technique. NBSS Publ., NBSS&LUP, Nagpur. (submitted).

Verma, T.P., Singh, R.S., Meena, R.L., Tailor, B.L., Singh, R., Dadhich, R., Yadav, H.S., Gulati, I.J., Sarkar, D. and Singh, S.K. 2016. Land Resource Inventory of Central State Farm Jetsar, Sri Ganganagar district,Rajasthan. NBSS Publ.1093, National Bureau of Soil Survey and Land Use Planning, Nagpur, India. pp.112.

Verma, T.P., Singh, R.S., Meena, R.L., Tailor, B.L., Singh, R., Sarkar, D. and Singh, S.K. 2016. Land Resource Inventory of KVK Farms in South Eastern Rajasthan-MPUAT, Udaipur. NBSS Publ. 1092, National Bureau of Soil Survey and Land Use Planning, Nagpur, India.pp. 176 pp.

2015-16

Bhaskar, B.P., Satyavathi, P.L.A. and Bhattacharyya, T. 2015. Geochemical characterization for reconstruction of physical and chemical properties of shrink-swell soils of Yavatmal district, Maharashtra. Report No-1084.pp.71.

Das, T.H., Reza, S.K., Bandyopadhyay, S., Baruah, U., Nayak, D.C., Sahoo, A.K., Mukhopadhyay, S., Gangopadhyay, S.K., Chattopadhyay, T., Sah, K.D., Sarkar, D., Singh, S.K. and Ray, S.K. 2016. *Soil Nutrient mapping of Sikkim*. NBSS Publ. 1086, January 2016, p. 156.

Kazuyuki Yagi, Fahmuddin Agus, Tomohito Arao, Milkha S. Aulakh, Zhaohai Bai, Rodel Carating, Kangho Jung, Atsunobu Kadono, Masayuki Kawahigashi, Seung Heon Lee, Lin Ma, Obi Reddy, G.P., Sidhu, G.S., Yusuke Takata, Tran Minh Tien, Renkou Xu, Xiaoyuan Yan, Kazunari Yokoyama, Fusuo Zhang, Dongmei Zhou 2015. Regional Assessment of Soil Changes in Asia, (Chapter-10), *Status of World Soil Resources Report, 287-329.* Status of the World's Soil Resources (SWSR) – Main Report. Food and Agriculture Organization of the United Nations and Intergovernmental Technical Panel on Soils, Rome, Italy.

Nagaraju, M.S.S., Nirmal Kumar, Patil, N.G. and Srivastava, R. 2015. Assessment and Mapping of Spatial Variability of Soil Properties in Basaltic Terrain for Precision Agriculture using VNIR Spectroscopy and Geostatistical Techniques. ICAR-NBSS&LUP Technical Report.

Obi Reddy, G.P. and Singh, S.K. 2015. Geospatial Technologies in Mapping, Monitoring and Management of Natural Resources, Training Manual, NRDMS (DST) Sponsored Training Programme held during 5th-25th August, 2015 pp.231.

Obi Reddy, G.P., Singh, S.K., Mondal, C., Srivastava, R., Bhattacharyya, T., Naidu, L.G.K., Sidhu, G.S., Baruah, U., Singh, R.S., Kumar Nirmal and Sarkar Dipak. 2015. Development of District Soil Information System (DSIS) on 1:50,000 Scale (50 Districts), NBSS&LUP, Nagpur, Project Report, pp. 160.

Singh, S.K., Hegde, R., Anil Kumar, K.S., Ramamurthy, V., Srinivas, S., Nair, K.M., Das, B., Tiwari, G., Jhangir, A., Vasundhara, R., Niranjana, K.V., Dhanorkar, B.A., Koyal, A., Bache Gowda, C., Reddy, N.B.M., Venkatesh, D.H., Archana, K.V., Maddileti, N. and Parvathi, S. 2015. *Land Resource Inventory of Erravally village, Jagadevpur Mandal, Medak district, Telangana for Agricultural Development.* NBSS Publication 1094. National Bureau of Soil Survey and Land Use Planning, Nagpur, India 66 p.

Verma, T.P., Singh, R.S., Giri, J.D., Naitam, R.K., Tailor, B.L., Singh, R., Shyampura, R.L., Sarkar, Dipak and Singh, S.K. 2015. Soil Resource Inventory and land evaluation of Chittaurgarh district for land use planning). NBSS Publ. 1091, National Bureau of Soil Survey and Land Use Planning, Nagpur, India.pp. 223.

Verma, T.P., Singh, R.S., Meena, R.L., Tailor, B.L., Singh, R., Dadhich, R., Yadav, H.S., Gulati, I.J., Sarkar, Dipak and Singh, S.K. 2016. Land Resource Inventory of Central State Farm Jetsar, Sri Ganganagar district, Rajasthan. NBSS Publ. 1093, National Bureau of Soil Survey and Land Use Planning, Nagpur, India.pp.106.

Verma, T.P., Singh, R.S., Meena, R.L., Tailor, B.L., Singh, R., Sarkar, Dipak and Singh, S.K. 2016. Land Resource Inventory of KVK Farms in South Eastern Rajasthan-MPUAT, Udaipur. NBSS Publ. 1092, National Bureau of Soil Survey and Land Use Planning, Nagpur, India. 180 pp.

Das, T.H, Reza, S.K., Bandyopadhyay, S., Baruah, U., Nayak, D.C., Sahoo, A.K., Mukhopadhyay, S., Gangopadhyay, S.K., Chattopadhyay, T., Sah, K.D., Sarkar, D.,

Singh, S.K., Pradhan, Yashoda abd Ray, S.K. (2016). Soil Nutrient Mapping of Sikkim. ICAR-National Bureau of Soil Survey and Land Use Planning, Nagpur, India. NBSS Publ.1086, p. 156.

2014-15

Anil Kumar, K.S., Nair, K.M., Thayalan, S., Ramesh Kumar, S.C., Hegde, Rajendra, Srinivas, S., Niranjana, K.V., Naidu, L.G.K., Sarkar, Dipak and Singh, S.K. 2014. Land Resources of Malappuram District, Kerala for Land Use Planning, NBSS Publication 1083, National Bureau of Soil Survey and Land Use Planning, Nagpur, India, 151p.

Bandyopadhyay, S., Baruah, U., Das, T.H., Dutta, D., Reza, S.K., Padua, S., Sarkar, D., Sah, K.D. and Singh, S.K. 2014. Assessment and mapping of some important soil parameters including macro and micronutrients for the state of Nagaland towards optimum utilization of land resources for integrated and sustainable development. NBSS Publ. 1080, Nagpur, 257p.

Bhattacharyya, T., Sidhu, G.S., Mahapatra, S.K. et al. 2014. Final Project Report : Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture (NAIP, C-4), NBSS Publ. No. 1074, ICAR-NBSS&LUP, Nagpur, pp.-92.

Chaturvedi, Arun, Patil, N.G., and Hajare, T.N. 2014. Final Report 'Efficient Land use based intergrated system for rural livelihood in Aurangabad, Dhule and Gondia district of Maharashtra'.

Das, T.H., Dutta, D., Obi Reddy, G.P., Singh, S.K., Sarkar, D., Dhyani, B.L. and Mishra, P.K. 2013. Soil Erosion of Sikkim NBSS Publ.164, NBSS&LUP, Nagpur, 42p.

Gangopadhyay, S.K., Mukhopadhyay, S., Singh, S.K. and Sarkar, D. 2013. Soil Resource Inventory and Land Evaluation of Aurangabad district, Bihar (1:50,000 scale) for Land Use Planning, NBSS Publ. No. 1058, ICAR-NBSS & LUP, Nagpur, 179 p.

Gangopadhyay, S.K., Nayak, D.C., Das, K., Sarkar, D. and Singh, S.K. 2013. Characterisation of Simana Sub-watershed under Subarnarekha Catchment, West Bengal for land use planning using IRS data. NBSS Publ. No.1044, ICAR-NBSS & LUP, Nagpur, 135 p.

Gangopadhyay, S.K., Singh, S.K. and Sarkar, D. 2013. Soil Resource Inventory of Experimental Farm, Borlaug Institute of South Asia (BISA), Pusa, Samastipur, Bihar. NBSS Publ. No. 1053, ICAR-NBSS & LUP, Nagpur, 68 p.

Jagdish Prasad, Ravindra Chary, G., Patil, N.G. and Obi Reddy, G.P. 2015. Agropedology Terminologies, published by Indian Society of Soil Survey & Land Use Planning, 177p.

Mahapatra, S.K., Yadav, R.P., Singh, S.P., Aggarwal, R.K. , Sharma, J.P., Tiwari, A.K., Sidhu, G.S., Sarkar, D., Singh, S.K., Sharda, V.N. and Mishra, P.K. 2014. Soil Erosion in Delhi, ICAR-NBSS Publ. 166, NBSS&LUP, Nagpur, India, 34p.

Nayak, D.C., Chattopadhyay, T., Mukhopadhyay, S., Singh, S.K. and Sarkar, D. 2014. Soil Resource Inventory and Land Evaluation of Rohtas district, Bihar (1:50,000 scale) for Land Use Planning, NBSS Publ. No. 1078, NBSS&LUP, Nagpur, 130p.

Ramamurthy, V. and Singh, S.K. 2015. Land Use Planning for important Medicinal and Aromatic Plants in Karnataka. NBSS Publ. 1081, ICAR-NBSS&LUP , Nagpur, 22p.

Ramamurthy, V., Naidu, L.G.K., Nair, K.M. Ramesh Kumar, S.C., Srinivas, S., Thayalan, S., Sarkar, D., Chaturvedi, A. and Singh, S.K.. (2015). District Land Use Planning, Mysore, Karnataka. NBSS Publ. No.169, 95p.

Ramamurthy, V., Nalatwadmath, S.K., Srinivas, S., Rama Mohan Rao, M.S., Shivaprasad, C.R. Adhikari, R.N., Naidu, L.G.K., Patil, S.L, Raizada, A., Sarkar, D., Singh, S.K. and Mishra, P.K. 2014. Soil Erosion in Karnataka. NBSS Publ. 162, NBSS&LUP (ICAR), Nagpur, 70p.

Ramamurthy, V., Singh, S.K., Ramesh Kumar, S.C., Nair, K.M., Patil, N.G. and Shivappa, Angadi 2015. Integrated Land Use Planning for enhanced tribal livelihood in H.D.Kote taluk of Mysore district, Karnataka. NBSS Publ. 1082, NBSS&LUP (ICAR), Nagpur, 34p.

Sahoo, A.K., Das, K., Das, A.L., Obi Reddy G.P., Singh, S.K., Sarkar, Dipak and Mishra, P.K. 2014. Soil Erosion of Andaman & Nicobar Islands, NBSS Publ. No.165, NBSS&LUP (ICAR), Nagpur, 30 p.

Sahoo, A.K., Sarkar, D., Singh, S.K., Obi Reddy, G.P., Dhyani, B.L., Mishra, P.K. and Sharda, V.N. 2014. Soil Erosion in Jharkhand, NBSS Publ.159, NBSS&LUP (ICAR), Nagpur, 39p.

Sahoo, A.K., Singh, S.K., Sarkar D., Sarkar, A.K., Agarwal, B.K., Shahi, D.K., Nayak, D.C., Mukhopadhyay, S. and Banerjee, T. 2013. Mapping of Soil Acidity and Nutrient Status at Block Level of Ramgarh District, Jharkhand, NBSS Report No.1052D, NBSS & LUP (ICAR), Nagpur, 66 p.

Sahoo, A.K., Singh, S.K., Sarkar, Dipak, Sarkar, A.K., Agarwal, B.K., Shahi, D.K., Nayak, D.C., Mukhopadhyay, S. and Banerjee, T. 2013. Mapping of Soil Acidity and Nutrient Status at Block Level of Dumka District, Jharkhand, NBSS Report No.1052A, NBSS&LUP (ICAR), Nagpur, 93 p.

Sahoo, A.K., Singh, S.K., Sarkar, Dipak, Sarkar, A.K., Agarwal, B.K., Das, T.H., Nayak, D.C., Mukhopadhyay, S. and Banerjee, T. 2013. Mapping of Soil Acidity and Nutrient Status at Block Level of Jamtara District, Jharkhand, NBSS Report No.1052B, NBSS&LUP (ICAR), Nagpur, 67 p.

Sahoo, A.K., Singh, S.K., Sarkar, Dipak, Sarkar, A.K., Agarwal, B.K., Das, T.H., Nayak, D.C., Mukhopadhyay, S. and Banerjee, T. 2013. Mapping of Soil Acidity and Nutrient Status at Block Level of Hazaribagh District, Jharkhand, NBSS Report No.1052C, NBSS&LUP (ICAR), Nagpur, 155 p.

2013-14

Bandyopadhyay, S., Dutta, D., Reza, S.K., Baruah, U and Sarkar, D. 2013. Land Use Planning of Diring-Thanglong Micro-watershed of Karbi-Anglong and Golaghat Districts of Assam under Hill & Mountain Ecosystem for Integrated Development. NBSS Publ. No. 1048, NBSS & LUP (ICAR), Nagpur. 58p.

Bhaskar B.P., Sarkar, D., Mandal, C., Bobade, S.V., Gaikawad, M.S., Gaikawad, S.S., Nimkar, A.M. and Bhattacharyya, T. 2014. Reconnaissance Soil Survey in Yavatmal district, Maharashtra. NBSS Publ. No.1059, NBSS&LUP, Nagpur. 204p.

Chattopadhyay, T., Bandyopadhyay, S., Baruah U., Sarkar, D., Nayak, D.C. and Dhyani, B.L. 2013. Soil Erosion of Arunachal Pradesh. NBSS Publ. No. 158 NBSS & LUP (ICAR), Nagpur, 27p.

Dutta, D., Reza, S.K. and Baruah, U. 2013. Study of soil moisture availability of soils during post-*Kharif* period in Sivasagar district of Assam. NBSS Publ. No. 1054, NBSS&LUP, Nagpur, 29p.

Jagat Ram, Singh, S.P., Yadav, R.C., Mahapatra, S.K., Sidhu, G.S., Sarkar, D. and Sharda, V.N. 2013. Soil Erosion in Uttarakhand. NBSS Publ. 156, NBSS&LUP, Nagpur, 53p.

Nair K.M, Anil Kumar K.S, Mandal, C., Chaturvedi, A., Thayalan, S., Ramesh Kumar, S. C., Rmammurthy, V., Srinivas, S., Sujatha, K., Venkatesh D. H., Naidu, L.G.K, Sarkar, D. and Rajasekaran P. 2013. Agro–Ecology of Kerala. Soil Fertility Assessment and Information Management for Enhancing Crop Productivity in Kerala, Kerala State Planning Board, Thiruvananathapuram, Kerala, India, pp. 54-71.

Nair, K.M., Anil Kumar, K.S., Thayalan, S., Ramamurthy, V., Ramesh Kumar, S.C., Srinivas, S., Koyal, A., Venkatesh, D.H., Sujatha, S., Jairamiah, Venkata Giriappa, Parvathi, S., Nethravathi, B., Sunitha, B.P., Manuja, C.V., Aparna M Hebbar, Menaka, J., Remina Sandeep, Sunitha Bellakka, Stefi Peter, Sowmya, H.S., Mohamed Vakketh, Nalini, T.V., Krishnakumaran, V., Denison, Z., Kochunarayana Pillai, Ajith R. Nair, Sangeeth Menon, Naidu, L.G.K., Sarkar, D. and Rajasekharan, P. 2013. Soil Fertility: Malappuram District. Soil Fertility Assessment and Information Management for Enhancing Crop Productivity in Kerala, Kerala State Planning Board, Thiruvananathapuram, Kerala, India, pp 328-348.

Naitam, R.K., Verma,T.P. and Singh, R.S. 2013. Land Use Planning of Chanavada II Watershed for Integrated Development. NBSS Publ.1050. NBSS&LUP, Nagpur, 150 p.

NBSS&LUP Staff 2013. Final report of project on "Comparative assessment of large scale mapping through conventional survey and remote sensing techniques- A case study in Parsori watershed, Katol tehsil, Nagpur district, Maharashtra state". NBSS&LUP, Nagpur, 27 p.

NBSS&LUP Staff 2013. Final report of the collaborative project with RRSC-C, Nagpur on "Detailed soil mapping in basaltic terrain for land resources management using Cartosat-1 data". NBSS&LUP, Nagpur, 41 p.

NBSS&LUP Staff 2013. Prediction of soil fertility parameters through Visible and Near Infrared (VNIR) soil reflectance data of West Bengal. NBSS&LUP, Nagpur, 12 p.

NBSS&LUP Staff 2014. Development of spectral reflectance methods and low cost sensors for real time application of variable rate inputs in precision farming. NBSS&LUP, Nagpur, 21 p.

Obi Reddy, G.P., Kothare, R.S., Sena, D.R., Harindranath, C.S., Naidu, L.G.K., Sarkar, D. and Sharda, V.N. 2013. Soil Erosion of Goa. NBSS Publ. 155. NBSS&LUP (ICAR), Nagpur. 54 p.

Reza, S.K., Baruah, U., Dutta, D. and Sarkar, D. 2013. Soil and land capability map for land use planning of Dzongu Farm, North Sikkim district, Sikkim. NBSS & LUP (ICAR), Report No. 1046. NBSS & LUP (ICAR), Nagpur, Maharashtra. 18p + Annexure.

Reza, S.K., Ray, S.K. and Baruah, U. 2014. Assessment of heavy metal pollution and its mapping in soils of contaminated areas of Morigoan, Dibrugarh and Tinsukia districts of Assam. Report No. 1050. NBSS & LUP (ICAR), Nagpur, Maharashtra. 18p.

Sidhu, G.S., Pal, S., Tiwari, A.K., Sarkar, D. and Sharda, V.N. 2013. Soil Erosion in Punjab. NBSS Publ. 151, NBSS & LUP (ICAR), Nagpur, Maharashtra, 33p.

Sidhu, G.S., Surya, J. N. Lal, T., Katiyar, D. K., Sharma, J.P. and Sarkar, D. 2013. Dynamics of land use and its impact on soil development in Shahid Bhagat Singh Nagar (Nawanshahr district), Punjab state. NBSS Tech. Bull No. 1047. NBSS & LUP (ICAR), Nagpur. 166p.

Surya, J. N., Sidhu, G.S., Lal, T., Walia, C.S., Singh, D., Mahapatra, S.K. 2013. Land Resource Inventory for farm planning in Lakhan Majra Block, Tahsil and District Rohtak, Haryana. NBSS Publ. 1049. NBSS & LUP (ICAR), Nagpur.

Atlas

Sarkar, D., Banerjee, T., Mukhopadhyay, S., Mukhopadhyay, J., Mandal, C. and Singh S.K. 2013. Land Resource Atlas of West Bengal, NBSS Publication **154** pp. 164.

2012-13

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Sonitpur District. NBSS & LUP Report No. **1041 (A).**

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Darrang District. NBSS & LUP Report No. **1041 (B)**.

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Goalpara District. NBSS & LUP Report No. **1041 (C)**.

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Kokrajhar District. NBSS & LUP Report No. **1041 (D)**.

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Bongaigaon District. NBSS & LUP Report No. **1041 (E)**.

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Barpeta District. NBSS & LUP Report No. **1041 (F)**.

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Nalbari District. NBSS & LUP Report No. **1041 (G)**.

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Marigaon District. NBSS & LUP Report No. **1041 (H)**.

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Nagaon District. NBSS & LUP Report No. **1041 (I)**.

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Lakhimpur District. NBSS & LUP Report No. **1041 (J)**.

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Dhemaji District. NBSS & LUP Report No. **1041 (K).**

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Tinsukia District. NBSS & LUP Report No. **1041 (L).**

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Karbi-Anglong District. NBSS & LUP Report No. **1041 (M).**

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Chirang District. NBSS & LUP Report No. **1041 (N).**

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Bagsa District. NBSS & LUP Report No. **1041 (O).**

Assessment and mapping of some important soil parameters including macro and micro nutrients for the thirteen (13) priority districts of Assam state (1:50,000 scale) towards optimum land use planning: Udalguri District. NBSS & LUP Report No. **1041 (P).**

Bhattacharyya, T., Sarkar, D., Ray, S.K., Chandran, P., Pal, D.K., Mandal, D.K., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Mandal, C., Srivastava, R., Sen, T.K., Chatterji, S., Obi Reddy, G.P., Patil, N.G., Mahapatra, S.K., Anil Kumar, K.S., Das, K., Singh, A.K., Reza, S.K., Dutta, D., Srinivas, S., Tiwary, P., Karthikeyan, K., Venugopalan, M.V.,Velmourougane, K., Srivastava, A., Raychaudhuri, M., Kundu, D.K., Mandal, K.G., Kar, G., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S., Sahu, V.T., Gaikwad, K.M., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta, D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal ,R.S., Sahu, A., Mahapatra, S., Puspamitra, S., Kumar, A., Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S. (2013). Soil datasets of the hot spots Indo-Gangetic Plain (IGP) Working Report No.3, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture", Lead Center, NBSS & LUP, Nagpur. p183.

Bhattacharyya, T., Sarkar, D., Ray, S.K., Chandran, P., Pal, D.K., Mandal, D.K., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Mandal, C., Srivastava, R., Sen, T.K., Chatterji, S., Obi Reddy, G.P., Patil, N.G., Mahapatra, S.K., Anil Kumar, K.S., Das, K., Singh, A.K., Reza, S.K., Dutta, D., Srinivas, S., Tiwary, P., Karthikeyan, K., Venugopalan, M.V.,Velmourougane, K., Srivastava, A., Raychaudhuri Mausumi, Kundu, D.K., Mandal, K.G., Kar, G., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S., Sahu, V.T., Gaikwad, K.M., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta, D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal ,R.S., Sahu, A., Mahapatra, S., Puspamitra, S., Kumar, A., Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S. (2013). Soil datasets of the hot spots Black Soil Region (BSR) Working Report No.4, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture", Lead Center, NBSS & LUP, Nagpur. p. 228.

Chandran, P., Tiwary, P., Bhattacharyya, T., Sarkar, D., Pal, D.K., Mandal, D.K., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Mandal, C., Srivastava, R., Sen, T.K., Chatterji, S., Ray, S.K., Obi Reddy, G.P., Patil, N.G., Mahapatra, S., Anil Kumar, K.S., Das, K., Singh, A.K., Reza, S.K., Dutta, D., S.K., Srinivas, Karthikeyan, K.,Venugopalan, M.V., Velmourougane, K., Srivastava, A., Raychaudhuri, M., Kundu, D.K., Mandal, K.G., Kar, G.,*Dijkshoorn, J.A.,*Batjes, N.H.,*Brindaban, P.S., Durge, S.L., Kamble, G.K.,Gaikwad, M.S.,Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S., Gaikwad, M.S., Sahu, V.T., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta, D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D.,

Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal, R.S., Sahu, A., Mahapatra, S., Puspamitra, S., Kumar, A.Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S. (2013). Soil and terrain database for georeferenced soil information system (GeoSIS) for Indo-Gangetic Plains & Black Soil Region, Working Report No.8, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture" NBSS&LUP, Nagpur. p.68+ *Annexure (*International Soil Resource and International Center (ISRIC), Wageningen, The Netherlands).*

Chatterji, S., Tiwary, P., Sen, T.K., Prasad, J., Bhattacharyya, T., Sarkar, D., Pal, D.K., Mandal, D.K., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Mandal, C., Srivastava, R., Chandran, P., Ray, S.K., Obi Reddy, G.P., Patil, N.G., Mahapatra, S.K., Srinivas, S., Das, K., Singh, A.K., Reza, S.K., Dutta, D., Anil Kumar, K.S., Karthikeyan, K., Venugopalan, M.V., Velmourougane, K., Srivastava A., Raychaudhuri, Mausumi, Kundu, D.K., Mandal, K.G., Kar, G., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S., Gaikwad, M.S., Sahu, V.T., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta, D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal, R.S., Sahu, A., Mahapatra, S., Puspamitra, S., Kumar, A., Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S. (2013). Land evaluation for agricultural land use planning for bench mark spots in Indo-Gangetic Plain (IGP) and Black Soil Region (BSR), Working Report No.10, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture" NBSS&LUP, Nagpur. p.51.

Mandal, C., Mandal, D.K., Bhattacharyya, T., Sarkar, D., Pal, D.K., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Srivastava, R., Sen, T.K., Chatterji, S., Chandran, P., Ray, S.K., Obi Reddy, G.P., Patil, N.G., Mahapatra, Anil Kumar, K.S., Das, K., Singh, A.K., Reza, S.K., Dutta, D., S.K., Srinivas,S., Tiwary, P., Karthikeyan, K., Venugopalan, M.V., Velmourougane, K., Srivastava, A., Raychaudhuri, Mausumi, Kundu, D.K., Mandal, K.G., Kar, G., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S.,Gaikwad, K.M. Sahu, V.T., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta, D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal, R.S., Sahu ,A., Mahapatra, S., Puspamitra, S., Kumar, A., Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S. (2013). Revised agro-ecological sub region for land use planning, Working Report No.12, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture." NBSS&LUP, Nagpur. p.50.

Mandal, D.K., Mandal, C., Bhattacharyya, T., Sarkar, D., Pal, D.K., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Srivastava, R., Sen, T.K., Chatterji, S., Chandran, P., Ray, S.K., Obi Reddy, G.P., Patil, N.G., Mahapatra, S.,

Anil Kumar, K.S., Das, K., Singh, A.K., Reza, S.K., Dutta, D., S.K., Srinivas, Tiwary, P., Karthikeyan, K., Venugopalan, M.V., Velmourougane, K., Srivastva, A., Raychaudhuri, Mausumi, Kundu, D.K., Mandal, K.G., Kar, G., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S.,Gaikwad, M.S., Sahu, V.T., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta, D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M.,Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal, R.S., Sahu, A., Mahapatra, S., Puspamitra, S., Kumar, A. Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S. (2013). Computation of Length of Growing Period (LGP): A modified approach, Working Report No.11, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture" NBSS&LUP, Nagpur. p.40.

Naidu, L.G.K., Ramamuthy, V., Srinivas, S., Natarajan, A. and Thayalan, S. (2012). delineation of agro-ecological zones of Tamil Nadu, NBSS & LUP, Publ. No **1039**.

Naitam,R.K., Verma, T.P. and Singh, R.S. (2012). Land use planning of Chanavada II watershed for integrated development. NBSS & LUP Publication. (Unpublished)

Natarajan A., Hegde, R., Anil Kumar, K.S., Niranjana, K.V. Naidu, L G K and Sarkar Dipak (2012). Land resource inventory of Durgada Nagenahalli village, Ellerampura Panchyath, Kortagere Taluk, Tumkur District, Karnataka for integrated development under NICRA Project. 108p.

Obi Reddy, G.P. and Sarkar, Dipak (2012). compendium on human resource development in remote sensing and GIS in natural resource management, NBSS Publ. No. 150, NBSS&LUP, Nagpur, 88 p.

Obi Reddy, G.P. and Sarkar, Dipak (2012). Assessment of soil loss for prioritization of sub watersheds – A remote sensing and GIS approach, NBSS Publ. No. 137, NBSS&LUP, Nagpur, 55 p.

Obi Reddy, G.P., Nirmal Kumar and Sarkar, Dipak (2012). Training manual on GIS and digital image processing, NBSS Publ. No. **153**, NBSS&LUP, Nagpur, 166 p.

Ray, S.K., Bhattacharyya, T., * Reddy, K.R., Pal, D. K., Mandal, D.K., Tiwary, P., Chandran, P., Sarkar, D., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Mandal, C., Srivastava, R., Sen, T.K., Chatterji, S., Obi Reddy, G.P., Patil, N.G., Mahapatra, S.K., Anil Kumar, K.S., Das, K., Singh, A.K., Reza, S.K., Dutta, D.,Srinivas, S.,Karthikeyan, K., Venugopalan, M.V.,Velmourougane, K., Srivastava, A., Raychaudhuri Mausumi, Kundu, D.K., Mandal, K.G., Kar, G., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S., Gaikwad, M.S., Sahu, V.T., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta,D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal, R.S., Sahu, A., Mahapatra, S., Puspamitra, S., Kumar, A., Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S.,

(2013). soil and land quality indices of the Indo-Gangetic Plains(IGP) & Black Soil Region (BSR) of India, Working Report No.9, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture" NBSS&LUP, Nagpur. p.214 (**Soil and Water Science Department, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, USA).*

Ray, S.K., Bhattacharyya, T., Sarkar, D., Pal, D.K., Chandran, P., Tiwary, P., Mandal, D.K., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Mandal, C., Srivastava, R., Sen, T.K., Chatterji, S., Obi Reddy, G.P., Patil, N.G., Mahapatra, S.K., Anil Kumar, K.S., Das, K., Singh, A.K., Reza, S.K., Dutta, D., Srinivas, S., Karthikeyan, K., Venugopalan, M.V.,Velmourougane, K., Srivastava, A., Raychaudhuri Mausumi, Kundu, D.K., Mandal, K.G., Kar, G., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S., Sahu, V.T., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta,D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal, R.S., Sahu, A., Mahapatra, S., Puspamitra, S., Kumar, A.Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S. (2013). Baseline data Indo-Gangetic Plains (IGP) Part I, Working Report No.1, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture", Lead Center, NBSS & LUP, Nagpur. p 1-686.

Ray, S.K., Bhattacharyya, T., Sarkar, D., Pal, D.K., Chandran, P., Tiwary, P., Mandal, D.K., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Mandal, C., Srivastava, R., Sen, T.K., Chatterji, S., Obi Reddy, G.P., Patil, N.G., Mahapatra, S.K., Anil Kumar, K.S., Das, K., Singh, A.K., Reza, S.K., Dutta, D., Srinivas, S., Karthikeyan, K., Venugopalan, M.V.,Velmourougane, K., Srivastava, A., Raychaudhuri Mausumi, Kundu, D.K., Mandal, K.G., Kar, G., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S., Sahu, V.T., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta,D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal, R.S., Sahu, A., Mahapatra, S., Puspamitra, S., Kumar, A.Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S. (2013). Baseline data Indo-Gangetic Plains (IGP) Part II Working Report No.1, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture", Lead Center, NBSS & LUP, Nagpur. p 687- 1290.

Ray, S.K., Bhattacharyya, T., Sarkar, D., Pal, D.K., Chandran, P., Tiwary, P., Mandal, D.K., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Mandal, C., Srivastava, R., Sen, T.K., Chatterji, S., Obi Reddy, G.P., Patil, N.G., Mahapatra, S.K., Anil Kumar, K.S., Das, K., Singh, A.K., Reza, S.K., Dutta, D., Srinivas, S., Karthikeyan, K., Venugopalan, M.V.,Velmourougane, K., Srivastava,

A., Raychaudhuri Mausumi, Kundu, D.K., Mandal, K.G., Kar, G., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S., Sahu, V.T., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta,D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal, R.S., Sahu, A., Mahapatra, S., Puspamitra, S., Kumar, A.Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S. (2013). Baseline data Black Soil Region (BSR) Part I Working Report No.2, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture", Lead Center, NBSS & LUP, Nagpur. p.1-498.

Ray, S.K., Bhattacharyya, T., Sarkar, D., Pal, D.K., Chandran, P., Tiwary, P., Mandal, D.K., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Mandal, C., Srivastava, R., Sen, T.K., Chatterji, S., Obi Reddy, G.P., Patil, N.G., Mahapatra, S.K., Anil Kumar, K.S., Das, K., Singh, A.K., Reza, S.K., Dutta, D., Srinivas, S., Karthikeyan, K., Venugopalan, M.V.,Velmourougane, K., Srivastava, A., Raychaudhuri Mausumi, Kundu, D.K., Mandal, K.G., Kar, G., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S., Sahu, V.T., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta,D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal, R.S., Sahu, A., Mahapatra, S., Puspamitra, S., Kumar, A.Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S. (2013). Baseline data Black Soil Region (BSR) Part II Working Report No.2, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture", Lead Center, NBSS & LUP, Nagpur. p 499-903.

Ray, S.K., Maurya, U.K., Anantwar, S.G., Chandran, P., Bhattacharyya, T., Sarkar, D., Pal, D.K., Satyavathi, P.L.A., Raja, P., Nimje, A.N., Balbuddhe, D.V. and Sheikh, S. (2013) Development of protocols for digestion, standards and methods to determine elements in soil and sediments using Inductively Coupled Plasma Spectrometry (ICP-AES). Final Project Report, NBSS&LUP, Nagpur, 67 p.

Raychaudhuri, Mausumi, Kundu, D.K., Mandal, K.G., Kar, G., Ashwani Kumar, Bhattacharyya, T., Sarkar, D., Pal, D.K., Mandal, D.K., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Mandal, C., Srivastava, R., Sen, T.K., Chatterji, S., Chandran, P., Ray, S.K., Obi Reddy, G.P., Patil, N.G., Mahapatra, S.K., Anil Kumar, K.S., Das, K.,Singh, A.K., Reza, S.K., Dutta, D., Srinivas, S., Tiwary, P., Karthikeyan, K., Venugopalan, M.V., Velmourougane, K., Srivastava, A., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S., Gaikwad, M.S., Sahu, V.T., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta, D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod,

N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal, R.S., Sahu, A., Mahapatra, S., Puspamitra, S., Kumar, A.Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S., (2013). Physical properties of IGP & BSR soils to assess soil and land quality, Working Report No.5, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture" NBSS&LUP, Nagpur. p.164.

Tiwary, P., Patil, N.G., Bhattacharyya, T., Sarkar, D., Pal, D.K., Mandal, D.K., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Das, T.H., Singh, R.S., Mandal, C., Srivastava, R., Sen, T.K., Chatterji, S., Chandran, P., Ray, S.K., Obi Reddy, G.P., Mahapatra, S.K., Anil Kumar, K.S., Das, K., Singh, A.K., Reza, S.K., Dutta, D.,Srinivas, S., Karthikeyan, K.,Venugopalan, M.V., Velmourougane, K., Srivastava, A., Raychaudhuri, Mausumi, Kundu, D.K., Mandal, K.G., Kar, G., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S., Gaikwad, M.S., Sahu, V.T., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta, D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal, R.S., Sahu, A., Mahapatra, S., Puspamitra, S., Kumar, A.,Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S. (2013). Development of pedo-transfer functions for Indian soils, Working Report No.7, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture" NBSS&LUP, Nagpur. p.40.

Velmourougane, K., Srivastava, A., Venugopalan, M.V., Bhattacharyya, T., Sarkar, D., Ray, S.K., Chandran, P.,Pal, D.K., Mandal, D.K., Prasad, J., Sidhu, G.S., Nair, K.M., Sahoo, A.K., Anil Kumar, K.S., Das, T.H., Singh, R.S., Mandal, C., Srivastava, R.,Sen, T.K., Chatterji, S., Obi Reddy, G.P., Patil, N.G., Mahapatra, S.K., Das, K., Singh, A.K., Reza, S.K., Dutta, D., Srinivas,, S.,Tiwary, P., Karthikeyan, K., Raychaudhuri, Mausumi, Kundu, D.K., Mandal, K.G., Kar G., Durge, S.L., Kamble, G.K., Gaikwad, M.S., Nimkar, A.M., Bobade, S.V., Anantwar, S.G., Patil, S.,Gaikwad, M.S., Sahu, V.T., Bhondwe, H., Dohtre, S.S., Gharami, S., Khapekar, S.G., Koyal, A., Sujatha, Reddy, B.M.W., Sreekumar, P., Dutta, D.P., Gogoi, L., Parhad, V.N., Halder, A.S., Basu, R., Singh, R., Jat, B.L., Oad, D.L., Ola, N.R., Wadhai, K., Lokhande, M., Dongare, V.T., Hukare, A., Bansod, N., Kolhe, A., Khuspure, J., Kuchankar, H., Balbuddhe, D., Sheikh, S., Sunitha, B.P., Mohanty, B., Hazarika, D., Majumdar, S., Garhwal, R.S., Sahu, A., Mahapatra, S., Puspamitra, S. Kumar, A., Gautam, N., Telpande, B.A., Nimje, A.M., Likhar, C. and Thakre, S. (2013). Biological properties of Indo-Gangetic Plains (IGP) and Black Soil Region (BSR), Working Report No.6, NAIP Component - 4 Project on "Georeferenced Soil Information System for Land Use Planning and Monitoring Soil and Land Quality for Agriculture"NBSS&LUP, Nagpur. p.84.

Verma,T.P.,Singh, R.S., Shyampura, R.L., Sharma, S.S.,Tailor, B. L., Singh, R. and Sarkar, D. (2012). Land resources for farm planning in Bhadesar Tehsil (Cluster of Ten Villages), Chittaurgarh District (Rajasthan). NBSS Publ. 168 p.

Walia, C.S., Surya, Jaya N., Dhankar, R.P., Sharma, J.P. and Sarkar, D. (2013). Generation of soil database for Khulgad watershed development in Almora district of Uttrakhand. NBSS Publ. **1043**. NBSS & LUP, Nagpur.

BOOK CHAPTERS

2016-17

Anil Kumar, K.S., Lalitha, M., Patil, Sidharam, Kalaiselvi, B., Nair, K.M. and Singh, S.K. 2017.Assessment of Land Degradation Vulnerability: A Case Study from Parts of Western Ghats and West Coast of IndiaChapter 8. Part I: *Land Resource Inventory and Characterization* in *Ed.:* G. P. Obi Reddy, N.G. Patil and Arun Chaturvedi,2017.*Sustainable Management of Land Resources*:An Indian Perspective. *Appl Academic Press*.

Anil Kumar, K.S., Nair, K.M., Ramesh Kumar, S.C., Srinivas, S., Ramamurthy, V., Sunil P. Maske, Jessy, M.D., Rajendra Hegde, James Jacob and Singh, S.K. 2016. Soil Quality Monitoring Sites (SQMS) for Traditional Rubber-growing Areas of South India,NBSS Publ. No. 1096, National Bureau of Soil Survey and Land Use Planning, Nagpur, India 1010 p.

Banerjee, T., Gupta Choudhury, S., Das, K., Nayak, D.C., Singh, S.K. 2016. Land Resource Inventory to Land Use Planning: A Tool for Sustainable Watershed Management. In Book: Land Use Planning and Management published by Institute of Landscape, Ecology and Ekistics, September, Vol.1.

Bhaskar B.P., Satyavathi P.L.A., Mandal C., Singh S.K. and Jagdish Prasad. 2017. Analysis of Aridity in Relation to Climate and Sustainability of Cotton Production in India. Climate Change and Sustainable Technology Environ. Sci. & Engg. 12: 84-114.

Bhaskar, B.P., Chaturvedi, A., Bhattacharyya, T. and Gaikwad, S.S. 2017. Land resource inventory and evaluation for agricultural land use planning in semiarid ecosystem of western India. (ed. by G.P. Obi Reddy, N.G. Patil and Arun Chaturvedi "Sustainable Management of Land resources- an Indian perspective"). *Apple Academic press*.pp.48-72.

Desertification and Land Degradation Atlas of India (Based on IRS AWiFS data of 2011-13 and 2003-05), Space Applications Centre, ISRO, Ahmedabad, India, 219 pages ISBN: ISBN: 978–93–82760-20-7.

Dubey, P.N., Bhaskar, B.P., Chandran, P., Singh, B. and Mishra, B.K. 2017. Major and trace element geochemistry in ferruginous soils developed under hot humid Malabar region, India. (Ed. G.P. Obi Reddy, N.G. Patil and Arun Chaturvedi "in Sustainable Management of Land resources- an Indian perspective").*Apple Academic press*.pp.240-265.

Jagdish Prasad (2016). Land Resource Inventory at Different Levels: Needs and Methods. *In: Land Use Planning for Arresting Land Degradation, Combating Climate Change and Ensuring Food Security* (A training manual). NBSS&LUP Pub. No. **171**:16-23.

Jagdish Prasad and Singh A.K. 2016. Land Degradation in India- A Menace. In: Souvenir of Global Ravine Conference on Mananging Ravines for Food and Livelihood Security (March 7-10, 2016) held at Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior M.P., India, p.118-127.

Jatav, M.K., Dua, V.K., Govindakrishnan, P.M. and Sharma, R.P. 2016.Impact of climate change on potato production in India.In Sustainable Potato Production and the Impact of Climate Change (Edited by Sunil Londhe)). IGI Global, ISBN13: 9781522517153**,** DOI: 10.4018/978-1-5225-1715-3.ch002, pp 87-104.

Meena, R.S., Meena, R.L., Singh, R.S. and Verma, T.P. 2016. Soil-site suitability evaluation for Orange (*Citrus reticulata*) in soils of Jhalarapatan block, Jhalawar district (Rajasthan). *Soil Conservation Society of India*, New Delhi.

Mukherjee, A., Rakshit, S., Nag, A., Ray, M., Kharbikar, H.L., Shubha Kumari., Sarkar, S., Paul, S., Roy, S., Maity, A., Meena, Vijay Singh., Burman, R. Roy. 2016. Climate change risk perception, adaptation and mitigation strategy: An extension outlook in mountain Himalaya. Conservation Agriculture: An approach to combat climate change in Indian Himalaya. Springer Publisher, Singapore. pp. 257-292.

Nair, K.M., Anil Kumar, K.S., Srinivas, S., Nagaraj, J.S., Violet D'Souza, M., Raghuramulu,Y., Hegde, R. and Singh, S.K. 2016. Soil Quality Monitoring Sites (SQMS) for Traditional Coffee-Growing Areas of India,NBSS Publ. No.1095, National Bureau of Soil Survey and Land Use Planning, Nagpur, India, 530 p.

Naitam, R.K., Deshmukh, P., Moharana, P.C**.,** Ramteke, I.K., Singh, R.S., and Singh, S.K. 2016.Climate change and land suitability for Potato Cultivation in India. In: Sustainable Potato Production and the Impact of Climate Change, S. L. Londhe (Ed.), IGI Global Publications.

Obi Reddy, G.P. 2016. Geospatial database mangement in GIS, *In*: Land Use Planning for Arresting Land degrdation, Combating Climate Change and Ensuring Food Security- A Training Manual, NBSS&LUP Publ. No.171, p 34-40.

Obi Reddy, G.P. 2016. Soil Geoportal Developemental and Its Applications, *In*: Land Use Planning for Arresting Land degrdation, Combating Climate Change and Ensuring Food Security- A Training Manual, NBSS&LUP Publ. No.171, p 50-56.

Obi Reddy, G.P. and Singh, S.K. 2016. Role of remote sensing and geospatial technologies in climate smart agriculture, *In:* Climate Resilient Agronomy (Eds: B. Venkateshwarulu *et al.*), *Indian Society of Agronomy*, New Delhi, p.368-378.

Ramamurthy, V., Singh, S.K., Chattaraj, S., Obi Reddy, G.P. and Ramesh Kumar, S.C. 2016. Land Resource Inventory Towards Village Level Agricultural Land Use Planning. In: *Sustainable Management of Land Resources* (ed: G.P. Obi Reddy, N.G. Patil and A. Chaturvedi). Apple Academy Press.

Ramesh Kumar, S.C., Hegde, Rajendra and Singh, S.K. 2016.Socio-economic Assessment for Land Use Planning in Training Manual on Land Use Planning, NBSS&LUP Publication.

Sahu, N., Obi Reddy, G.P., Nirmal Kumar, Nagaraju, M.S.S., Srivastava, R. and Singh, S.K. 2016. Sustainable Management of Land Resources: An Indian Perspective. Chapter-11 Morphometric Analysis Using GIS Techniques: A Case Study from the Basaltic Terrain of Central India. Published by CRC Press.

Sahu, N., Vasu, D., Sahu, A., Lal, Narayan and Singh, S.K. 2017.Agriculturally Important Microbes for Sustainable Agriculture - Volume I: Plant-Soil-Microbe nexus. Chapter: Strength of microbes in nutrient cycling: a key to soil health. Springer Publication.(Accepted).

Sharma, R.P., Jatav, M.K., Dua, V.K. and Manoj Kumar 2016.Nutrient Management for Sustainable Potato Production in India: New Initiative. In Sustainable Potato Production and the Impact of Climate Change (Edited by S. Londhe). IGI Global, ISBN13: 9781522517153, DOI: 10.4018/978-1-5225-1715-3.ch002, pp 17-49.

Sidhu, G.S. and Yadav, R.P. 2016. Soil Degradation in North-West Himalayas (NWH): A case study of Himachal Pradesh. Conservation Agriculture: An Approach to Combat Climate Change in Indian Himalaya" (Eds. J.K. Bisht, V.S. Meena, P.K. Mishra, A. Pattanayak) ISBN: 978-981-10-2557-0, p. 381-408.

Singh, R.S. and Naitam, R.K. 2016. Land Resource Inventory and Agricultural Land Use Planning. In: N. K. Pareek and S. Arora (Eds.) Natural Resource Management in Arid and Semi-Arid Ecosystem for Climate Resilient Agriculture, Soil Conservation Society of India, New Delhi. pp. 464.

Singh, S.K., Chattaraj, S., Patil, N.G., Ray, S.K. and Chatterji, S. 2016. Soils of India: Problems and Potentialities. *In*Ed. R. Lal Encyclopedia of Soil Science, Third Edition, CRC Press, ISBN 9781498738903.

Space Applications Centre (SAC). 2016. Desertification and Land Degradation Atlas of India (Based on IRS AWiFS data of 2011-13 and 2003-05). Space Applications Centre, Indian Space Research Organisation, Department of Space, Government of India, Ahamedabad.252 p. (One among the contributors for South India).

Surya, J.N, Yadav, R.P., Sidhu, G.S. and Singh, S.K. 2016. Soils of Indo-Gangetic Plains: Constraints and Potentials in Relevance of to Agro-ecological Regions. *In* Ed. R. Lal Encyclopedia of Soil science, 3rd Edition. p.1168-1177.

Yadav, R.P. 2016. Torrential Erosion in Himalayas.*In* Ed. R. Lal Encyclopedia of Soil science, 3rd Edition.

2015-16

Bhattacharrya, R., Ghosh, B.N., Mishra, P.K., Mandal, B., Rao, Srinivasa, Sarkar, D., Das, K., Anil, K.S., Lalitha, M., Hati, K. and Franzlubbers. 2016. Overcoming Land Degradation in India, *Sustainability:* Sustainable Agriculture, Food and Wildlife (Ed. Ms. Shuang Zhao "Enhancing Soil Health to Mitigate Soil Degradation"). *Sustainability*. 8x:DOI:10.3390.

Bhattacharyya, T., Chandran, P., Ray, S.K., Tiwary, P., Mandal, C., Sarkar, D. and Pal, D.K. 2015. Soil and Crop History in Dominant Agro-Ecosystems of The Indo-Gangetic Plains, India. In: M.V. Rao, V. Suresh Babu, Suman Chandra, G. Ravindra Chary (Editors). Integrated Land Use Planning for Sustainable Agriculture and Rural Development. CRC Press, pp. 57-78.

Chandran, P. 2015. Pedology and Soil Survey In: *Agropedology Terminologies* (Eds. J. Prasad, Chary, G.R , Patil, N.G. and Obi Reddy, G.P.), Indian Society of Soil Survey and land Use Planning, Nagpur.

Dharumarajan, S. Lalitha, M., Anil Kumar, K.S., Vasundhara, R., Ramurthy, V., Thayalan, S., Dhinwa. P. S. and Singh, S.K. 2015. Desertification Status Mapping of Andra Prdesh and Karnataka using Remote Sensing Data.In *Advances in Soil and Water Resources Management for Food and Livelihood Security in Changing Climate*.(Eds. Bhan, S. and Arora, S.).Soil Conservation Society of India, New Delhi. Pp.682/ISBN: 978-81-909228-5-2.

Hegde, R., Niranjana, K.V., Natarajan, A. and Naidu, L.G.K. 2015.Generation of farm specific land resources database for effective implementation of watershed development programs-a case study of Magadi model watershed in Karnataka.In *Managing the Natural Resources in dry lands (eds.*A. Raizada, S.L. Patil, Hritick Biswas, K.K.Reddy, D. Mandal, O.P.S. Khola, O.P. Chaturvedi and P.K. Mishra).Published by CSWRTI, Dehradoon, India: 113-128.

Jagdish Prasad and Srivastava, Rajeev. 2015. Soil Survey for Agricultural Land Use Planning. In: *Soil Science : An Introduction* (Eds. R.K. Rattan, J.C. Katyal, B.S. Dwivedi, A.K. Sarkar, Tapas Bhattacharyya, J.C. Tarafdar, S.S. Kukal), Published by the Indian society of Soil Science, New Delhi. p.97-111.

Lama, T.D., Rakshit, A., Sharma, R.P. and Yadava, R.B. 2015.Soil management for sustainable production.In :Principles of Soil Science. (Edited by Rakshit A, Raha P and Bhadoria PBS). Kalyani Publishers, Ludhiana (India) ISBN: 978-93-272-5118, pp. 292-312.

Moharana, P.C., Sharma, R.P. and Singh, R.S. 2015. Managing potassium for sustainable crop production in arid-ecosystem of India.In : Potassic Fertilizers for Sustainable Agriculture (Editors). Himanshu Publications, Udaipur (Rajasthan, India) ISBN: 978-81-7906-514-3, pp. 113-131.

Obi Reddy, G.P. and Sarkar, Dipak 2015.Geospatial Technologies for Land Use Planning, Sustainable Land Resource Management and Food Security. In: *Integrated Land Use Planning for Sustainable Agriculture and Rural Development* (Eds: Rao M.V. et al., 2015), Apple Academic Press Inc., Canada, ISBN: 13: 978-1-77188-198-2, pp. 91-104.

Obi Reddy, G.P.,Sarkar, Dipak, Mandal, C., Srivastava, R., Bhattacharyya, T., Naidu, L.G.K., Sidhu, G.S., Baruah, U., Singh, S.K., Singh, R.S., Nair, K.M., Sen, T.K., Chandran, P., Sahoo, A.K., Srinivas, S., Nirmal Kumar and Chavan, Sapna 2016. Digital Soil Resource Database and Information System, In: *Geospatial Technology for Integrated Natural Resources Management*,(Eds. P.S. Roy and R.S. Dwivedi), Yes Dee Publishing Pvt. Ltd, Chennai, pp. 321-351.

Rajan, K., Natarajan, A., Dinesh, D., Khola O.P.S. and Anil Kumar, K.S. 2015. Sodicity Induced Soil Dispersion in Kabini Canal Command Area of Karnataka In: *Managing Natural Resources in the Drylands – Constraints and Opportunities* (Editors: A. Raizada, S.L. Patil, Hritick Biswas, K.K. Reddy, O.P.S. Khola, D. Mandal, O.P. Chaturvedi and P.K. Mishra). Satish Serial Publishing House, Delhi. pp. 105-112.

Sahoo, A.K., Sarkar, Dipak and Singh, S.K. 2015. Assessment and Evaluation of Land Resources for Agricultural Land Use Planning – A Case Study in Nadia district, West Bengal under Irrigated Agro-ecosystem, In: *Integrated Land Use Planning for Sustainable Agriculture and Rural Development*". (Eds. M.V. Rao, V. Suresh Babu,

Suman Chandra, G. Ravindra Chary). Apple Academic Press, New Jersey, USA, pp. 205-219.

Sahoo, A.K., Singh, S.K., Sarkar, Dipak and Sarkar, A.K. 2015.Soil Nutrient Mapping – A Case Study. In: *Plant Nutrient Disorders – Diagnosis and Management* (Editors: A.K. Sarkar and P. Mahapatra), New India Publishing Agency, New Delhi, p. 247-284.

Sharma, R.P. and Purohit, H.S. 2015.Significance of clay minerals in potash nutrition. In : Potassic Fertilizers for Sustainable Agriculture (Eds. Choudhary R. S., Choudhary Rohan and Tiwari R. C.). Himanshu Publications, Udaipur (Rajasthan, India) ISBN: 978-81-7906-514-3, pp. 56-64.

Singh S.K., Chattaraj S., Patil N.G., Ray S.K., Chatterji S. 2016. Soils of India: Problems and Potentialities. *Encyclopedia of Soil Science*, Third Edition, DOI: 10.1081/E-ESS3-120053904.

Singh, S.K. and Chandran, P. 2015. Soil genesis and classification. In *Soil Science: An Introduction*, (Eds. R.K. Rattan, J.C. Katyal, B.S. Dwivedi, A.K. Sarkar, T. Bhattacharyya, J.C. Tarafdar and S.S. Kukal), Indian Society of Soil Science, New Delhi. pp 57-96.

Singh, U.B., Sahu, Asha, Sahu, Nisha, Wasiullah, Renu, Malviya, Deepti, Singh, B.P., Moh. Imran, Shamandeep Kaur, Pallavi, Singh, Alka, Dixit, Ruchita, Karthikeyan, N., Pandiyan, K., Nagrale, D.T., Sharma, P.K., Rai, J.P., Manna M.C. and Sharma A.K. 2016. Biological Control of Plant-Parasitic Nematodes: Recent Perspectives. In: *Microbial Empowerment in Agriculture: A Key to Sustainability and Crop Productivity.* pp. 173-226 published by Biotech Books, New Delhi.

Srivastava,Rajeev, Sarkar, Dipak and Obi Reddy,G.P. 2015. Recent Advances in the Assessment of Degraded Lands for their Management In: Integrated Land Use Planning for Sustainable Agriculture and Rural Development. (Eds: M.V. Rao, V. Suresh Babu, Suman Chandra, and G. Ravindra Chary), Apple Academic Press 2015), P 79–87.

Surya, J.N., Yadav, R.P., Sidhu, G.S. and Singh, S.K. 2016. Soils of Indo-Gangetic Plains : Constraints and Potentials in Relevance to Agro-Ecological Region. *Encyclopedia of Soil Science* Third Edition. DOI:10.1081/E-ESS3-120053783.

Yadav, R.P. 2016. Torrential Erosion in the Himalayas.*Encyclopedia of Soil Science* Third Edition. DOI:10.1081/E-ESS3-120053783.

2014-15

Avasthe, R.K., Das, K. and Reza, S.K. 2014.Integrated Nutrient Management through Organic Sources. In Handbook of Organic Crop Production in Sikkim (Eds. R.K. Avasthe, Y. Pradhan and K. Bhutia), Jointly published by Organic Mission, Government of Sikkim, Gangtok, Sikkim and ICAR Research Complex for NEH Region, Sikkim, Gangtok, Sikkim, India. pp. 317–328.

Bhaskar, B.P. and Saxena, R.K. 2014. Soil-Landscape Relationships in Lohit Valley near Tezu, Arunachal Pradesh. Biodiversity: Threats and Conservation. Global Publishers.Vol. 1.pp.175-190.

Bhaskar, B.P., Sarkar, D. and Baruah, U. 2014. Wet land evaluation for rice based crpping systems in Brahmaputra valley, India. Biodiversity: Threats and Conservation. Global Publishers.Vol.1. pp.100-113.

Bhaskar, B.P., Saxena, R.K., Sarkar, D., Baruah, U. and Butte, P.S. 2015. Transect approach for assessing soil variability in eroded landscapes of Shillong plateau, Meghalaya. (Eds. Ikemefuna and Bhatt.Soil Contamination and Conservation, Discovery Publishing house Pvt. Ltd.New Delhi.pp.154-178.

Bhattacharyya T., Pal D.K., Gupta R.K., Chandran P., Ray S.K., Mandal C., Jagdish Prasad, Sarkar D., Tiwary P., Karthikeyan, K. and Telpande, B. 2014. Prioritizing areas for soil carbon sequestration: A step for conservation agriculture.(Eds. J. Somasundaram, R.S. Chaudhary, A. Subba Rao, K.M. Hati, N.K.Sinha and M. Vassanda Coumar), Conservation Agriculture for Carbon Sequestration and Sustaining Soil Health. New India Publishing Agency, New Delhi, India, pp. 225-246.

Das, S.K., Avasthe, R.K. and Reza, S.K. 2014.Importance of Soil Testing in Organic Agriculture. In *Handbook of* Organic *Crop Production in Sikkim* (Eds. R.K. Avasthe, Y. Pradhan and K. Bhutia), Jointly published by Organic Mission, Government of Sikkim, Gangtok, Sikkim and ICAR Research Complex for NEH Region, Sikkim, Gangtok, Sikkim, India. pp. 311–316.

Das, S.K., Avasthe, R.K. and Reza, S.K. 2014.Management of Soil Acidity. In Handbook of Organic Crop Production in Sikkim (Eds. R.K. Avasthe, Y. Pradhan and K. Bhutia), Jointly published by Organic Mission, Government of Sikkim, Gangtok, Sikkim and ICAR Research Complex for NEH Region, Sikkim, Gangtok, Sikkim, India. pp. 307–310.

Hegde, Rajendra, Niranjana, K.V., Natarajan, A. and Naidu, L.G.K. 2015.Generation of farm specific land resources database for effective implementation of watershed development programs-A case study of Magadi model watershed in Karnataka.In "Managing the Natural Resources in the Dry lands- Constraints and Opportunities. (Eds. A. Raizada, S.L. Patil, Hritick Biswas, K.K Reddy, D. Mandal, O P S Khola, O.P. Chaturvedi and P. K Mishra). Satish Serial Publishing House, Azadpur, Delhi, India: pp 113-128.

Nirmal Kumar and Karthikeyan K. 2014.Remote sensing of soil residue and conservation tillage.(Eds. J. Somasundaram, R.S. Chaudhary, A. Subba Rao, K.M. Hati, N.K. Sinha and M. Vassanda Coumar.), Conservation Agriculture for Carbon Sequestration and Sustaining Soil Health. New India Publishing Agency, New Delhi, India, pp. 485-494.

Obi Reddy, G.P. and Sarkar, D. 2015. Geospatial technologies in sustainable land resource management for land use planning and food security, *In*: Integrated Land Use Planning for Sustainable agriculture and rural development, (Eds. M. V. Rao, V. Suresh Babu, Suman Chandra, G. Ravindra Chary) Apple Academic Press, pp 79-87.

Srivastava, R., Obi Reddy, G.P. and Sarkar, D. 2014. Recent advances in assessment of degraded lands for their management, *In*: Integrated Land Use Planning for Sustainable agriculture and rural development (Eds. M. V. Rao, V. Suresh Babu, Suman Chandra, G. Ravindra Chary) Apple Academic Press, pp 91-104.

2013-14

Bhattacharyya T., Pal D.K., Gupta R.K., Chandran P., Ray S.K., Mandal C., Jagdish Prasad, Sarkar, D., Tiwary P., Karthikeyan and Telpande B. 2014. Prioritizing Areas for Soil Carbon Sequestration: A Step for Conservation Agriculture. In *Conservation Agriculture for Carbon Sequestration and Sustaining Soil Health* (Eds. J. Somasundaram, R.S. Chaudhary, A. Subba Rao, K.M. Hati, N.K. Sinha and M. Vassanda Coumar), New India Publishing Agency, New Delhi, India, pp. 225-246.

Bhattacharyya, T. 2013. Carbon sequestration in various agro-ecosystems and applications of various models. In *Adaptation and mitigation strategies for climate resilient agriculture* (Eds : G. R. Chary, Ch. Srinivasarao, K. Srinivas, G.R. Maruthi Sankar, R. Nagarjuna Kumar, B. Venkateswarlu), CRIDA, ICAR, Hyderabad, India 362, pp.145-153.

Bhattacharyya, T., Pal, D. K. ,Gupta, R. K., Chandran, P., Ray, S. K., Mandal, C., Jagdish Prasad, Sarkar, D., Tiwary, P. Karthikeyan, K. and Telpande, B. 2013. Prioritizing Areas for Soil Carbon Sequestration: A Step for Conservation Agriculture. In *Conservation Agriculture- An Indian Perspective* (Eds. Somasundaram *et al.*). New India Publishing Agency (NIPA), pp. 225-246.

Nagarjuna Kumar, R., Obi Reddy, G.P., Chary, R. G., Srinivasrao, Ch. and Maruthi Sankar, G.R. 2014. Developing Cadastral Level Resource Maps Using Geospatail Technologies, In *Adaptation and Mitigation Startegies for Climate Resilient Agriculture* (Eds. G. Ravindra Chary *et al.*), Central Research Institute for Dryland Agriculture, ICAR, Hyderabad, India, ISBN: 978-93-80883-25-0, pp. 353-362.

Natrajan A. Hegde, R., Naidu, L.G.K. 2013.Status of land resources and role of resources inventory for resources management.In *Innovations in Agricultural Policy* (Eds. P.K. Shetty and M.V. Srinivas Gowda. National Institute of Advanced studies, IISc Bangalore, pp. 171-180.

Nirmal Kumar and Karthikeyan K. 2014. Remote Sensing of Soil Residue and Conservation Tillage.In *Conservation Agriculture for Carbon Sequestration and Sustaining Soil Health.* (Eds. J. Somasundaram, R.S. Chaudhary, A. Subba Rao, K.M. Hati, N.K. Sinha and M. Vassanda Coumar), New India Publishing Agency, New Delhi, India, pp. 485-494.

Obi Reddy, G.P., Sarkar, D., Mandal, C., Srivastava, R., Bhattacharyya, T., Naidu, L.G.K., Sidhu, G.S., Baruah, U., Singh, S.K., Singh, R.S., Nair, K.M., Sen, T.K., Chandran, P., Sahoo, A.K., Srinivas, S., Nirmal Kumar and Chavan, S. 2014. Soil Resource Database and Information System *In: Geospatial Technology for Integrated Natural Resources Management* (Eds. P.S. Roy and R.S. Dwivedi), Yes Dee Publishing Pvt Ltd, Chennai, pp 370-406.

Sahoo, A.K. and Sarkar, D. 2013. Genesis and Classification of Acid Soils of India, In: *Acid Soils – Their Chemistry and Management*,(Ed. A.K. Sarkar), New India Publishing Agency, New Delhi, India, pp.49-104.

2012-13

Banerjee T., Sah K. D. (2012). Door-Sangbedan O Bhougolik Tathya Paddhatir Madhyame Bhagirathi Nadir Gatiprakiti Parjalochana (Bengali), Ganga:Jal-O-Manush, pp.111-114.

Bhaskar, B.P. (2012). Landscape analysis in soil surveys. Remote sensing and GIS in Digital Terrain analysis and Landscape modeling. (Ed. Obi Reddy, G.P. and Dipak Sarkar) NBSS & LUP Publ.No.**152**. pp. 39-51.

Bhaskar, B.P., Sarkar Dipak and Baruah, U. (2012).Characterization and Management of Hydric soils for Agricultural Use At Majuli River Island, Assam, India.(Ed. Pawan Kumar, B and Avnish, C) Environmental Botechnology and Application. Discovery Publishing House Pvt. Ltd., New Delhi. Chapter 10. pp. 161-177.

Bhattacharyya, T., Kundu, S., Benbi, D.K., Mandal, B., Mandal, U., Subba Rao, A., Sarkar, D., Ray, S.K., Chandran, P., Pal, D. K., Mandal, C., Telpande, B. A., Tiwary, P., Lokhande, M.A., Deshmukh, A.S. and Varma, S. (2012). Interpolation of Village Level Datasets through Krigging in different Agro-Eco Sub regions, *In*: Proceedings of National Seminar on Geospatial Solutions for Resource Conservation and Management (Ed. D.K. Prabhuraj, R. S. Reddy, T. R. Sreedhara Murthy, S. Vadivelu, K. Ashoka Reddy, B.P. Lakshmikantha, A. S. Rajashekar, Sanjana S Bakre, Prathima K.) J. N. Tata Auditorium, Indian Institute of Science, Bengaluru, pp 45-52.

Bhattacharyya, T., Pal, D.K., Chandran, P., Ray, S.K. and Mandal, C. (2013) Soil carbon reserves and prioritization for C sequestration in Indian soils, *In*: Climate change and agriculture (Ed. T.Bhattacharyya, D.K.Pal, Dipak Sarkar, S.P. Wani) Studium Press (India) Pvt. Ltd., New Delhi, pp 113-121.

Chandran, P. (2012).Concepts for developing Soil Information in SOTER. In : Remote Sensing and GIS in Digital Terrain Analysis and Soil Landscape Modelling (Ed. G.P. Obi Reddy and Dipak Sarkar) NBSS Publ. 152, NBSS&LUP, Nagpur, pp.209-216.

Chandran, P., Mandal, C., Bhattacharyya, T., Sarkar, D., Pal, D.K., Ray, S.K., Jagdish Prasad, Tiwary, P., Srivastava, R., Lokhande, M., Wadhai, K., Dongare, V. and Dijkshoorn, J.A., Batjes, N.M. and Brindaban, P.S. (2012). Soil and Terrain Information System of the Indo-Gangetic Plains, India for Resource Planning. In : Proceedings of National Seminar on Geospatial Solutions for Resource Conservation and Management (Ed. D.K. Prabhuraj, R.S. Reddy, T.R. Sreedhara Murthy, S. Vadivelu, K. Ashoka Reddy, B.P. Lakshmikantha, A. S. Rajashekar, Sanjana S. Bakre, Prathima, K.), January 18-20, 2012 organised by Karnataka State Remote Sensing Application Centre, Bangaluru, pp.25-35.

Chaturvedi, Arun (2012). Remote Sensing and GIS in Land Use Planning (2012). Remote Sensing & GIS in Digital Terrain Analysis and Soil Landscape Modelling. NBSS&LUP Pub. No. **152**. Nagpur.

Giri, J.D. (2012). Soil survey data interpretation. In : Remote Sensing and GIS in Digital Terrain Analysis and Soil Landscape Modelling (Eds. G.P. Obi Reddy and Dipak Sarkar) NBSS Publ. **152**, NBSS&LUP, Nagpur, pp.229-240.

Jagdish Prasad., Tiwary, P., Sarkar Dipak, Sidhu, G. S., Singh, R. S., Sahoo, A. K., Mahapatra, S. K., Mandal, C., Ray,S.K., Chandran, P., Pal, D. K., and

Bhattacharyya, T. (2012). Suitability Evaluation of Major Soils of the Indo- Gangetic Plains for Wheat, *In*: Proceedings of National Seminar on Geospatial Solutions for Resource Conservation and Management (Ed. D.K. Prabhuraj, R. S. Reddy, T. R. Sreedhara Murthy, S. Vadivelu, K. Ashoka Reddy, B.P. Lakshmikantha, A. S. Rajashekar, Sanjana S Bakre, Prathima K), January 18-20, 2012 organised by Karnataka State Remote Sensing Application Centre, Bangaluru , pp 62-70.

Jagdish Prasad., Tiwary, P., Sarkar Dipak., Sidhu, G. S., Singh, R. S., Sahoo, A. K., Mahapatra, S. K., Mandal, C., Ray, S.K., Chandran, P., Pal, D. K., and Bhattacharyya, T. (2012). Suitability Evaluation of Major Soils of the Indo- Gangetic Plains for Wheat, *In*: Proceedings of National Seminar on Geospatial Solutions for Resource Conservation and Management (Ed. D.K. Prabhuraj, R. S. Reddy, T. R. Sreedhara Murthy, S. Vadivelu, K. Ashoka Reddy, B.P. Lakshmikantha, A. S. Rajashekar, Sanjana S Bakre, Prathima K), J. N. Tata Auditorium, Indian Institute of Science, Bengaluru , pp 62-70.

Mandal, C., Mandal, D. K., Jagdish Prasad, Sarkar Dipak, Chandran, P., Tiwary, P., Patil, N.G., Obi Reddy, G.P., Lokhande, M.A., Wadhai, K.N., Dongare, V.T., Sidhu, G. S., Sahoo, A.K., Nair, K. M., Singh, R.S., Pal, D.K. and Ray, S.K. (2012). Revision of black soil map of India for sustainable crop production, In: Proceedings of National Seminar on Geospatial Solutions for Resource Conservation and Management (Ed. D.K. Prabhuraj, R. S. Reddy, T. R. Sreedhara Murthy, S. Vadivelu, K. Ashoka Reddy, B.P. Lakshmikantha, A. S. Rajashekar, Sanjana S. Bakre, Prathima, K.), J. N. Tata Auditorium, Indian Institute of Science, Bengaluru , pp 36-44.

Nagaraju, M.S.S. (2012). GPS applicatios in resource inventory. In : Remote Sensing and GIS in Digital Terrain Analysis and Soil Landscape Modelling (Ed. G.P. Obi Reddy and Dipak Sarkar) NBSS Publ. 152, NBSS&LUP, Nagpur, pp.98-105.

Nagaraju, M.S.S. (2012). Remote sensing data characteristics. In : Remote Sensing and GIS in Digital Terrain Analysis and Soil Landscape Modelling (Ed. G.P. Obi Reddy and Dipak Sarkar) NBSS Publ. 152, NBSS&LUP, Nagpur, pp.78-105.

Nagaraju, M.S.S. (2012). Soil-landscape in large scale soil mapping. In : Remote Sensing and GIS in Digital Terrain Analysis and Soil Landscape Modelling (Ed. G.P. Obi Reddy and Dipak Sarkar) NBSS Publ. 152, NBSS&LUP, Nagpur, pp.136-139.

Nirmal Kumar (2012). Geostatistics in digital terrain analysis. In Remote sensing and GIS in digital terrain analysis and soil-landscape modeling (Ed. G.P. Obi Reddy and Dipak Sarkar), NBSS Publ. No. 152, NBSS&LUP, Nagpur, pp. 147-155.

Nirmal Kumar (2012). Overview of GIS and image processing software's. In Remote sensing and GIS in digital terrain analysis and soil-landscape modeling (Ed. G.P. Obi Reddy and Dipak Sarkar), NBSS Publ. No. 152, NBSS&LUP, Nagpur, pp. 113-118.

Nirmal Kumar (2012). Remote sensing and GIS applications in LULC analysis. In Remote sensing and GIS in digital terrain analysis and soil-landscape modeling (Ed. G.P. Obi Reddy and Dipak Sarkar), NBSS Publ. No. 152, NBSS&LUP, Nagpur, pp. 254-263.

Obi Reddy, G.P. (2012). Extraction of terrain variables from DEM, In: Remote sensing and GIS in digital terrain analysis and soil-landscape modeling, NBSS&LUP Publ. No. 152 (Ed. G.P. Obi Reddy and Dipak Sarkar), pp 140-146.

Obi Reddy, G.P. (2012). Advances of GIS and remote sensing in hydro-geomorphology, In: Remote sensing and GIS in digital terrain analysis and soil-landscape modeling, NBSS&LUP Publ. No. 152 (Ed. G.P. Obi Reddy and Dipak Sarkar), pp 184-193.

Obi Reddy, G.P. (2012). Conceptual design of soil information system – A Geoportal, In: Remote sensing and GIS in digital terrain analysis and soil-landscape modeling, NBSS&LUP Publ. No. 152 (Ed. G.P. Obi Reddy and Dipak Sarkar), pp 217-226.

Obi Reddy, G.P. (2012). Geomorphological processes and evolution of landforms, In: Remote sensing and GIS in digital terrain analysis and soil-landscape modeling, NBSS&LUP Publ. No. 152 (Ed. G.P. Obi Reddy and Dipak Sarkar), pp 26-35.

Obi Reddy, G.P. (2012). GIS and remote sensing applications in watershed hydrology, In: Remote sensing and GIS in digital terrain analysis and soil-landscape modeling, NBSS&LUP Publ. No. 152 (Ed. G.P. Obi Reddy and Dipak Sarkar), pp 159-173.

Obi Reddy, G.P. (2012). Principles and concepts of GIS, In: Remote sensing and GIS in digital terrain analysis and soil-landscape modeling (Ed. G.P. Obi Reddy and Dipak Sarkar), pp 69-77.

Obi Reddy, G.P. (2012). Principles of digital image processing, In: Remote sensing and GIS in digital terrain analysis and soil-landscape modeling, NBSS&LUP Publ. No. 152 (Ed. G.P. Obi Reddy and Dipak Sarkar), pp 86-97.

Obi Reddy, G.P. (2012).Digital Elevation Models- Sources and resolutions, In: Remote sensing and GIS in digital terrain analysis and soil-landscape modeling, NBSS&LUP Publ. No. 152 (Ed. G.P. Obi Reddy and Dipak Sarkar), pp 121-125.

Obi Reddy, G.P. (2012).Principles and applications of digital terrain analysis, In: Remote sensing and GIS in digital terrain analysis and soil-landscape modeling, NBSS&LUP Publ. No. 152 (Ed. G.P. Obi Reddy and Dipak Sarkar), pp 129-135.

Obi Reddy, G.P. and Sarkar, Dipak (2012). Geospatial technologies in characterization of land use system and analysis of their spatio-temporal dynamics in hot sub-humid ecosystem of central India. In: Agro-informatics and Precision Agriculture 2012, (Ed. P. Krishna Reddy et. al.), pp.205-211.

Obi Reddy, G.P. and Sarkar, Dipak (2013). Remote sensing and GIS for spatial decision support in sustainable land resource management, *In*: Geospastail Technologies for Natural Resource Management (Ed: S.K. Soam, P.D. Sreekanth and N.H. Rao), New India Publishing Agency, ISBN: 978-93-81450-80-2,pp. 259-277.

Obi Reddy, G.P. and Sarkar, Dipak (Eds) (2012). Remote sensing and GIS in digital terrain analysis and soil-landscape modeling, NBSS Publ. No. 152, NBSS&LUP, Nagpur, pp. 300.

Pal, D.K., Bhattacharyya, T., Datta, S.C., Chandran, P. and Ray, S.K. (2013) Impact of climate change in soils of semi-arid tropics (SAT), *In*: Climate change and agriculture (Ed. T.Bhattacharyya, D.K.Pal, Dipak Sarkar, S.P. Wani) Studium Press (India) Pvt. Ltd., New Delhi, pp 123-143.

Patil N.G. (2012). A Note on "Estimating soil physical properties to build soil information system".NBSS & LUP (ICAR) Publication No. **152**.

Raja, P., Malpe, D.B., Bhaskar, B.P., Mrghade Deepali and Tapaswi, P.M. (2012).Hydrogeochemical characterization of groundwater for irrigation in Purna Basin, Maharashtra.*Memoir Geological Society of India*. pp. 171-188.

Sarkar Dipak, Obi Reddy, G.P. and Naidu, L.G.K. (2012). Genesis and spatial distribution of acid soils in India towards sustainable crop production, In: Acid Soils of India-Distribution, Properties and Management for Sustainable crop Production, (Ed: S. Sudhir et al.,) pp 1-14.

Sharma R P and Behera K. K. (2012) Fertigation techniques in fruit and vegetable crops.In : Green Agriculture: Newer Technologies, 2012 © Kambaska Kumar Behera (ed.). New India Publishing Agency, New Delhi (India) ISBN: 978-93-81450-27-7, pp. 353-389.

Sharma R P and Singh R. S. (2012).Mineralogical framework of the Aravalli sediments, semi quantification of minerals in soil fractions of alluvial plains. LAMBERT Academic Publishing, GmbH & Co KG, Saabrucken, Germany. Printed in the USA. ISBN: 978-3-8484-9378-4. pp 1-229.

Sidhu, G. S. (2013). Natural soil resources of north western part of the Indo-Gangetic Plains and their management for rainfed crops. (Chapter 5) In: Impact of Climate Change in soils and rainfed agriculture of tropical ecosystem. Published by Studium Press, LLC, USA. pp 91-100.

Singh, D.S. (2012). Principles of geomorphology. In : Remote Sensing and GIS in Digital Terrain Analysis and Soil Landscape Modelling (Eds. G.P. Obi Reddy and Dipak Sarkar) NBSS Publ. 152, NBSS&LUP, Nagpur, pp.13-20.

Srivastava , Rajeev (2012). Principals of remote sensing. In : Remote Sensing and GIS in Digital Terrain Analysis and Soil Landscape Modelling (Eds. G.P. Obi Reddy and Dipak Sarkar) NBSS Publ. 152, NBSS&LUP, Nagpur, pp.63-68.

Srivastava , Rajeev (2012). Hyperspectral remote sensing applications in soils. In : Remote Sensing and GIS in Digital Terrain Analysis and Soil Landscape Modelling (Eds. G.P. Obi Reddy and Dipak Sarkar) NBSS Publ. 152, NBSS&LUP, Nagpur, pp.194-196.

Srivastava, Rajeev (2012). Remote sensing applications in soil resource inventory. In : Remote Sensing and GIS in Digital Terrain Analysis and Soil Landscape Modelling (Eds. G.P. Obi Reddy and Dipak Sarkar) NBSS Publ. 152, NBSS&LUP, Nagpur, pp.126-128.